# APPENDIX C: PROBE CALIBRATION

#### **Calibration Laboratory of** Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst

- S Service suisse d'étalonnage
- С Servizio svizzero di taratura
- S Swiss Calibration Service

Accreditation No.: SCS 0108

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Client **PC Test**  Certificate No: D750V3-1161\_Jul16

# **CALIBRATION CERTIFICATE**

Object	D750V3 - SN:116	31		V PTY
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits abo	ove 700 MHz	8/9/10
Calibration date:	July 13, 2016			
		onal standards, which realize the physical un robability are given on the following pages ar		
All calibrations have been conduc	ted in the closed laborator	ry facility: environment temperature (22 $\pm$ 3)°	C and humidity < 70%.	
Calibration Equipment used (M&T	'E critical for calibration)			
Primary Standards	ID # .	Cal Date (Certificate No.)	Scheduled Calibration	1
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17	
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17	
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17	
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17	
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17	
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17	
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16	
Secondary Standards	ID #	Check Date (in house)	Scheduled Check	
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-1	6
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-1	6
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-1	6
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-1	6
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-1	6
	Name	Function	Signature _/	
Calibrated by:	Claudio Leubler	Laboratory Technician	(JZ)	
Approved by:	Katja Pokovic	Technical Manager	Relly	-
This calibration certificate shall n	ot be reproduced except in	i full without written approval of the laboratory	Issued: July 13, 2016	

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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- S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### **Glossary:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# Additional Documentation:

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Accreditation No.: SCS 0108

#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	· <u> </u>
Frequency	750 MHz ± 1 MHz	

Head TSL parameters The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.9 ± 6 %	0.91 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.09 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.17 W/kg ± 17.0 % (k=2)
SAR averaged over 10 $cm^3$ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.39 W/kg ± 16.5 % (k=2)

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	55.1 ± 6 %	0.99 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.16 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	8.43 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.41 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	5.53 W/kg ± 16.5 % (k=2)

# Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	55.6 Ω - 0.9 jΩ
Return Loss	- 25.4 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	50.2 Ω - 4.0 jΩ
Return Loss	- 28.0 dB

### **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.033 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 19, 2015

# **DASY5 Validation Report for Head TSL**

Date: 13.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1161

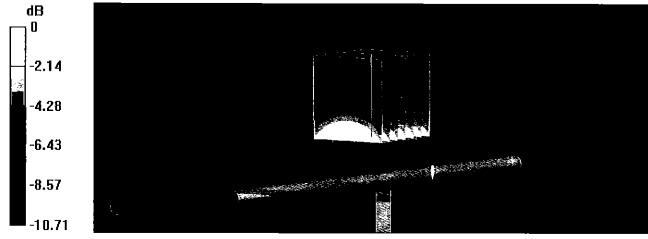
Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz;  $\sigma = 0.91$  S/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

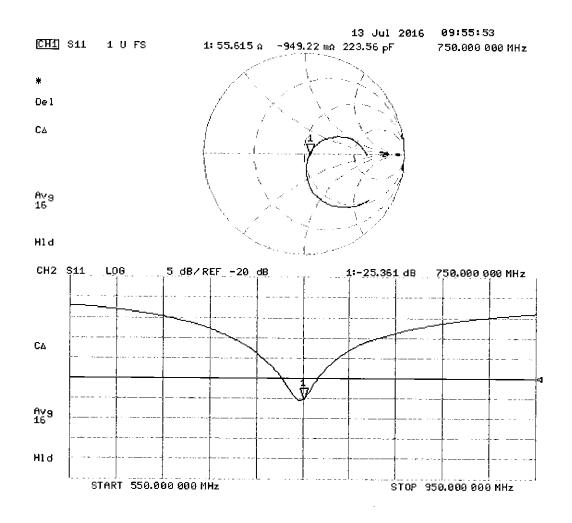
- Probe: EX3DV4 SN7349; ConvF(10.07, 10.07, 10.07); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 58.07 V/m; Power Drift = -0.00 dB Peak SAR (extrapolated) = 3.13 W/kg SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.37 W/kg Maximum value of SAR (measured) = 2.80 W/kg



0 dB = 2.80 W/kg = 4.47 dBW/kg



# **DASY5 Validation Report for Body TSL**

Date: 13.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1161

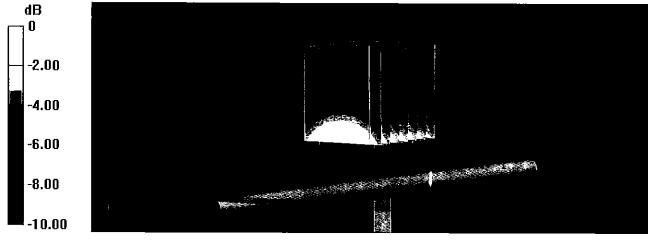
Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz;  $\sigma = 0.99$  S/m;  $\varepsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

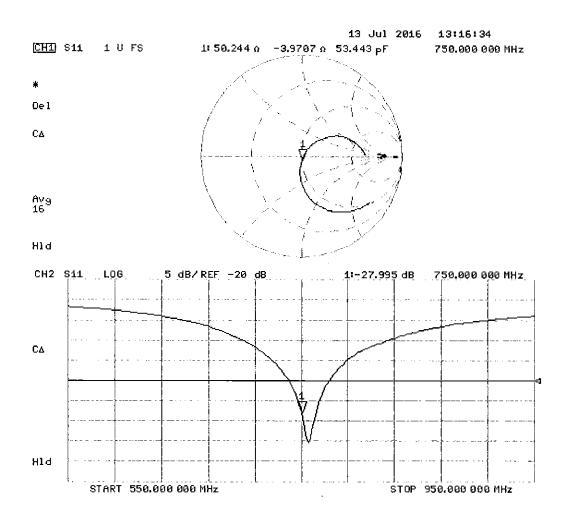
- Probe: EX3DV4 SN7349; ConvF(9.99, 9.99, 9.99); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 56.33 V/m; Power Drift = -0.00 dB Peak SAR (extrapolated) = 3.22 W/kg SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.41 W/kg Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.87 W/kg = 4.58 dBW/kg



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Accreditation No.: SCS 0108

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#### Client PC Test

Certificate No: D835V2-4d047\_Jul16

# CALIBRATION CERTIFICATE

Object	D835V2 - SN:4d	047		
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits	above 700 MHz	
				BNV 7/16/2016
				-11612016
Calibration date:	July 13, 2016			
	<b>,</b> ,			
		ional standards, which realize the physica		
The measurements and the uncer	tainties with confidence p	robability are given on the following page	es and are part of the certificate.	ľ
All calibrations have been conduct	ted in the closed laborato	ry facility: environment temperature (22 ±	- 3)°C and humidity < 70%	
			oy o una namiaty < 7070.	
Calibration Equipment used (M&T	E critical for calibration)			
	L			
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration	
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17	
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17	
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17	
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17	
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17	
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17	
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16	
Secondary Standards	ID #	Check Date (in house)	Scheduled Check	
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	•	
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16	
Power sensor HP 8481A	SN: MY41092317		In house check: Oct-16	
		07-Oct-15 (No. 217-02223)	In house check: Oct-16	
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16	
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16	
	Name	Function	Signature	
Calibrated by:	Jeton Kastrati	Laboratory Technician	$\rightarrow$ $1/a$	
			- le	
Approved by:	Katja Pokovic	Technical Manager	20 101-	
			por o my	
			Issued: July 13, 2016	
This calibration certificate shall no	t be reproduced except in	full without written approval of the labora		

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Accreditation No.: SCS 0108

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# Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# Additional Documentation:

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

### **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.6 ± 6 %	0.94 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.13 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL SAR measured	condition 250 mW input power	1.53 W/kg

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.9 ± 6 %	1.01 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.47 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	9.57 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.60 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	6.24 W/kg ± 16.5 % (k=2)

# Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.8 Ω - 5.9 jΩ
Return Loss	- 24.5 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	45.8 Ω - 8.2 jΩ
Return Loss	- 20.3 dB

### **General Antenna Parameters and Design**

Electrical Delay (one direction)	None ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	August 16, 2006

Date: 13.07.201

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d047

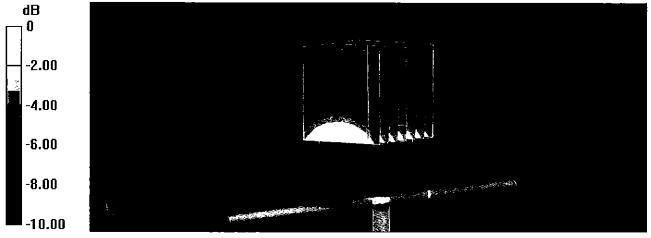
Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz;  $\sigma = 0.94$  S/m;  $\varepsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

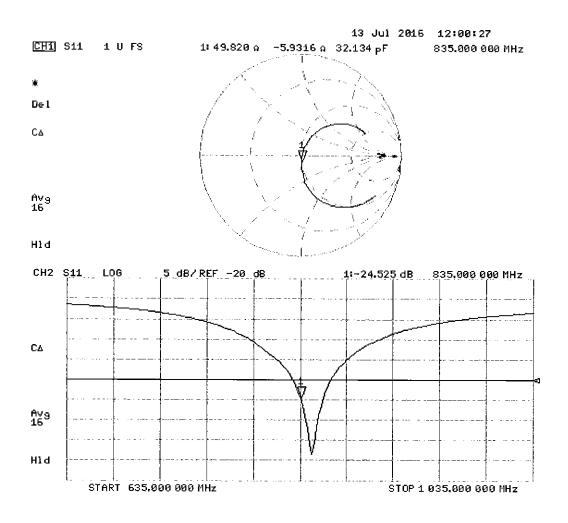
- Probe: EX3DV4 SN7349; ConvF(9.72, 9.72, 9.72); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 60.98 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 3.56 W/kg SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.53 W/kg Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/kg



# **DASY5 Validation Report for Body TSL**

Date: 13.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d047

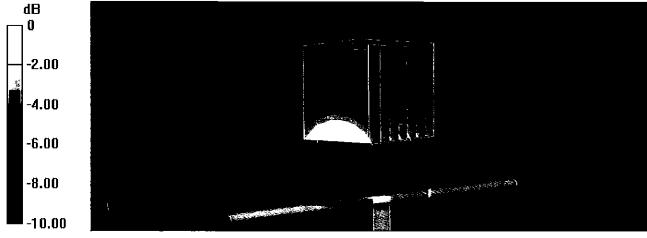
Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz;  $\sigma = 1.01$  S/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

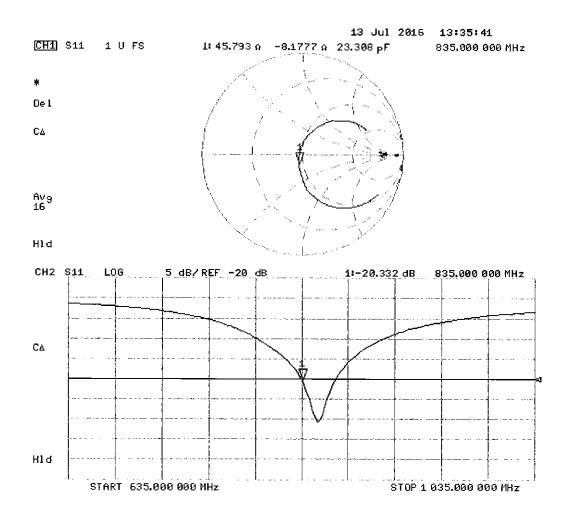
- Probe: EX3DV4 SN7349; ConvF(9.73, 9.73, 9.73); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 59.88 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 3.67 W/kg SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.6 W/kg Maximum value of SAR (measured) = 3.27 W/kg

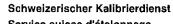


0 dB = 3.27 W/kg = 5.15 dBW/kg



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S **Swiss Calibration Service** 

Accreditation No.: SCS 0108

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Issued: May 17, 2016

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

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lient PC lest Certificate No: D1/65V2-1008_IVIay16				
CALIBRATION C	ERTIFICATE	<b>.</b>		
Object	D1765V2 - SN:10	800		
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits abo	ove 700 MHz	BNV 05123116
Calibration date:	May 11, 2016			
	•	ional standards, which realize the physical un probability are given on the following pages an		-
All calibrations have been conduc	ted in the closed laborato	ry facility: environment temperature (22 $\pm$ 3)°(	C and humidity < 70%.	
Calibration Equipment used (M&T	E critical for calibration)			
Primary Standards	1D #	Cal Date (Certificate No.)	Scheduled Calib	pration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17	
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17	
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17	
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17	
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17	
Reference Probe EX3DV4	SN: 7349	31-Dec-15 (No. EX3-7349_Dec15)	Dec-16	
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16	
Secondary Standards	ID #	Check Date (in house)	Scheduled Che	ck
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check:	
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check:	
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check:	
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check:	
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check:	
	Name	Function	Signature	
Calibrated by:	Michael Weber	Laboratory Technician		<b>5</b>
Approved by:	Katja Pokovic	Technical Manager	M.Neze	

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S **Swiss Calibration Service** 

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

# **Glossarv:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# Additional Documentation:

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end ٠ of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed • point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole • positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. • No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna ٠ connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Accreditation No.: SCS 0108

### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1750 MHz ± 1 MHz	

#### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.1	1.37 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.8 ± 6 %	1.36 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.10 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	36.7 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	4.81 W/kg

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.4	1.50 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.8 ± 6 %	1.50 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

#### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.30 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	37.3 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	4.94 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	19.8 W/kg ± 16.5 % (k=2)

# Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.8 Ω - 6.0 jΩ
Return Loss	- 24.2 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	45.8 Ω - 6.8 jΩ
Return Loss	- 21.6 dB

#### **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.211 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	October 06, 2005

# **DASY5 Validation Report for Head TSL**

Date: 11.05.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 1765 MHz; Type: D1765V2; Serial: D1765V2 - SN: 1008

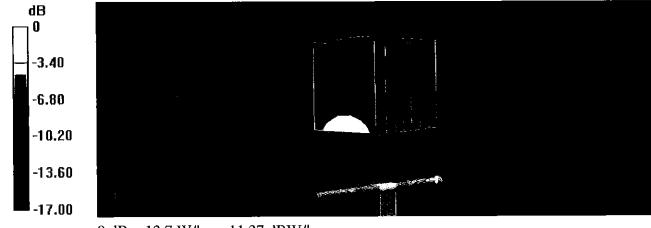
Communication System: UID 0 - CW; Frequency: 1750 MHz Medium parameters used: f = 1750 MHz;  $\sigma = 1.36$  S/m;  $\epsilon_r = 39.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

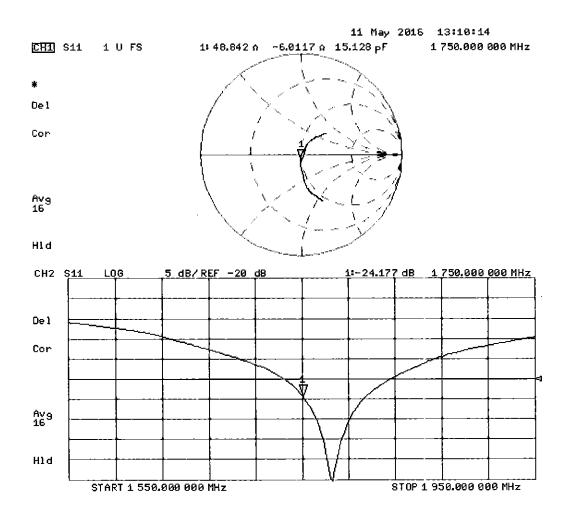
- Probe: EX3DV4 SN7349; ConvF(8.54, 8.54, 8.54); Calibrated: 31.12.2015;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 104.4 V/m; Power Drift = 0.06 dB Peak SAR (extrapolated) = 16.7 W/kg SAR(1 g) = 9.1 W/kg; SAR(10 g) = 4.81 W/kg Maximum value of SAR (measured) = 13.7 W/kg



0 dB = 13.7 W/kg = 11.37 dBW/kg



# **DASY5** Validation Report for Body TSL

Date: 11.05.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 1765 MHz; Type: D1765V2; Serial: D1765V2 - SN: 1008

Communication System: UID 0 - CW; Frequency: 1750 MHz Medium parameters used: f = 1750 MHz;  $\sigma = 1.5$  S/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

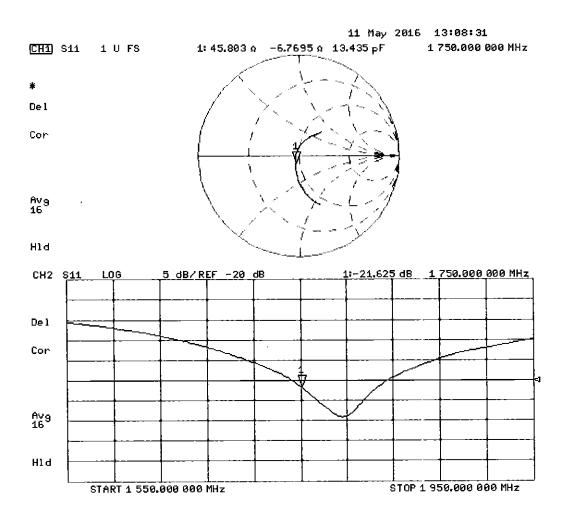
#### DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.25, 8.25, 8.25); Calibrated: 31.12.2015;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

# Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 100.9 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 16.4 W/kg SAR(1 g) = 9.3 W/kg; SAR(10 g) = 4.94 W/kg Maximum value of SAR (measured) = 14.0 W/kg





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Accreditation No.: SCS 0108

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#### Client PC Test

Certificate No: D1900V2-5d149\_Jul16

# **CALIBRATION CERTIFICATE**

Object	D1900V2 - SN:5d149		
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits at	oove 700 MHz
Calibration date:	July 15, 2016		BNV 07/22/2016
	•	onal standards, which realize the physical ( robability are given on the following pages a	
All calibrations have been conduc	ted in the closed laborator	ry facility: environment temperature (22 $\pm$ 3)	)°C and humidily < 70%.
Calibration Equipment used (M&T	E critical for calibration)		
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16
	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	42
Approved by:	Kalja Pokovic	Technical Manager	lelly
This calibration certificate shall no	t be reproduced except in	full without written approval of the laborato	/ Issued: July 19, 2016 pry.

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#### **Glossary:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

# **Calibration is Performed According to the Following Standards:**

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# **Additional Documentation:**

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

#### **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.8 ± 6 %	1.38 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.96 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	40.1 W/kg ± 17.0 % (k=2)
SAR averaged over 10 $cm^3$ (10 g) of Head TSL	condition	
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL SAR measured	condition 250 mW input power	5.23 W/kg

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.7 ± 6 %	1.51 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.95 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	39.9 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.28 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.1 W/kg ± 16.5 % (k=2)

# Appendix (Additional assessments outside the scope of SCS 0108)

#### **Antenna Parameters with Head TSL**

Impedance, transformed to feed point	52.4 Ω + 5.5 jΩ
Return Loss	- 24.6 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.6 Ω + 7.0 jΩ
Return Loss	- 23.1 dB

#### **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.197 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

# Additional EUT Data

Manufactured by	SPEAG
Manufactured on	March 11, 2011

# **DASY5 Validation Report for Head TSL**

Date: 15.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d149

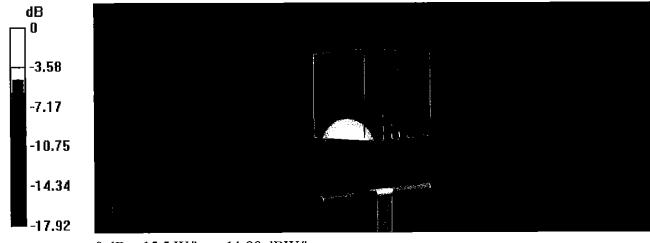
Communication System: UID 0 - CW; Frequency: 1900 MHz Medium parameters used: f = 1900 MHz;  $\sigma = 1.38$  S/m;  $\varepsilon_r = 39.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

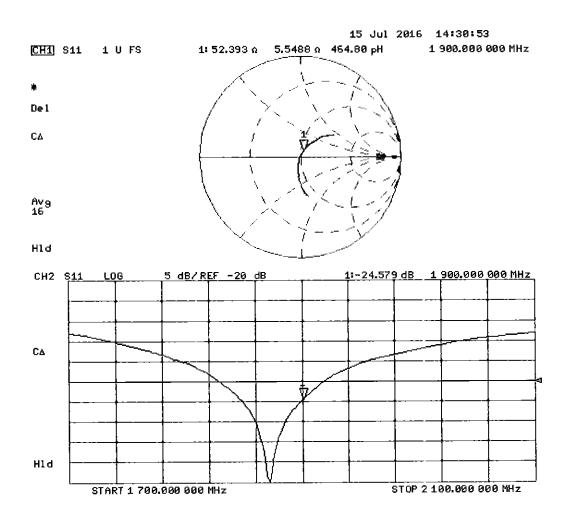
- Probe: EX3DV4 SN7349; ConvF(7.99, 7.99, 7.99); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 107.5 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 18.7 W/kg SAR(1 g) = 9.96 W/kg; SAR(10 g) = 5.23 W/kg Maximum value of SAR (measured) = 15.5 W/kg



0 dB = 15.5 W/kg = 11.90 dBW/kg



# **DASY5 Validation Report for Body TSL**

Date: 13.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d149

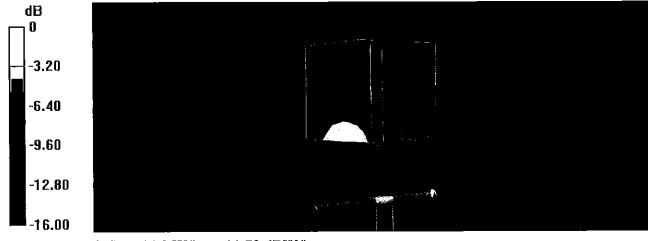
Communication System: UID 0 - CW; Frequency: 1900 MHz Medium parameters used: f = 1900 MHz;  $\sigma = 1.51$  S/m;  $\varepsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

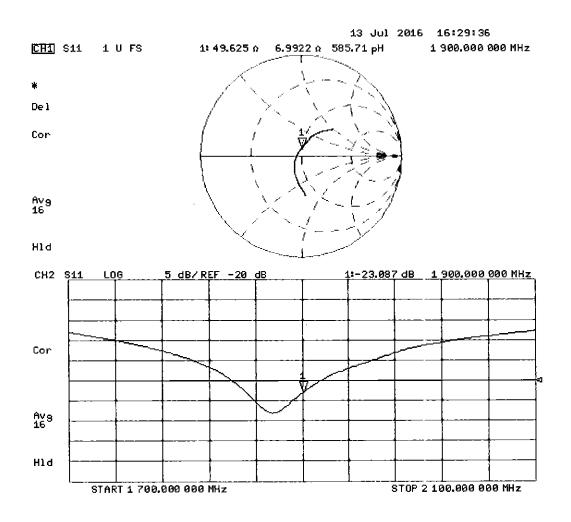
- Probe: EX3DV4 SN7349; ConvF(8.03, 8.03, 8.03); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 103.9 V/m; Power Drift = 0.00 dB Peak SAR (extrapolated) = 17.4 W/kg SAR(1 g) = 9.95 W/kg; SAR(10 g) = 5.28 W/kg Maximum value of SAR (measured) = 14.9 W/kg



0 dB = 14.9 W/kg = 11.73 dBW/kg



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Client PC Test

Certificate No: D2450V2-797\_Sep16

# CALIBRATION CERTIFICATE

Object	D2450V2 - SN:79			
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits a	BNV bove 700 MHz 09-29-2016	
Calibration date:	September 13, 20	D16		
		onal standards, which realize the physical robability are given on the following pages		
All calibrations have been conduc	ted in the closed laborator	y facility: environment temperature (22 $\pm$ 3	8)°C and humidity < 70%.	
Calibration Equipment used (M&TE critical for calibration)				
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration	
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17	
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17	
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17	
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17	
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17	
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17	
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16	
Secondary Standards	ID #	Check Dale (in house)	Scheduled Check	
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16	
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16	
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16	
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16	
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16	
	Name	Function	Signature	
Calibrated by:	Jeton Kastrati	Laboratory Technician	A=M2	
Approved by	Kotia Pokoda	Topplet Merson	and the second sec	
Approved by:	Katja Pokovic	Technical Manager	KE KG	
			*	

Issued: September 13, 2016

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Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### **Glossary:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# **Additional Documentation:**

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

# **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.9 ± 6 %	1.88 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.4 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.1 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.26 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg ± 16.5 % (k=2)

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52. <b>7</b>	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.6 ± 6 %	2.04 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

#### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.0 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	50.7 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.13 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.2 W/kg ± 16.5 % (k=2)

### Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.8 Ω + 6.0 jΩ
Return Loss	- 23.3 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	50.8 Ω + 8.0 jΩ
Return Loss	- 22.0 dB

#### **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.160 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	January 24, 2006

### **DASY5 Validation Report for Head TSL**

Date: 13.09.2016

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:797

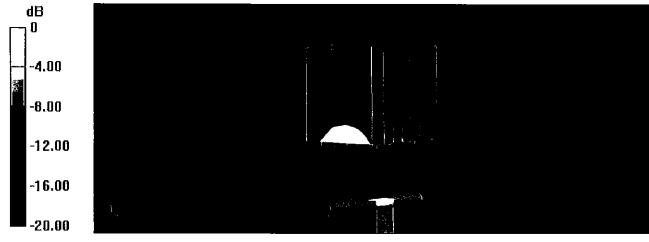
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 1.88$  S/m;  $\varepsilon_r = 37.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

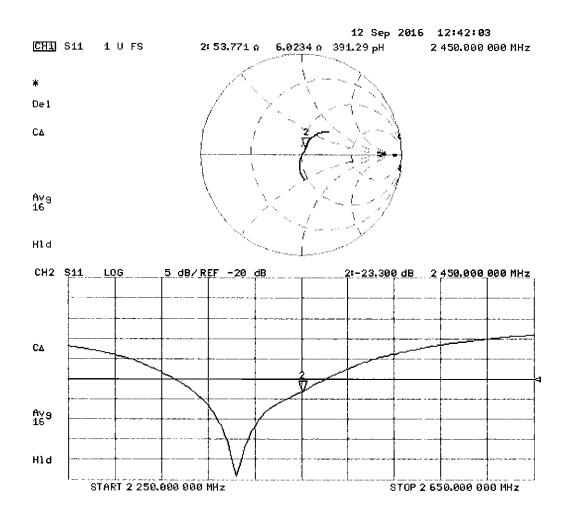
- Probe: EX3DV4 SN7349; ConvF(7.72, 7.72, 7.72); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 113.4 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 26.9 W/kg SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.26 W/kg Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg



### **DASY5 Validation Report for Body TSL**

Date: 13.09.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:797

Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 2.04$  S/m;  $\varepsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

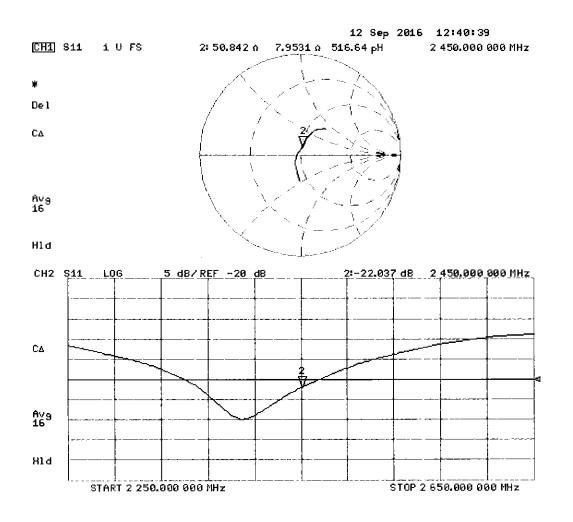
- Probe: EX3DV4 SN7349; ConvF(7.79, 7.79, 7.79); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 106.5 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 25.6 W/kg SAR(1 g) = 13 W/kg; SAR(10 g) = 6.13 W/kgMaximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 dBW/kg



#### **Calibration Laboratory of** Schmid & Partner **Engineering AG** Zeughausstrasse 43, 8004 Zurich, Switzerland



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S Swiss Calibration Service

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Accreditation No.: SCS 0108

Certificate No: D750V3-1003\_Jan17

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**PC Test** Cilent

CALIBRATION C	ERTIFICATE		
Object	D750V3 - SN:100	03	
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits	above 700 MHz BNV 01/26/201
Calibration date:	January 11, 2017	7	
The measurements and the unce	rtainties with confidence p	onal standards, which realize the physic robability are given on the following pag ry facility: environment temperature (22	ges and are part of the certificate.
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 7349	31-Dec-16 (No. EX3-7349_Dec16)	Dec-17
DAE4	SN: 601	04-Jan-17 (No. DAE4-601_Jan17)	Jan-18
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17
	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	Gell
Approved by:	Katja Pokovic	Technical Manager	Lo las
			Issued: January 11, 2017

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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#### Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation:

e) DASY4/5 System Handbook

#### Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Accreditation No.: SCS 0108

#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.6 ± 6 %	0.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

#### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.10 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.39 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.36 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.43 W/kg ± 16.5 % (k=2)

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.2 ± 6 %	0.96 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

#### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.21 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	8.79 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.45 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	5.78 W/kg ± 16.5 % (k=2)

#### Appendix (Additional assessments outside the scope of SCS 0108)

#### **Antenna Parameters with Head TSL**

Impedance, transformed to feed point	54.3 Ω - 1.4 jΩ
Return Loss	- 27.3 dB

#### **Antenna Parameters with Body TSL**

Impedance, transformed to feed point	49.4 Ω - 6.0 jΩ
Return Loss	- 24.4 dB

#### General Antenna Parameters and Design

ctrical Delay (one direction)	1.034 ns
-------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	January 21, 2009

#### **DASY5 Validation Report for Head TSL**

Date: 11.01.2017

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1003

Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz;  $\sigma = 0.89$  S/m;  $\varepsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

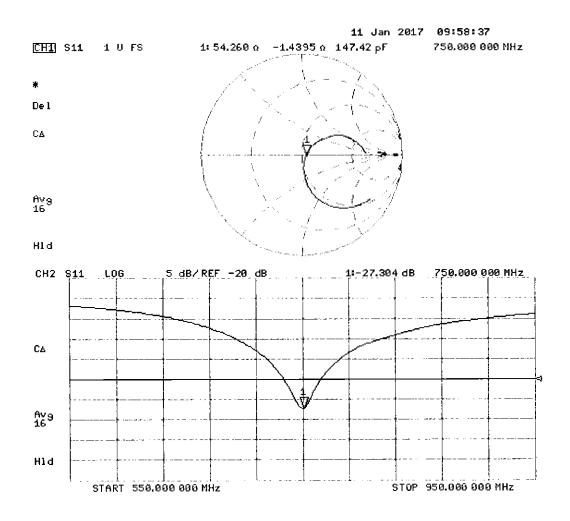
- Probe: EX3DV4 SN7349; ConvF(10.17, 10.17, 10.17); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.01.2017
- Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 59.38 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 3.20 W/kg SAR(1 g) = 2.1 W/kg; SAR(10 g) = 1.36 W/kg Maximum value of SAR (measured) = 2.82 W/kg



0 dB = 2.82 W/kg = 4.50 dBW/kg



#### **DASY5 Validation Report for Body TSL**

Date: 10.01.2017

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1003

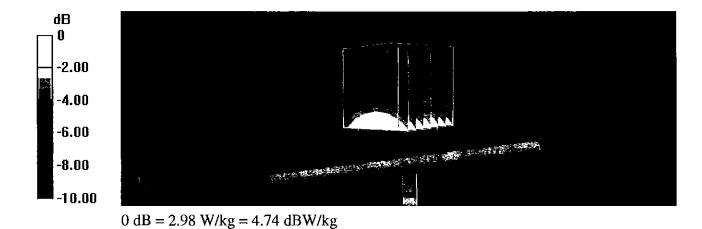
Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz;  $\sigma = 0.96$  S/m;  $\varepsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

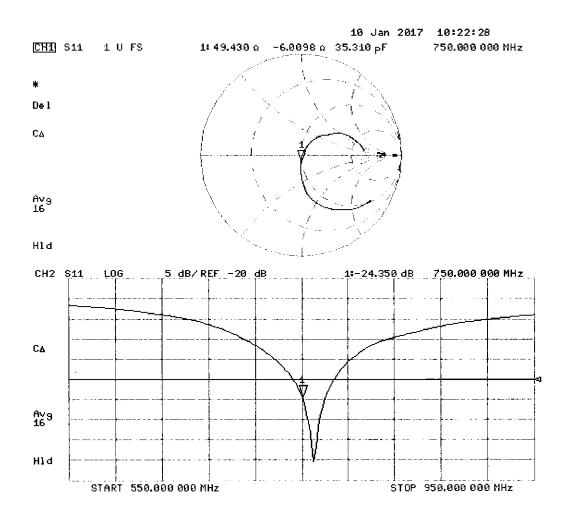
DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(9.99, 9.99, 9.99); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.01.2017
- Phantom: Flat Phantom 4.9 (Back); Type: QD 00R P49 AA; Serial: 1005
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 58.22 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 3.40 W/kg SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.45 W/kg Maximum value of SAR (measured) = 2.98 W/kg





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#### Client PC Test

Certificate No: D2450V2-981\_Jul16

# **CALIBRATION CERTIFICATE**

Object	D2450V2 - SN:98	31		
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits abo	ove 700 MHz	VPT1 8/ 9/1
Calibration date:	July 25, 2016			:
The measurements and the unce	rtainties with confidence p	onal standards, which realize the physical un robability are given on the following pages an ry facility: environment temperature (22 $\pm$ 3)°(	d are part of the certificate.	
Calibration Equipment used (M&T	E critical for calibration)			
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration	
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17	
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17	
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17	
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17	
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17	
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17	1
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16	
Secondary Standards	ID #	Check Date (in house)	Scheduled Check	
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16	3
Power sensor HP 8481A	SN: US37292783	07-Ocl-15 (No. 217-02222)	In house check: Oct-16	3
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16	3
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16	6
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16	3
Calibrated by:	Name Michael Weber	Function Laboratory Technician	Signature	
Approved by:	Katja Pokovic	Technical Manager	L'IL	
This calibration cortificate chall n	of be reproduced event in	n full without written approval of the laboratory	Issued: July 27, 2016	

#### **Calibration Laboratory of**

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#### **Glossarv:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation:

e) DASY4/5 System Handbook

#### Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Accreditation No.: SCS 0108

#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

## Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.0 ± 6 %	1.86 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

#### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.8 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
•		
SAR measured	250 mW input power	6.26 W/kg

#### **Body TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.8 ± 6 %	2.03 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

#### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.0 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	50.8 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.04 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	23.8 W/kg ± 16.5 % (k=2)

#### Appendix (Additional assessments outside the scope of SCS 0108)

#### **Antenna Parameters with Head TSL**

Impedance, transformed to feed point	53.2 Ω + 3.4 jΩ
Return Loss	- 26.9 dB

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	50.2 Ω + 4.5 jΩ
Return Loss	- 27.0 dB

#### **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.162 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### Additional EUT Data

Manufactured by	SPEAG
Manufactured on	December 30, 2014

#### **DASY5 Validation Report for Head TSL**

Date: 13.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:981

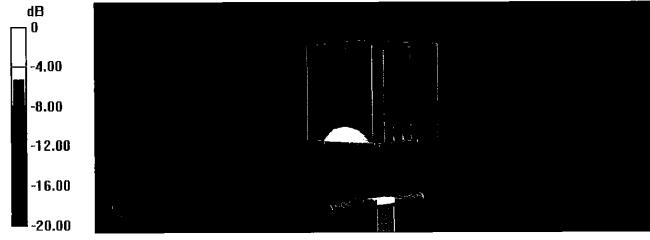
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 1.86$  S/m;  $\varepsilon_r = 38$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

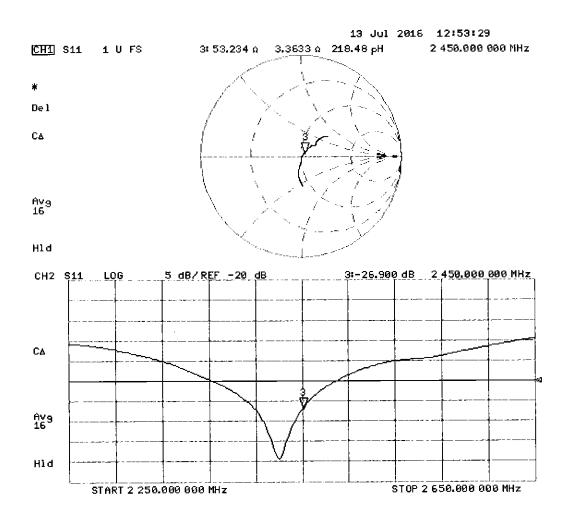
- Probe: EX3DV4 SN7349; ConvF(7.72, 7.72, 7.72); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 115.8 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 27.4 W/kg SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.26 W/kg Maximum value of SAR (measured) = 22.5 W/kg



0 dB = 22.5 W/kg = 13.52 dBW/kg



#### **DASY5 Validation Report for Body TSL**

Date: 25.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:981

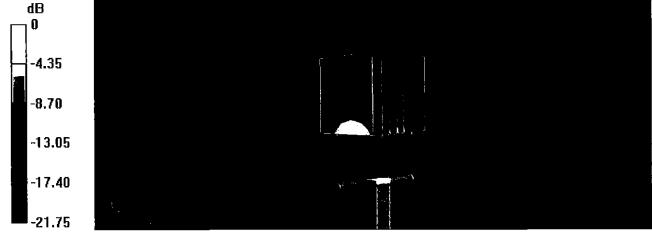
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 2.03$  S/m;  $\varepsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

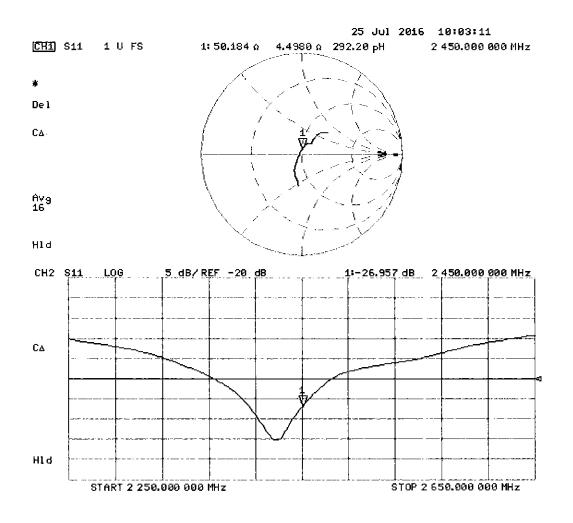
- Probe: EX3DV4 SN7349; ConvF(7.79, 7.79, 7.79); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

#### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 107.1 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 26.0 W/kg SAR(1 g) = 13 W/kg; SAR(10 g) = 6.04 W/kg Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg



#### **Calibration Laboratory of** Schmid & Partner **Engineering AG** Zeughausstrasse 43, 8004 Zurich, Switzerland





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Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

09-28-2016

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service Is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client PC Test

Certificate No: ES3-3287\_Sep16

# **CALIBRATION CERTIFICATE**

Object
--------

ES3DV3 - SN:3287

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

September 19, 2016

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-15 (No. ES3-3013_Dec15)	Dec-16
DAE4	SN: 660	23-Dec-15 (No. DAE4-660_Dec15)	Dec-16
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	4 D 11/1
			sey high
Approved by:	Katja Pokovic	Technical Manager	Retty
	3 - J		
			Issued: September 20, 2016
This calibration certificate	e shall not be reproduced except in ful	without written approval of the laboratory	I.

#### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst

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Multilateral Agreement for the recognition of calibration certificates

#### Glossary: TSL tissue simulating liquid NORMx,y,z sensitivity in free space sensitivity in TSL / NORMx,y,z ConvF DCP diode compression point CF crest factor (1/duty\_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters Polarization @ φ rotation around probe axis Polarization 9 9 rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- Techniques", June 2013
  b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx, y, z are only intermediate values, i.e., the uncertainties of NORMx, y, z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x, y, z = NORMx, y, z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe ES3DV3

# SN:3287

Manufactured: June 7, 2010 Calibrated: September 19

September 19, 2016

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)	
Norm $(\mu V/(V/m)^2)^A$	0.87	0.98	1.00	± 10.1 %	
DCP (mV) <sup>B</sup>	101.9	101.4	106.1		

#### **Modulation Calibration Parameters**

UID	Communication System Name		Α	В	С	D	VR	Unc <sup>E</sup>
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	198.4	±3.5 %
		Y	0.0	0.0	1.0		189.6	
		Z	0.0	0.0	1.0	-	184.8	

Note: For details on UID parameters see Appendix.

#### **Sensor Model Parameters**

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms.V <sup>-2</sup>	T2 ms.V⁻¹	T3 ms	T4 V <sup>-2</sup>	T5 V⁻¹	Т6
X	65.67	459.4	34.07	29.08	2.68	5.077	2	0.308	1.009
Ϋ́	71.46	511.8	35.31	29.86	3.707	5.1	0.748	0.607	1.009
Z	50.48	357.3	34.55	27.84	2.262	5.1	1.583	0.279	1.01

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>a</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max, deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Ünc (k=2)
750	41.9	0.89	6.96	6.96	6.96	0.44	1.36	± 12.0 %
835	41.5	0.90	6.67	6.67	6.67	0.29	1.69	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.43	1.42	<u>± 12.0 %</u>
1900	40.0	1.40	5.27	5.27	5.27	0.41	1.45	± 12.0 %
2300	39.5	1.67	4.86	4.86	4.86	0.61	1.28	± 12.0 %
2450	39.2	1.80	4.54	4.54	4.54	0.47	1.51	± 12.0 %
2600	39.0	1.96	4.41	4.41	4.41	0.77	1.18	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target lissue parameters. <sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

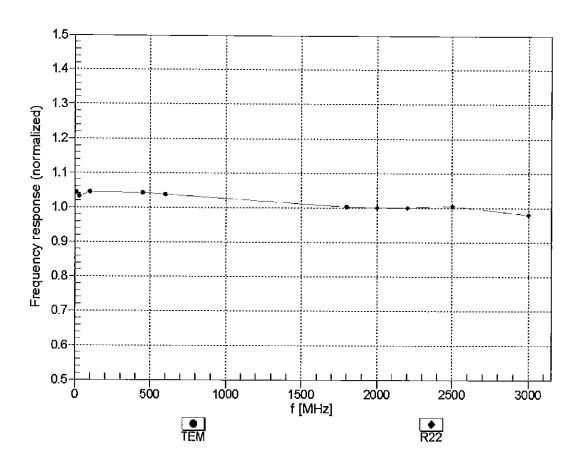
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>`G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.64	6.64	6.64	0.27	1.86	± 12.0 %
835	55.2	0.97	6.55	6.55	6.55	0.50	1.37	± 12.0 %
1750	53.4	1.49	5.11	5.11	5.11	0.33	1.85	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.42	1.59	± 12.0 %
2300	52.9	1.81	4.55	4.55	4.55	0.55	1.42	± 12.0 %
2450	52.7	1.95	4.35	4.35	4.35	0.80	1.09	± 12.0 %
2600	52.5	2.16	4.12	4.12	4.12	0.80	1.10	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

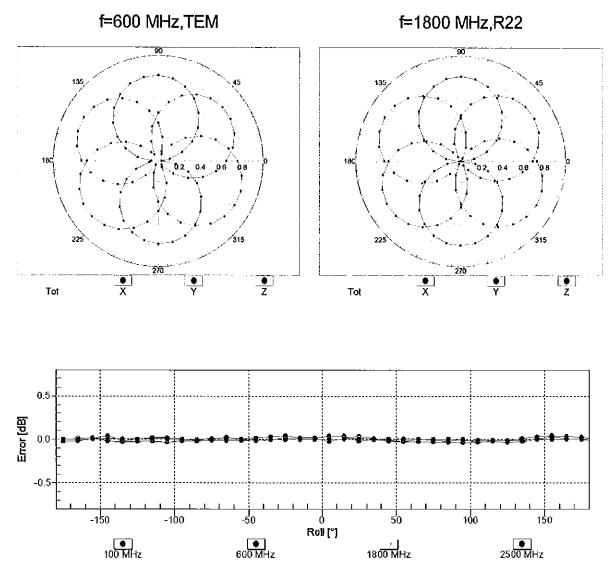
validity can be extended to  $\pm$  110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

The ConvF uncertainty for indicated target tissue parameters. <sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



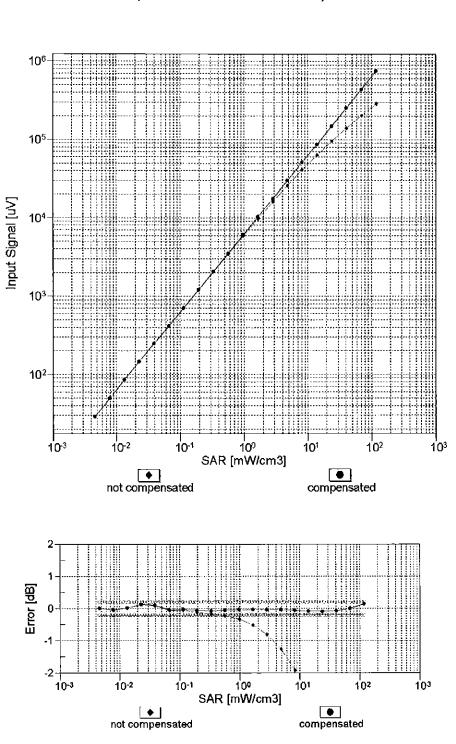
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



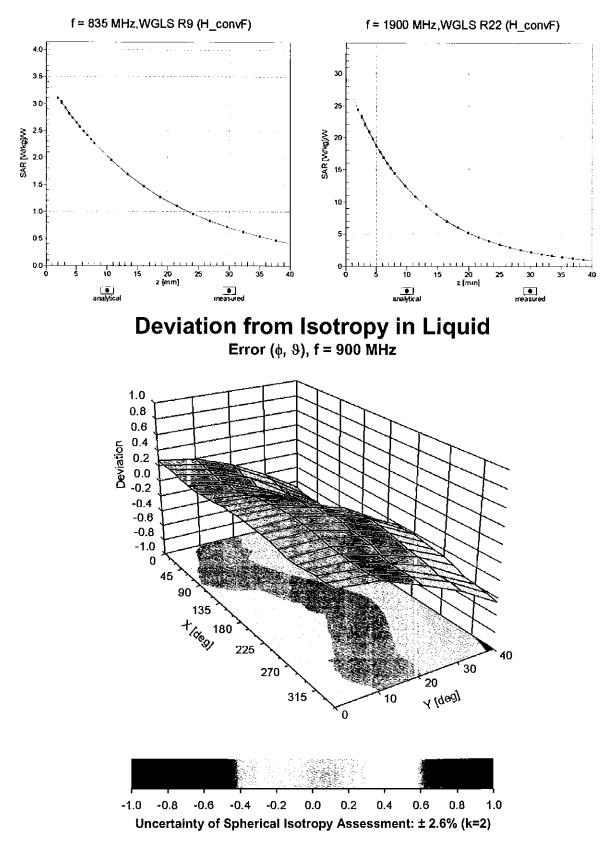
# Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



## Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

Uncertainty of Linearity Assessment: ± 0.6% (k=2)



# **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	84.9
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

### **Appendix: Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	198.4	± 3.5 %
		Y	0.00	0.00	1.00		189.6	
		Ζ	0.00	0.00	1.00		184.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	9.57	81.27	19.66	10.00	25.0	± 9.6 %
		Y	9.48	81.17	20.59		25.0	
		Ζ	11.44	84.72	20.81		25.0	
10011- CAB	UMTS-FDD (WCDMA)	×	1.41	73.12	18.60	0.00	150.0	± 9.6 %
		Y	<u>1.09</u>	67.36	15.29		150.0	
10010		Z	1.04	67.24	15.12		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.39	66.79	17.15	0.41	150.0	± 9.6 %
		Y	1.33	64.98	15.75		150.0	
10010		Z	1.31	64.97	15.66	4.10	150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.20	67.40	17.54	1.46	150.0	± 9.6 %
		Y	5.27	67.18	17.41		150.0	
10001		Z	5.09	67.33	17.40	0.00	150.0	+0.00
10021- DAB	GSM-FDD (TDMA, GMSK)	X	25.12	98.64	27.15	9.39	50.0	± 9.6 %
		Y	16.05	91.61	25.96		50.0	
40000		Z	54.58	112.47	31.02	9.57	50.0	1001
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	21.90	96.28	26.48	9.57	50.0	± 9.6 %
		Y	15.04	90.31	25.57		50.0 50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	ZX	40.95 100.00	<u>107.64</u> 118.44	29.77 30.60	6.56	60.0	± 9.6 %
DAD		Y	56.85	112.42	30.28		60.0	
		Z	100.00	119.26	30.80		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	15.98	100.03	37.68	12.57	50.0	± 9.6 %
		Y	12.36	89.89	33.32		50.0	
	-	Z	14.92	100.13	38.33		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	19.89	102.72	35.15	9.56	60.0	± 9.6 %
		Y	15.11	94.49	32.22		60.0	
		Z	21.16	106.39	36.94	<u> </u>	60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	×	100.00	117.46	29.21	4.80	80.0	± 9.6 %
		Y	100.00	119.97	30.83		80.0	
40000	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z	100.00	118.35	29.47	2 55	80.0	± 9.6 %
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	117.97	28.63	3.55	100.0	19.0 %
		Y 7	100.00	119.91	29.91	<u> </u>	100.0	
40000		Z	100.00	118.74	28.84 31.54	7.80	100.0 80.0	± 9.6 %
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)		14.03	95.19		1.00	<u> </u>	± 9.0 %
		Y Z	<u>11.54</u> 13.09	89.32 95.17	29.33 31.96		80.0	<u> </u>
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	117.04	29.36	5.30	70.0	± 9.6 %
		Y	100.00	119.78	31.12	1	70.0	
		Ż	100.00	117.69	29.49		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	120.90	28.34	1.88	100.0	± 9.6 %
		Y	100.00	121.14	28.78	1	100.0	
		Ż	100.00	119.84	27.78	T	100.0	[

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#### September 19, 2016

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	128.75	30.50	1.17	100.0	± 9.6 %
·		ΤΥ	100.00	125.19	29.33		100.0	
		Ż	100.00	124.54	28.68		100.0	<u> </u>
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	24.47	102.44	28.62	5.30	70.0	± 9.6 %
		Υ	12.93	91.34	25.64		70.0	
		Z	20.22	99.06	27.27		70.0	
10034- _CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	15.75	99.73	26.60	1.88	100.0	±9.6 %
		Y	6.06	84.29	21.90		100.0	
40005		Z	7.41	86.87	21.79		100.0	
10035- _CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	8.06	91.60	24.06	1.17	100.0	± 9.6 %
		Y	3.71	78.74	19.66		100.0	
40000		Z	4.06	80.00	19.16		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	31.59	106.91	29.95	5.30	70.0	± 9.6 %
_		Υ	14.71	93.73	26.48		70.0	
10007		Z	25.49	103.04	28.49		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	15.02	99.00	26.34	1.88	100.0	± 9.6 %
		Y	5.91	83.93	21.74		100.0	
10000		Z	6.95	86.01	21.48		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	8.64	92.97	24.58	1.17	100.0	± 9.6 %
		Y	3.82	79.37	19.97		100.0	
40000		Z	4.16	80.58	19.47	_	100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	3.32	80.83	20.52	0.00	150.0	± 9.6 %
		Y	1.99	71.59	16.56		150.0	
100/0		Z	1.78	71.38	15.53		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	×	93.96	116.51	30.17	7.78	50.0	± 9.6 %
		Υ	28.36	100.31	27.04		50.0	
40044		Z	100.00	118.01	30.46		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	110.81	0.68	0.00	150.0	±9.6 %
		Y	0.00	94.68	0.92		150.0	
40040		Z	0.01	95.27	0.89		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	12.13	84.40	24.33	13.80	25.0	± 9.6 %
		Y	11.03	81.88	24.36		25.0	
40040	DEOT (TOD. TOLLA (ED.L. OHOL)		15.47	90.17	26.32		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	14.56	88.92	24.53	10.79	40.0	± 9.6 %
		<u>Y</u>	12.34	85.94	24.48		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Z X	20.46 13.90	95.78 88.80	26.73 25.15	9.03	40.0 50.0	±9.6%
		Y	11.60	84.02				
		Z	15.96	84.93 92.01	24.34		50.0	
10058-	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	10.54	<u>92.01</u> 89.79	26.12	6 57	50.0	
DAB			10.04	09.79	28.95	6.55	100.0	±9.6 %
			0 17		27.04		400 0	
		Y	9.17	85.43	27.21		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)		9.17 9.28 1.62		27.21 28.66 18.42	0.61	100.0 100.0 110.0	± 9.6 %
	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	Y Z X	9.28 1.62	85.43 88.15 69.54	28.66 18.42	0.61	100.0 110.0	±9.6 %
	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	Y Z X Y	9.28 1.62 1.52	85.43 88.15 69.54 67.09	28.66 18.42 16.78	0.61	100.0 110.0 110.0	± 9.6 %
	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	Y Z X	9.28 1.62	85.43 88.15 69.54	28.66 18.42	0.61	100.0 110.0	± 9.6 %
CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Y Z X Y Z	9.28 1.62 <u>1.52</u> 1.47	85.43 88.15 69.54 67.09 67.00	28.66 18.42 16.78 16.67		100.0 110.0 110.0 110.0	

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10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	24.29	111.37	31.49	2.04	110.0	± 9.6 %
		Y	7.57	90.21	25.12	<u> </u>	110.0	İ
		Z	8.96	94.42	26.47		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.94	67.26	16.92	0.49	100.0	± 9.6 %
		Y	4.99	66.94	16.70		100.0	
		Z	4.80	67.06	16.67		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.98	67.42	17.05	0.72	100.0	± 9.6 %
<u> </u>		Y	5.03	67.12	16.85		100.0	
		Z	4.84	67.22	16.80		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.33	67.75	17.30	0.86	100.0	± 9.6 %
		Y	5.40	67.50	17.13		100.0	
		Z	5.14	67.52	17.06		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.22	67.77	17.45	1.21	100.0	± 9.6 %
		Y	5.30	67.55	17.30		100.0	
		Z	5.05	67.55	17.23		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.28	67.89	17.67	1.46	100.0	± 9.6 %
		Ý	5.37	67.69	17.54		100.0	
4000-		Z	5.11	67.69	17.47		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.58	67.96	18.07	2.04	100.0	± 9.6 %
		Y	5.70	67.83	17.99		100.0	
40000		Z	5.44	67.94	17.97		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.73	68.36	18.44	2.55	100.0	± 9.6 %
	· ·	Y	5.86	68.26	18.38		100.0	
		Z	5.56	68.20	18.31		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.80	68.22	18.58	2.67	100.0	± 9.6 %
		Y	5.93	68.12	18.53		100.0	
		Z	5.64	68.21	18.51		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.34	67.61	17.91	1.99	100.0	± 9.6 %
		Y	5.43	67.44	17.80		100.0	
		Z	5.23	67.57	17.79		100.0	
10072- _CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.41	68.20	18.23	2.30	100.0	± 9.6 %
		Y	5.52	68.04	18.13		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	Z X	<u>5.28</u> 5.54	68.10 68.52	18.11 18.63	2.83	100.0 100.0	±9.6 %
0/10		Y	5.67	68.41	18.56	· · ·	100.0	
		Z	5.42	68.46	18.55		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.57	68.60	18.89	3.30	100.0	± 9.6 %
		Y	5.71	68.53	18.84		100.0	
		Z	5.46	68.55	18.80		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.74	69.13	19.40	3.82	90.0	± 9.6 %
		Y	5.91	69.12	19.39		90.0	
		Z	5.60	68.97	19.28		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.73	68.87	19.48	4.15	90.0	±9.6 %
		Y	5.91	68.89	19.48		90.0	
		Z	5.64	68.84	19.44		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.76	68.96	19.58	4.30	90.0	± 9.6 %
		Y	5.95	68.98	19.59		90.0	
		Z	5.68	68.95	19.55		90.0	

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CAB         DQPSK, Fullrate)         Y         2.60         65.39         10.25           0090- DAB         GPRS-FDD (TDMA, GMSK, TN 0.4)         X         100.00         118.52         30.65         6.           10097- DAB         V         54.54         111.83         30.17         7           10097- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           CAB         V         1.87         67.25         15.70         7         7         2.07         69.87         17.29         0.           CAB         V         1.83         67.753         15.65         7         7         7         1.83         67.20         15.65           10098- DAB         EDGE-FDD (TDMA, 8PSK, TN 0.4)         X         19.79         102.55         35.10         9.           0.48         MHz, QPSK)         Y         15.06         94.38         32.19         7           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10102- CAB         M	.00 150.0	.00 150.0 ±	: 9.6 %
Iooga- CAB         Iooga- DQPSK, Fullrate)         Z         0.86         65.95         12.66           Iooga- CAB         DQPSK, Fullrate)         Y         2.20         64.33         9.03         4.           Iooga- DAB         QPRS-FDD (TDMA, GMSK, TN 0.4)         X         100.00         118.52         30.65         6.           Iooga- DAB         Y         54.54         111.83         30.17         7           Iooga- CAB         Y         54.54         111.83         30.45         6.           Iooga- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           Iooga- CAB         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.26         7.           Iooga- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         18.79         102.55         35.10         9.           Iooga- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         18.79         102.55         35.10         9.           Iooga- DAB         Y         16.66         94.38         32.19         10100-         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           Iooga- DAB         Y	150.0	150.0	
10082- CAB         S-64 / IS-136 FDD (TDMA/FDM, PI/4- CAB         X         2.22         64.23         9.03         4.           0090- DAB         GPRS, Fullrate)         Y         2.60         65.39         10.25         10.00           10090- DAB         GPRS, FDD (TDMA, GMSK, TN 0-4)         X         100.00         118.52         30.65         6.           10097- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           10098- CAB         UMTS-FDD (HSDPA)         X         2.07         69.88         17.29         0.           10098- CAB         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.28         0.           10098- CAB         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.28         0.           10098- CAB         UMTS-FDD (TDMA, 8PSK, TN 0-4)         19.79         10.25         52.1         9.           10100- CAB         MHz, QPSK)         Y         1.83         67.20         15.65         11.60         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.16         18.05         0.           10102- CAB         MHz, 16-QAM         X	150.0		
Z         2.07         64.06         8.86           DAB         GPRS-FDD (TDMA, GMSK, TN 0.4)         X         100.00         118.52         30.65         6.           DAB         Y         54.54         111.83         30.17         2.         100.00         119.33         30.85         6.           10097-         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           CAB         Y         1.87         67.25         15.70         2.         1.83         67.720         15.65           10098-         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.29         0.           CAB         Y         1.83         67.20         15.65         15.70         2.         1.80         67.49         16.52           10099-         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           DAB         -         Y         15.06         94.38         32.19         10100-           CTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           CAB         MHz, QPSK)         Y         3.44         67.86	.77 80.0		9.6 %
10090- DAB         GPRS-FDD (TDMA, GMSK, TN 0-4)         X         100.00         118.52         30.65         6.           10097- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           10097- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           10098- CAB         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.28         0.           10098- CAB         UMTS-FDD (HSUPA, Subtest 2)         X         2.03         69.88         17.28         0.           CAB         Y         1.83         67.20         15.65         15.55         16.52         15.55         16.52         15.55         16.52         17.09         102.55         35.10         9.         18.52         30.85         17.28         0.           AB         Y         1.83         67.25         15.55         19.09         15.65         15.55         10.9         18.52         30.65         16.71         16.65         16.71         16.67         16.71         16.65         16.71         16.67         16.73         16.67         17.73.15         18.60         0.         16.171         16.67         16.73	80.0	80.0	
DAB         Product and tex product and product and produc	80.0	80.0	
Image: Constraint of the image: Constraint of th	.56 60.0		9.6 %
10097- CAB         UMTS-FDD (HSDPA)         X         2.07         69.87         17.29         0.           10098- CAB         V         1.87         67.53         15.55         15.55           10098- CAB         UMTS-FDD (HSUPA, Sublest 2)         X         2.03         69.88         17.28         0.           CAB         Y         1.83         67.20         15.55         15.65           10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           0.4         Y         15.06         94.38         32.19         2         21.07         106.24         36.89           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.06         0.           10101- LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           MHz, 16-QAM)         Y         3.44         67.88         16.03         16.04         10.02           LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         67.61         16.00         10.02           LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         77.84         21.45         3.1	60.0		
CAB         Y         1.87         67.25         15.70           10098         UMTS-FDD (HSUPA, Sublest 2)         X         2.03         69.88         17.28         0.           CAB         Y         1.83         67.53         15.55         15.55         15.55           10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.06         0.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.06         0.           10101- LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.71         0.           10102- CAB         MHz, 16-QAM)         Y         3.34         70.68         16.71         0.           10101- LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           CAB         MHz, 16-QAM)         Y         3.54         70.66         15.91         11.           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         68.78         16.77         0.           C	60.0		
Z         1.83         67.53         15.55           10098- CAB         UMTS-FDD (HSUPA, Sublest 2)         X         2.03         69.88         17.28         0.           Y         1.83         67.20         15.65         15.55         15.55         15.55         15.55           10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         67.66         15.91         0.           10102- CAB         MHz, 16-QAM)         Y         3.44         67.88         16.03         0.           Y         3.55         67.81         16.12         0.         0.         0.         0.           CAB         MHz, 16-QAM)         Y         3.55         67.81         16.12         0.           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         68.78         16.77         0. <td>.00 150.0</td> <td></td> <td>9.6 %</td>	.00 150.0		9.6 %
10098- CAB         UMTS-FDD (HSUPA, Sublest 2)         X         2.03         69.86         17.28         0.           I0099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           I0099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           I0090- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         106.24         36.89           I0100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           I0101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           I0102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.56         67.81         16.03           I0102- CAB         MHz, 16-QAM)         Y         3.44         67.68         16.03         0.           I0102- CAB         MHz, 64-QAM)         Y         3.55         67.81         16.00         0.           I0103- CAB         MHz, QPSK)         Y         8.52         77.08         20.81         3.3           I0104- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         8.83 <td>150.0</td> <td></td> <td></td>	150.0		
CAB         Y         1.83         67.20         15.65         7.12         7.12           10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10101- CAB         MHz, 16-QAM)         Y         3.44         67.86         16.71         0.           10102- CAB         MHz, 16-QAM)         Y         3.44         67.86         16.71         0.           10102- CAB         MHz, 16-QAM)         Y         3.44         67.86         16.71         0.           10102- CAB         MHz, 64-QAM)         Y         3.55         67.81         16.12         0.           10102- CAB         MHz, 04-QAM, 100% RB, 20         X         3.62         68.78         16.77         0.           10102- CAB         MHz, 04-QAM, 100% RB, 20         X         9.03         78.	150.0		
Z         1.80         67.49         15.52           10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         68.78         16.77         0.           10102- CAB         MHz, 64-QAM)         Y         3.55         67.81         16.12         2         3.38         67.61         16.00         16.00         16.00         16.00         16.00         16.00         16.00         16.00         16.00         16.01         16.02         16.41         16.00         16.71         0.         16.82         16.72         16.85         16.72         16.85         16.75         16.33         <	.00 150.0		9.6 %
10099- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-4)         X         19.79         102.55         35.10         9.           0         X         15.06         94.38         32.19         Z         21.07         106.24         36.89           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.71         73.15         18.05         0.           CAB         MHz, QPSK)         Y         3.34         70.68         16.71         Z         3.15         70.31         16.60         0.           CAB         MHz, 16-QAM)         Y         3.44         67.88         16.03         0.           CAB         MHz, 64-QAM)         Y         3.65         67.61         16.02         10.02           LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         68.78         16.77         0.           CAB         MHz, 64-QAM)         Y         3.55         67.61         16.00         10.02           LTE-FDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.3           CAB         MHz, QPSK)         Y         8.52         77.08         20.81           10104-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12	150.0		
DAB         Y         15.06         76.160         61.06         61.07         61.06         61.07         61.06         61.07         61.06         61.07         61.06         61.07         61.0	150.0		
Z         21.07         106.24         36.89           10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         X         3.71         73.15         18.05         0.           2         3.15         70.31         16.60         0.         0.0	.56 60.0		9.6 %
10100- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         X         3.71         73.15         18.05         0.           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         Y         3.34         70.68         16.71           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         X         3.53         68.94         16.73         0.           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         Y         3.44         67.88         16.03           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.0           CAB         MHz, 64-QAM)         Y         3.55         67.81         16.12         2         3.38         67.61         18.00         10.0           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.63         77.31         21.45         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           10104- CAC         MHz, 64-QAM)         Y         7.58         73.53	60.0		
CAB         MHz, QPSK)         Y         3.34         70.68         16.71           10101-         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.53         68.94         16.73         0.           CAB         MHz, 16-QAM)         Y         3.44         67.88         16.03         0.           CAB         MHz, 16-QAM)         Y         3.44         67.88         16.03         0.           CAB         MHz, 64-QAM)         Y         3.44         67.86         15.91         0.           10102-         LTE-FDD (SC-FDMA, 100% RB, 20         X         3.62         68.76         16.77         0.           CAB         MHz, 64-QAM)         Y         3.55         67.61         16.00         16.00           10103-         LTE-TDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.3           CAB         MHz, QPSK)         Y         8.52         77.08         20.81         2.           10104-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.3           CAB         MHz, 64-QAM)         Y         8.68         76.21         21.28         2.         2.645         77.10	60.0		
Z         3.15         70.31         16.60           10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         X         3.53         68.94         16.73         0.1           2         3.28         67.66         15.91         0.1           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.1           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         Y         3.55         67.81         16.12           2         3.38         67.61         16.00         1000         16.00         1000           CAB         MHz, QPSK)         Y         8.52         77.08         20.81         16.00           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.10         21.68           10105- CAB         MHz, 16-QAM)         Y         8.68         76.21         21.28           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.5           10105- CAC         LTE-FDD (SC-FDMA, 100% RB, 10			9.6 %
10101- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         X         3.53         68.94         16.73         0.1           Y         3.44         67.88         16.03         2         3.28         67.66         15.91           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.1           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         Y         3.55         67.61         16.00           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         Y         8.52         77.08         20.81           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         Y         8.68         76.21         21.64           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         X         8.83         77.31         21.70         3.9           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         8.12         75.63         21.27         3.9           10105- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 CAC         X         3.26         72.24         17.88         0.0           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 CAC         X         3.21         68.83         16.74         0.0	150.0		
CAB         MHz, 16-QAM)         Y         3.44         67.88         16.77         0.           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.1           CAB         MHz, 64-QAM)         Y         3.55         67.81         16.12         0.1           CAB         MHz, 64-QAM)         Y         3.55         67.81         16.77         0.1           CAB         MHz, 64-QAM)         Y         3.55         67.81         16.12         0.1           CAB         MHz, QPSK)         Y         3.55         67.81         16.00         0.1           CAB         MHz, QPSK)         Y         8.52         77.08         20.81         0.1           CAB         MHz, 16-QAM)         Y         8.68         76.21         21.64         0.0           10104-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           CAB         MHz, 64-QAM)         Y         8.68         76.21         21.28           10105-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           CAB	150.0		<u> </u>
Z         3.28         67.66         15.91           10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.0           Y         3.55         67.81         16.12         2         3.38         67.61         16.00           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.9           10103- CAB         MHz, QPSK)         Y         8.52         77.08         20.81         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         MHz, 16-QAM)         Y         8.68         76.21         21.28           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           10105- CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           CAC         MHz, 64-QAM)         Y         2.97         69.86         16.52         3.9           CAC			9.6 %
10102- CAB         LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         3.62         68.78         16.77         0.1           2         3.55         67.81         16.12         2         3.38         67.61         16.00         10103-           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.52         77.08         20.81           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           10105- CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         2         3.9           10108- CAC         MHz, 64-QAM)         Y         2.97         69.86         16.52         2         2.76         69.54         16.43           10108- CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         2<	150.0		
Y         3.55         67.81         16.12           Z         3.38         67.61         16.00           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.9           CAB         MHz, QPSK)         Y         8.52         77.08         20.81         Z         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.11         21.70         3.9           CAB         MHz, 16-QAM)         Y         8.68         76.21         21.28           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           10105- CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         2         3.9           10108- CAC         MHz, 08C-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, 16-QAM)         Y         2.97         69.86         16.52         2           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10         <	150.0 00 150.0		9.6 %
Z         3.38         67.61         16.00           10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         9.03         78.84         21.45         3.9           CAB         MHz, QPSK)         Y         8.52         77.08         20.81         3.9           V         8.79         79.04         21.64         3.9         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.10         21.64           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.10         21.68           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           0105- CAC         MHz, 64-QAM)         Y         7.58         73.53         20.37         2         3.9           10108- CAC         MHz, 08C-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, 16-QAM)         Y         2.97         69.86         16.52         2           10109- CAC         LTE-FDD (SC-FDMA, 1			
10103- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         X         9.03         78.84         21.45         3.9           V         8.52         77.08         20.81         Z         8.79         79.04         21.64         21.64         21.64         21.64         21.64         21.64         21.64         21.64         21.70         3.9         3.9           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         Y         8.68         76.21         21.28         21.27         3.9           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         Y         8.68         76.21         21.28         21.27         3.9           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         8.12         75.63         21.27         3.9           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)         Y         7.68         75.16         21.11         11         10108-         2.76         69.54         16.52         2         2         2.76         69.54         16.43         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.21         68.83         16.74         0.0         0.0           CAC         MHz, 16-QAM)			
CAB         MHz, QPSK)         Y         8.52         77.08         20.81           10104-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.3           CAB         MHz, 16-QAM)         Y         8.68         76.21         21.84         3.4           10104-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.83         77.31         21.70         3.5           CAB         MHz, 16-QAM)         Y         8.68         76.21         21.28         3.5           10105-         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.6           CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         2         3.6           CAC         MHz, QPSK)         Y         7.68         75.16         21.11         1           10108-         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, 16-QAM)         Y         2.97         69.86         16.52         2           10109-         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.21         68.83         16.74         0.0 </td <td>150.0</td> <td></td> <td></td>	150.0		
Z         8.79         79.04         21.64           10104- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         X         8.83         77.31         21.70         3.9           Y         8.68         76.21         21.28         21.64         3.9           U105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20         X         8.12         75.63         21.27         3.9           U105- CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           CAC         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, QPSK)         Y         2.97         69.86         16.52         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.9			9.6 %
10104- CAB       LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)       X       8.83       77.31       21.70       3.9         Y       8.68       76.21       21.28       21.28       2       21.70       3.9         10105- CAB       LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)       Y       8.68       76.21       21.28       2         10105- CAB       LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)       X       8.12       75.63       21.27       3.9         10108- CAC       MHz, 64-QAM)       Y       7.58       73.53       20.37       2       3.9         10108- CAC       MHz, QPSK)       Z       7.68       75.16       21.11       1	65.0		
CAB         MHz, 16-QAM)         Y         8.68         76.21         21.28           I0105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         8.12         75.63         21.27         3.9           CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37         3.9           CAB         Y         7.58         73.53         20.37         3.9           CAB         Y         7.58         73.53         20.37         3.9           Z         7.68         75.16         21.11         11           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, QPSK)         Y         2.97         69.86         16.52         2           CAC         MHz, 16-QAM)         Y         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         2         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz,         X         2.68         71.31         17.65         0.0           CAC         QPSK)         Y </td <td>65.0</td> <td></td> <td></td>	65.0		
Z         8.45         77.10         21.68           10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         8.12         75.63         21.27         3.9           Y         7.58         73.53         20.37         Z         7.68         75.16         21.11           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, QPSK)         Y         2.97         69.86         16.52         2           LTE-FDD (SC-FDMA, 100% RB, 10         X         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         2           LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         3.12         67.65         15.97         2           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         3.12         67.65         15.97         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.82         16.19         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.65         16.05         0.0			9.6 %
10105- CAB         LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         X         8.12         75.63         21.27         3.5           Y         7.58         73.53         20.37         Z         7.68         75.16         21.11         10108- LTE-FDD (SC-FDMA, 100% RB, 10 CAC         X         3.26         72.24         17.88         0.0           Y         2.97         69.86         16.52         Z         2.76         69.54         16.43           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         X         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         Z         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.68         71.31         17.65         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.82         16.19         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.65         16.05         0.0           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.65         16.05         0	65.0		
CAB         MHz, 64-QAM)         Y         7.58         73.53         20.37           Z         7.68         75.16         21.11         10108-         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.26         72.24         17.88         0.0           CAC         MHz, QPSK)         Y         2.97         69.86         16.52         2           CAC         Y         2.97         69.86         16.52         2         2         2.76         69.54         16.43           10109-         LTE-FDD (SC-FDMA, 100% RB, 10         X         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         2           10110-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, Z         2.93         67.47         15.80         10           10110-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, Z         2.68         71.31         17.65         0.0           CAC         QPSK)         Y         2.45         68.82         16.19         2         2.25         68.65         16.05         10111-           LTE-FDD (SC-FDMA, 100% RB, 5 MHz, Z         Z         2.94         69.70         17.25         0.0 <td> 65.0</td> <td></td> <td>-</td>	65.0		-
Z         7.68         75.16         21.11           10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)         X         3.26         72.24         17.88         0.0           Y         2.97         69.86         16.52         2         2         2.76         69.54         16.43           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         X         3.21         68.83         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         0.0           CAC         QPSK)         Y         2.45         68.82         16.19         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         Y         2.45         68.82         16.19           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         Y         2.45         68.82         16.19           Z         2.25         68.65         16.05         10.111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz,         X         2.94         69.70         17.25         0.0			9.6 %
10108- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)         X         3.26         72.24         17.88         0.0           Y         2.97         69.86         16.52         2         2         2.76         69.54         16.43         10109- 10.00         2         2.76         69.54         16.43         16.74         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         0.0           CAC         MHz, 16-QAM)         Y         3.12         67.65         15.97         0.0           CAC         QPSK)         Y         3.12         67.65         15.97         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         Y         2.45         68.82         16.19         0.0           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, LTE-FDD (SC-FDMA, 100% RB, 5 MHz,         X         2.94         69.70         17.25         0.0	65.0		
Y         2.97         69.86         16.52           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         X         3.21         68.83         16.74         0.0           Y         3.12         67.65         15.97         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         Y         3.12         67.65         15.97           Z         2.93         67.47         15.80         10.0           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           Y         2.45         68.82         16.19         2         2.25         68.65         16.05           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         X         2.94         69.70         17.25         0.0	65.0 00 150.0		9.6 %
Z         2.76         69.54         16.43           10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         X         3.21         68.83         16.74         0.0           Y         3.12         67.65         15.97         2         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           2         2.45         68.82         16.19         2         2.25         68.65         16.05           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.82         16.19         2           2         2.25         68.65         16.05         10.05         10.111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         X         2.94         69.70         17.25         0.0	450.0	450.0	
10109- CAC         LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         X         3.21         68.83         16.74         0.0           Y         3.12         67.65         15.97         2         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           2         2.45         68.82         16.19         2         2.25         68.65         16.05           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         Y         2.45         68.82         16.19         2           2         2.25         68.65         16.05         10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         X         2.94         69.70         17.25         0.0	150.0		
Y         3.12         67.65         15.97           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.93         67.47         15.80           Y         2.45         68.82         16.19         0.0           Z         2.25         68.65         16.05         10111-           LTE-FDD (SC-FDMA, 100% RB, 5 MHz, LTE-FDD (SC-FDMA, 100% RB, 5 MHz, Z         X         2.94         69.70         17.25         0.0	150.0 00 150.0		9.6 %
Z         2.93         67.47         15.80           10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           Y         2.45         68.82         16.19           Z         2.25         68.65         16.05           IO111-           LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 100% RB, 5 MHz,         X         2.94         69.70         17.25         0.0	450.0		
10110- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)         X         2.68         71.31         17.65         0.0           Y         2.45         68.82         16.19           Z         2.25         68.65         16.05           IO111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         2.94         69.70         17.25         0.0	150.0		
Y         2.45         68.82         16.19           Z         2.25         68.65         16.05           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         2.94         69.70         17.25         0.0	150.0 00 150.0		9.6 %
Z         2.25         68.65         16.05           10111-         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X         2.94         69.70         17.25         0.0	150.0	150.0	
10111- LTE-FDD (SC-FDMA, 100% RB, 5 MHz, X 2.94 69.70 17.25 0.0	150.0		
<u>CAC</u> 16-QAM) 0.0			9.6 %
Y 2.81 68.04 16.25	150.0	150.0	
Z 2.63 68.09 16.01	150.0		

Y         3.24         67.56         16.01         150.0           10113         LTE-FDD (5C-FDMA, 100% RB, 5 MHz, GAC         X         3.09         69.65         17.28         0.00         150.0         ± 0.6 %           CAC         64-GAM         Y         2.97         68.11         16.35         150.0         ± 0.6 %           10114         IEEE 802.11n (HT Greenfield, 13.5         X         5.30         67.67         16.69         0.00         150.0         ± 0.8 %           AMps, BPSK)         Y         5.32         67.34         16.45         150.0         ± 0.8 %           CAB         Mbps, BPSK)         Y         5.32         67.34         16.45         150.0         ± 0.8 %           10115         IEEE 802.11n (HT Greenfield, 135 Mbps, X         5.68         67.55         16.83         0.00         150.0         ± 9.6 %           10116         IEEE 802.11n (HT Mixed, 13.5 Mbps, X         5.43         67.35         16.50         150.0         ± 9.6 %           CAB         BPSK)         Y         5.33         67.35         16.48         150.0         ± 9.6 %           CAB         16.20.11n (HT Mixed, 13.5 Mbps, X         5.31         67.62         16.50         150.0	10112- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.32	68.66	16.72	0.00	150.0	± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				3.24	67.56	16.01		150.0	
U1013- CAC         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC         X         3.09         69.65         17.28         0.00         150.0         ± 9.6 %, ± 9.6 %,           CAC         64-QAM)         Y         2.97         68.11         16.35         150.0         ± 9.6 %,           10114- CAB         IEEE 502.11n (HT Greenfield, 13.5         X         5.30         67.67         16.69         0.00         150.0         ± 9.6 %,           CAB         Mbps, BPSK)         Y         5.32         67.34         16.45         150.0         ± 9.6 %,           10115-         IEEE 602.11n (HT Greenfield, 81 Mbps, CAB         Z         5.16         67.41         16.44         150.0         ± 9.6 %,           10116-         IEEE 802.11n (HT Greenfield, 135 Mbps, CAB         X         5.43         67.93         16.73         0.00         150.0         ± 9.6 %,           10117-         IEEE 802.11n (HT Mixed, 13.5 Mbps, CAB         X         5.43         67.59         16.63         150.0         ± 9.6 %,           10118-         IEEE 802.11n (HT Mixed, 81 Mbps, 16- CAB         X         5.73         68.05         16.89         0.00         150.0         ± 9.6 %,           10118-         IEEE 802.11n (HT Mixed, 81 Mbps, 16- CAB         X <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
CAC         64-QAM         Y         1.00         1	10113-						0.00		+06%
Z         2.76         66.22         16.13         150.0         150.0           CAB         Mbps, BPSK)         Y         5.30         67.67         16.69         0.00         150.0         ± 9.6 %           CAB         Mbps, BPSK)         Y         5.32         67.34         16.45         150.0         ± 9.6 %           CAB         16-0AM         Y         5.32         67.34         16.46         150.0         ± 9.6 %           CAB         16-0AM         Y         5.74         67.75         16.66         150.0         ± 9.6 %           CAB         64-0AM         Y         5.45         67.53         16.74         0.00         150.0         ± 9.6 %           CAB         64-0AM         Y         5.45         67.53         16.50         150.0         ± 9.6 %           CAB         62-0AM         Y         5.45         67.63         16.50         150.0         ± 9.6 %           CAB         62-0AM         Y         5.45         67.62         16.73         0.00         150.0         ± 9.6 %           CA         5.73         16.85         16.80         0.00         150.0         ± 9.6 %           CA         5.73 </td <td>CAC</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.00</td> <td></td> <td>±9.0 %</td>	CAC						0.00		±9.0 %
CAB         Mbps, BPSK)         Y         F32         G7.34         F6.45         F6.00           1115-         IEEE 802.11n (HT Greenfield, 81 Mbps, GAB         7         5.32         67.34         16.45         150.0         ±9.6 %           CAB         IEEE 802.11n (HT Greenfield, 81 Mbps, CAB         5.68         67.95         16.83         0.00         150.0         ±9.6 %           CAB         IEEE 802.11n (HT Greenfield, 135 Mbps, CAB         5.49         67.63         16.77         0.00         150.0         ±9.6 %           CAB         G4-QAM)         Y         5.45         67.63         16.50         150.0         ±9.6 %           CAB         G4-QAM)         Y         5.45         67.63         16.50         150.0         ±9.6 %           CAB         G4-QAM)         Y         5.33         67.35         16.48         150.0         ±9.6 %           CAB         G92.11n (HT Mixed, 13.5 Mbps, 64         X         5.73         68.05         16.89         0.00         150.0         ±9.6 %           CAB         GAM)         Y         5.73         68.05         16.88         0.00         150.0         ±9.6 %           CAB         GAM)         Y         5.74									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10114- CAB						0.00		± 9.6 %
			Y	5.32	67.34	16.45		150.0	
CAB         16-QAM)         Y         5.74         67.75         16.66         150.0           Z         5.49         67.60         16.57         150.0         ±         9.6 %           CAB         64-QAM)         Y         5.45         67.53         16.74         0.00         150.0         ±.9.6 %           CAB         64-QAM)         Y         5.45         67.58         16.50         150.0         ±.9.6 %           10117-         IEEE 802.11n (HT Mixed, 13.5 Mbps,         X         5.31         67.63         16.50         150.0         ±.9.6 %           CAB         BPSK)         Y         5.33         67.63         16.48         150.0         ±.9.6 %           CAB         BPSK)         Y         5.73         68.05         16.89         0.00         150.0         ±.9.6 %           CAB         QAM)         Y         5.76         67.71         16.65         150.0         ±.9.6 %           CAB         QAM)         Y         5.76         67.71         16.65         150.0         ±.9.6 %           CAB         QAM)         Y         5.42         16.69         150.0         ±.9.6 %           CAB         QAM)				5.18	67.41	16.46		150.0	
Z         5.49         67.60         16.57         150.0           CAB         IEEE 602.11n (HT Greenfield, 135 Mbps, GAB         Y         5.43         67.93         16.74         0.00         150.0         ± 9.6 %           CAB         Y         5.45         67.58         16.50         150.0         ± 9.6 %           10117-         IEEE 602.11n (HT Mixed, 13.5 Mbps, CAB         Y         5.33         67.35         16.48         150.0         ± 9.6 %           CAB         PSK)         Y         5.33         67.35         16.42         150.0         ± 9.6 %           CAB         PSK)         Y         5.33         67.73         16.82         10.00         ± 9.6 %           CAB         QAM)         Y         5.76         67.71         16.65         150.0         ± 9.6 %           10119-         IEEE 802.11n (HT Mixed, 135 Mbps, 64-         X         5.40         67.88         16.73         0.00         150.0         ± 9.6 %           CAB         QAM         Y         5.42         67.56         16.48         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.62         67.56         16.48         150.0         ± 9.6 %	10115- CAB		X	5.68	67.95	16.83	0.00	150.0	± 9.6 %
Z         5.49         67.60         16.57         150.0           CAB         IEEE 802.11n (HT Greenfield, 135 Mbps, CAB         Y         5.43         67.93         16.74         0.00         150.0         ± 9.6 %           CAB         Y         5.45         67.58         16.50         150.0         ± 9.6 %           10117-         IEEE 802.11n (HT Mixed, 13.5 Mbps, CAB         Y         5.33         67.35         16.42         150.0         ± 9.6 %           10118-         IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)         Y         5.73         68.05         16.89         0.00         150.0         ± 9.6 %           10118-         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         Y         5.76         67.71         16.65         150.0         ± 9.6 %           10119-         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         QAM         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         QAM         Y         5.42         67.54         16.48         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.64         67.85 <td></td> <td></td> <td>Y</td> <td>5.74</td> <td>67.75</td> <td>16.66</td> <td></td> <td>150.0</td> <td></td>			Y	5.74	67.75	16.66		150.0	
10116- CAB         IEEE 602.11n (HT Greenfield, 135 Mbps, 64-OAM)         X         5.43         67.93         16.74         0.00         150.0         ± 9.6 %           0117- CAB         IEEE 602.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         5.45         67.58         16.50         150.0         ± 9.6 %           0117- CAB         IEEE 602.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         5.31         67.93         16.42         150.0         ± 9.6 %           0.00         150.0         ± 9.6 %         5.31         67.93         16.42         150.0         ± 9.6 %           CAB         BPSK)         Y         5.33         67.35         16.42         150.0         ± 9.6 %           CAB         QAM)         Y         5.76         67.71         16.65         150.0         ± 9.6 %           CAB         QAM)         Y         5.76         67.71         16.68         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.54         16.48         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.56         16.48         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67									-
Y         5.43         67.58         16.50         150.0           10117- CAB         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         5.33         67.63         16.73         0.00         150.0         ±9.6 %           CAB         BPSK)         Y         5.33         67.35         16.48         150.0         ±9.6 %           CAB         DAM         Y         5.33         67.35         16.48         150.0         ±9.6 %           CAB         QAM         Y         5.73         68.05         16.89         0.00         150.0         ±9.6 %           CAB         QAM         Y         5.76         67.71         16.65         150.0         ±9.6 %           CAB         QAM         Z         5.54         67.71         16.65         150.0         ±9.6 %           CAB         QAM         Y         5.42         67.54         16.48         150.0         ±9.6 %           CAB         QAM         Y         3.67         68.77         16.68         0.00         150.0         ±9.6 %           CAB         MHz, 16-QAM         Y         3.67         67.62         15.29         150.0         150.0         ±9.6 %	10116- CAB						0.00		±9.6 %
Z         5.29         67.63         16.50         150.0           CAB         BPSK)         Y         5.31         67.69         16.73         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         5.33         67.35         16.48         150.0         ± 9.6 %           CAB         CAB         Y         5.33         67.35         16.48         150.0         ± 9.6 %           CAB         QAM         Y         5.73         68.05         16.89         0.00         150.0         ± 9.6 %           CAB         QAM         Y         5.76         67.71         16.65         150.0           10119-         IEEE 802.11n (HT Mixed, 135 Mbps, 64-         X         5.40         67.82         16.48         150.0           10119-         IEEE FOD (SC-FDMA, 100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM         Y         3.62         67.81         16.79         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM         Y         3.60         67.81         16.05         150.0         150.0         150.0         150				5 45	67.58	16.50		150.0	
10117- CAB         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         X         5.31         67.69         16.73         0.00         150.0         ± 9.6 %           CAB         PSK)         Y         5.33         67.35         16.48         150.0           CAB         IEEE 802.11n (HT Mixed, 81 Mbps, 16- CAB         X         5.73         68.05         16.89         0.00         150.0         ± 9.6 %           CAB         QAM)         Y         5.54         67.28         16.69         150.0         ± 9.6 %           CAB         QAM         Y         5.76         67.71         16.65         150.0         ± 9.6 %           CAB         QAM         Y         5.54         67.54         16.69         150.0         ± 9.6 %           CAB         QAM         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         QAM         Y         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAB         MHz, 64-QAM         Y         3.72         67.84         16.19		<u> </u>							
CAB         BPSK)         No.         Construction         Y         5.33         67.35         16.48         150.0           CAB         Z         5.15         67.28         16.42         150.0         ±9.6 %           CAB         CAM         Y         5.76         67.71         16.65         150.0         ±9.6 %           CAB         CAM         Y         5.76         67.71         16.65         150.0         ±9.6 %           CAB         CAM         Y         5.76         67.71         16.69         150.0         ±9.6 %           10119-         IEEE 802.11n (HT Mixed, 135 Mbps, 64-         X         5.40         67.84         16.49         150.0         ±9.6 %           CAB         OAM         Y         5.42         67.54         16.49         150.0         ±9.6 %           CAB         MHz, 16-QAM         100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ±9.6 %           CAB         MHz, 64-QAM         Y         3.72         67.84         16.19         150.0         ±9.6 %           CAB         MHz, 64-QAM         Y         3.72         67.84         16.19         150.0	10117-	IFFE 802 11p (HT Mixed 13.5 Mbps					0.00		+06%
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	CAB						0.00		± 9.0 %
10118- CAB         IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)         X         5.73         68.05         16.89         0.00         150.0         ± 9.6 %           CAB         QAM         Y         5.76         67.71         16.65         150.0         150.0         ± 9.6 %           CAB         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         X         5.40         67.88         16.73         0.00         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.54         16.69         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.81         16.05         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.81         16.05         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.64         67.70         16.08         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.24         67.62         15.92         16.00         150.0         ± 9.6 %           CAB         MHz,									
CAB         QAM)         Y         5.76         67.71         16.65         150.0           10119- CAB         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         X         5.40         67.88         16.73         0.00         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         QAM)         Y         5.42         67.54         16.49         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Z         5.26         67.66         16.48         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         68.77         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.62         67.81         16.05         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         QPSK)         Y         2.22         68.66         16.03         150.0									
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10118- CAB						0.00		±9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
CAB         QAM)         Y         5.42         67.54         16.49         150.0           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         QPSK)         Y         2.22         68.66         16.03         150.0         ± 9.6 %           CAC         QPSK)         Y         2.202         68.61         16.20         150.0         ± 9.6 %           CAC         GPSK         150.0         150.0         ± 9.6 %         150.0         ± 9.6 %           CAC         GPSK         16.20         150.0         ± 9.6 %			Z	5.58	67.82	16.69		150.0	
Y         5.42         67.54         16.49         150.0           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.71         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.81         16.05         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         GPSK)         Y         2.22         68.66         16.03         150.0         ± 9.6 %           CAC         GPSK)         Y         2.222         68.66         16.03         150.0         ± 9.6 %           CAC         GPSK)         Y         2.222         68.66         16.03         150.0         ± 9.6 %           CAC         16-QAM)         Y         2.68         68.61         16.20         150.0         ± 9.6 %           CAC </td <td>10119- CAB</td> <td></td> <td>X</td> <td>5.40</td> <td>67.88</td> <td>16.73</td> <td>0.00</td> <td>150.0</td> <td>±9.6 %</td>	10119- CAB		X	5.40	67.88	16.73	0.00	150.0	±9.6 %
Z         5.26         67.56         16.48         150.0           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.81         16.05         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         3.60         67.81         16.05         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Z         3.42         67.62         15.92         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         QPSK)         Z         3.54         67.70         16.08         150.0         ± 9.6 %           CAC         QPSK)         Y         2.22         68.66         16.03         150.0         ± 9.6 %           CAC         16-QAM         100% RB, 3 MHz,         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         16-QAM         Y         2.63         68.61         16.20         150.0         ± 9.6 %     <			Y	5.42	67.54	16.49		150.0	
10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)         X         3.67         68.77         16.68         0.00         150.0         ± 9.6 %           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)         Y         3.60         67.81         16.05         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         GPSK)         Z         3.54         67.70         16.08         150.0         ± 9.6 %           10142- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.48         71.58         17.67         0.00         150.0         ± 9.6 %           CAC         GPSK)         Y         2.22         68.66         16.03         150.0         ± 9.6 %           CAC         ITE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         GAM)         Y         2.68         68.61         16.20         150.0         ± 9.6 %									
Y         3.60         67.81         16.05         150.0           ID141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 CAB         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAB         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAB         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         QPSK)         Y         2.202         68.66         16.03         150.0         ± 9.6 %           CAC         IE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         IE-GPD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         IE-GPD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.65         68.53         15.87 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td><td></td><td>± 9.6 %</td></td<>							0.00		± 9.6 %
Z         3.42         67.62         15.92         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           V         3.72         67.84         16.19         150.0         ± 9.6 %           I0142- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         X         2.48         71.58         17.67         0.00         150.0         ± 9.6 %           I0142- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         X         2.48         71.58         17.67         0.00         150.0         ± 9.6 %           I0143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           I0143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.65         68.61         16.20         150.0         ± 9.6 %           I0144- CAC         G4-QAM         Y         2.68         68.61         16.20         150.0         ± 9.6 %           CAC         G4-QAM         Y         2.53         66.90         14.94         150.0         ± 9.6 %           CAC         MAL, QPSK         Y <td>0,10</td> <td></td> <td></td> <td>3.60</td> <td>67.81</td> <td>16.05</td> <td></td> <td>150.0</td> <td></td>	0,10			3.60	67.81	16.05		150.0	
10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)         X         3.79         68.75         16.79         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.72         67.84         16.19         150.0         ± 9.6 %           CAC         QPSK)         Z         3.54         67.70         16.08         150.0         ± 9.6 %           10142- QPSK)         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         Y         2.22         68.66         16.03         150.0         ± 9.6 %           10143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AC         Y         2.22         68.66         16.03         150.0         ± 9.6 %           10143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AC         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AC         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.53         66.90         14.94         150.0         ± 9.6 %           CAC         MZ         2.90         71.65         16.48         0.00         150.0         ± 9.6 % </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10141-						0.00		+96%
Z         3.54         67.70         16.08         150.0           10142- QPSK)         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         X         2.48         71.58         17.67         0.00         150.0         ± 9.6 %           X         2.22         68.66         16.03         150.0         ± 9.6 %           X         2.02         68.67         15.71         150.0         ± 9.6 %           CAC         16-QAM)         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         16-QAM)         X         2.68         68.61         16.20         150.0         ± 9.6 %           CAC         16-QAM)         Z         2.48         68.71         15.71         150.0         ± 9.6 %           CAC         64-QAM)         Z         2.48         68.71         15.71         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         MHz, QPSK)         Y         1.64         67.49         14.94         150.0         ± 9.6 %           CAC         MHz, QPSK)         Y         1.64 <td>CAB</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.00</td> <td></td> <td>1 3.0 %</td>	CAB						0.00		1 3.0 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			-						
CAC         QPSK)         Y         2.22         68.66         16.03         150.0           10143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           10143- CAC         16-QAM)         Y         2.68         68.61         16.20         150.0         ± 9.6 %           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         Y         2.68         68.61         16.20         150.0         ± 9.6 %           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           10145- CAC         MHz, QPSK)         Y         2.53         66.90         14.94         150.0         ± 9.6 %           10145- CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0         ± 9.6 %           10146- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         6.65         82.42         19.81         0.00         150.0         <	10110								
Z         2.02         68.57         15.71         150.0           10143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         16-QAM)         Y         2.68         68.61         16.20         150.0         ± 9.6 %           CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         Y         2.68         68.61         16.20         150.0           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.53         66.90         14.94         150.0         ± 9.6 %           CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0           10145- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         2.00         71.65         16.48         0.00         150.0         ± 9.6 %           10146- CAC         MHz, 16-QAM)         Y         1.64         67.49         14.42         150.0         ± 9.6 %           CAC         MHz, 16-QAM)         Y         3.51         73.00         16							0.00		± 9.6 %
10143- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)         X         2.90         70.86         17.43         0.00         150.0         ± 9.6 %           CAC         16-QAM)         Y         2.68         68.61         16.20         150.0         100.0           CAC         Z         2.48         68.71         15.71         150.0         100.0           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.53         66.90         14.94         150.0         10.0         ± 9.6 %           CAC         MHz, QAM)         Y         2.53         66.75         14.27         150.0         10.0         ± 9.6 %           10145- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         2.00         71.65         16.48         0.00         150.0         ± 9.6 %           10145- CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0         16.00         16.00         150.0         ± 9.6 %           10146- CAC         MHz, 16-QAM)         Y         3.51         73.00         16.51         150.								1	
CAC       16-QAM)       Y       2.68       68.61       16.20       150.0         10144- CAC       LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)       X       2.65       68.53       15.87       0.00       150.0       ± 9.6 %         CAC       64-QAM)       Y       2.53       66.90       14.94       150.0       ± 9.6 %         CAC       64-QAM)       Z       2.29       66.75       14.27       150.0       ± 9.6 %         CAC       MHz, QPSK)       Y       1.64       67.49       14.42       150.0       ± 9.6 %         CAC       MHz, QPSK)       Y       1.64       67.49       14.42       150.0       ± 9.6 %         CAC       MHz, QPSK)       Y       1.64       67.49       14.42       150.0       ± 9.6 %         CAC       MHz, APSK)       Y       1.64       67.49       14.42       150.0       ± 9.6 %         CAC       MHz, 16-QAM)       Y       3.51       73.00       16.51       150.0       ± 9.6 %         CAC       MHz, 16-QAM)       Y       3.51       73.00       16.51       150.0       ± 9.6 %         CAC       MHz, 64-QAM)       Y       4.34       76.22       18.03									
Z         2.48         68.71         15.71         150.0           10144- CAC         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.65         68.53         15.87         0.00         150.0         ± 9.6 %           CAC         64-QAM)         Y         2.53         66.90         14.94         150.0         ±         9.6 %           CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         2.00         71.65         16.48         0.00         150.0         ±         9.6 %           CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0         ±         9.6 %           CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0         ±         9.6 %           CAC         MHz, QPSK)         Y         1.64         67.49         14.42         150.0         ±         9.6 %           CAC         MHz, 16-QAM)         Y         3.51         73.00         16.51         150.0         ±         9.6 %           CAC         MHz, 16-QAM)         Y         3.51         73.00         16.51         150.0         ±         9.6 %           CAC         MHz, 64-QAM)         <			X	2.90	70.86	17.43	0.00	150.0	± 9.6 %
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				2.68	68.61				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							1	150.0	
Y         2.53         66.90         14.94         150.0           Z         2.29         66.75         14.27         150.0           10145- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         X         2.00         71.65         16.48         0.00         150.0         ± 9.6 %           2         2.29         65.53         12.17         150.0         ± 9.6 %           2         2         1.28         65.53         12.17         150.0           10146- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         6.65         82.42         19.81         0.00         150.0         ± 9.6 %           2         2.73         70.16         13.72         150.0         ± 9.6 %           2         2.73         70.16         13.72         150.0         ± 9.6 %           10147- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         11.62         90.60         22.70         0.00         150.0         ± 9.6 %			X	2.65	68.53	15.87	0.00	150.0	± 9.6 %
Z         2.29         66.75         14.27         150.0           10145- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         X         2.00         71.65         16.48         0.00         150.0         ± 9.6 %           V         1.64         67.49         14.42         150.0         ±         150.0         ±         9.6 %           Intersection         Y         1.64         67.49         14.42         150.0         ±         9.6 %           Intersection         Y         1.64         67.49         14.42         150.0         ±         9.6 %           Intersection         Y         1.64         67.49         14.42         150.0         ±         9.6 %           Intersection         Z         1.28         65.53         12.17         150.0         ±         9.6 %           Intersection         Y         3.51         73.00         16.51         150.0         ±         9.6 %           Intersection         Y         3.51         73.00         16.51         150.0         ±         9.6 %           Intersection         Y         3.51         70.16         13.72         150.0         ±         9.6 %         ±         9.6 %			Y	2.53	66.90	14.94		150.0	
10145- CAC       LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)       X       2.00       71.65       16.48       0.00       150.0       ± 9.6 %         V       1.64       67.49       14.42       150.0       16.48       0.00       150.0       ± 9.6 %         U       Y       1.64       67.49       14.42       150.0       16.0       150.0       16.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td>									1
Y         1.64         67.49         14.42         150.0           Z         1.28         65.53         12.17         150.0           10146- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         6.65         82.42         19.81         0.00         150.0         ± 9.6 %           V         3.51         73.00         16.51         150.0         ±         160.0         ±         ±         9.6 %           LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.62         90.60         22.70         0.00         150.0         ±         9.6 %           CAC         MHz, 64-QAM)         Y         4.34         76.22         18.03         150.0         ±         9.6 %			-				0.00		± 9.6 %
10146- CAC       LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)       X       6.65       82.42       19.81       0.00       150.0       ± 9.6 %         V       3.51       73.00       16.51       150.0       ±       160.0       ±       160.0       ±       9.6 %         U       Z       2.73       70.16       13.72       150.0       150.0       ±       9.6 %         10147- CAC       LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)       X       11.62       90.60       22.70       0.00       150.0       ±       9.6 %	~ <del>~</del>								
CAC         MHz, 16-QAM)         Y         3.51         73.00         16.51         150.0           Image: CAC         Y         3.51         73.00         16.51         150.0         Image: CAC         <									<u> </u>
Y         3.51         73.00         16.51         150.0           Z         2.73         70.16         13.72         150.0           10147- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         11.62         90.60         22.70         0.00         150.0         ± 9.6 %				6.65			0.00		± 9.6 %
Z         2.73         70.16         13.72         150.0           10147- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         11.62         90.60         22.70         0.00         150.0         ± 9.6 %           Y         4.34         76.22         18.03         150.0				3.51	73.00	16.51		150.0	
10147- CAC         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         11.62         90.60         22.70         0.00         150.0         ± 9.6 %           Y         4.34         76.22         18.03         150.0								150.0	
Y 4.34 76.22 18.03 150.0							0.00		± 9.6 %
				1 24	76.00	19.02	1	150.0	
			Z	4.34	73.44	15.25		150.0	

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10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.22	68.90	16.79	0.00	150.0	± 9.6 %
		ΤY	3.13	67.70	16.01	1	150.0	
		Ż	2.94	67.52	15.84	<u> </u>	150.0	
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.33	68.71	16.76	0.00	150.0	± 9.6 %
		Y	3.25	67.61	16.05		150.0	
		Z	3.06	67.50	15.89		150.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.59	81.08	22.43	3.98	65.0	± 9.6 %
		Υ	8.87	78.87	21.64		65.0	
		Z	9.33	81.38	22.62		65.0	
10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.50	77.58	21.63	3.98	65.0	± 9.6 %
		Y	8.30	76.31	21.16		65.0	
		Z	8.08	77.33	21.50		65.0	
10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.85	78.28	22.25	3.98	65.0	± 9.6 %
		<u> </u>	8.62	76.95	21.75		65.0	
10		Z	8.48	78.15	22.17		65.0	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.77	71.95	18.01	0.00	150.0	± 9.6 %
		<u>Y</u>	2.51	69.32	16.50		150.0	
40455		<u>Z</u>	2.29	69.01	16.28		150.0	
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.94	69.69	17.25	0.00	150.0	± 9.6 %
_		Y	2.80	68.03	16.25		150.0	
		Z	2.63	68.10	16.02		150.0	
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.40	72.31	17.91	0.00	150.0	±9.6 %
		Y	2.09	68.89	16.05		150.0	
		Z	1.86	68.62	15.51		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.55	69.65	16.30	0.00	150.0	± 9.6 %
<u> </u>		Y	2.36	67.46	15.11		150.0	
		Z	2.12	67.25	14.30		150.0	
10158- <u>CAC</u>	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.10	69.70	17.32	0.00	150.0	±9.6 %
		Y	2.97	68.15	16.39		150.0	
		Z	2.78	68.27	16.17		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.69	70.18	16.62	0.00	150.0	±9.6 %
		Y	2.48	67.89	15.40		150.0	
		Z	2.22	67.66	14.56		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.10	70.43	17.35	0.00	150.0	±9.6 %
		Y	2.94	68.69	16.29		150.0	
		Z	2.78	68.69	16.25		150.0	
10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.22	68.62	16.74	0.00	150.0	± 9.6 %
		Y	<u>3.14</u>	67.48	16.00		150.0	
		Z	2.96	67.42	15.82		150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	х	3.32	68.61	16.76	0.00	150.0	± 9.6 %
		Y	3.24	67.49	16.04		150.0	
40400		Z	3.07	67.56	15.92	_	150.0	
10166- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.32	72.20	20.50	3.01	150.0	± 9.6 %
		Y	4.09	70.13	19.37		150.0	
40407		Z	3.89	71.03	19.86		150.0	
10167- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	6.13	77.20	21.71	3.01	150.0	± 9.6 %
			E 0.4	70.40	00.00			
		Y Z	5.31	73.40	20.02		150.0	

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10168- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.94	79.87	23.11	3.01	150.0	± 9.6 %
		Y	5.79	75.28	21.14		150.0	
		Z	5.82	77.80	22.20		150.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.47	76.31	22.20	3.01	150.0	± 9.6 %
		Y	3.93	72.42	20.26		150.0	
		Z	3.45	71.87	20.27		150.0	
10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	9.97	90.37	26.89	3.01	150.0	± 9.6 %
		Y	6.08	79.64	22.84		150.0	
		Z	5.69	81.07	23.66		150.0	
10171- AAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	6.58	81.51	22.72	3.01	150.0	± 9.6 %
	ļ. <u>.</u> .	Y	4.82	74.69	19.94		150.0	
		Ζ	4.39	75.54	20.48		150.0	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	73.64	126.23	37.77	6.02	65.0	± 9.6 %
		Ý	18.65	98.22	29.94		65.0	
		Z	50.70	122.38	37.42		65.0	
10173- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	94.74	123.96	35.21	6.02	65.0	± 9.6 %
		Υ	22.61	98.04	28.47		65.0	
		Z	96.90	127.66	36.64		65.0	
10174- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	56.11	113.11	31.91	6.02	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	18.59	93.53	26.66		65.0	
		Z	65.46	118.77	33.84		65.0	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.37	75.74	21.85	3.01	150.0	± 9.6 %
		Y	3.86	71.99	19. <u>97</u>		150.0	
		Z	3. <u>41</u>	71.52	20.02		150.0	
10176- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	9.99	90.41	26.90	3.01	150.0	± 9.6 %
		Y	6.09	79.66	22.85		150.0	
		Z	5.70	81.10	23.67		150.0	
10177- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	4.43	76.02	22.00	3.01	150.0	± 9.6 %
		Y	3.90	72.21	20.10		150.0	
		Z	3.44	71.69	20.11		150.0	
10178- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	9.65	89.71	26.63	3.01	150.0	± 9.6 %
-		Y	5.97	79.26	22.66		150.0	
		Z	5.62	80.80	23.53		150.0	
10179- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.97	85.43	24.54	3.01	150.0	± 9.6 %
		Y	5.36	76.88	21.19	L	150.0	L
		Z	4.98	78.13	21.92	<u> </u>	150.0	
10180- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	6.51	81.29	22.61	3.01	150.0	± 9.6 %
		Y	4.79	74.55	19.86	1	150.0	<u> </u>
		Z	4.38	75.44	20.42		150.0	Ļ
10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.42	75.99	21.99	3.01	150.0	± 9.6 %
		Ý	3.90	72.19	20.09		150.0	<u> </u>
		Z	3.43	71.67	20.11		150.0	L
10182- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.63	89.67	26.62	3.01	150.0	± 9.6 %
		Y	5.96	79.23	<u>22.65</u>		1 <u>50.0</u>	
		Ż	5.61	80.77	<u>23.51</u>		150.0	<u> </u>
10183- AAA	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	6.50	81.25	22.60	3.01	150.0	± 9.6 %
		Y	4.78	74.53	19.85		150.0	
		Ż	4.37	75.41	20.41		150.0	

10184- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	4.44	76.05	22.02	3.01	150.0	± 9.6 %
		ΤY-	3.91	72.24	20.12		150.0	
		Z	3.45	71.72	20.13		150.0	
10185- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	9.70	89.80	26.67	3.01	150.0	± 9.6 %
		Y	5.99	79.32	22.68		150.0	
		Z	5.64	80.86	23.56		150.0	
10186- AAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	6.54	81.37	22.64	3.01	150.0	± 9.6 %
		Y	4.81	74.60	19.88		150.0	
		Z	4.39	75.50	20.45		150.0	
10187- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	4.45	76.10	22.07	3.01	150.0	± 9.6 %
		Y	3.92	72.26	20.15		150.0	
		Z	3.46	71.78	20.19		150.0	
10188- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	10.51	91.45	27.34	3.01	150.0	± 9.6 %
		Y	6.26	80.23	23.14		150.0	
		Z	5.89	81.76	24.00		150.0	-
10189- _AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	6.85	82.27	23.07	3.01	150.0	± 9.6 %
	<u> </u>	Y	4.94	75.14	20.19		150.0	
10100		Z	4.52	76.06	20.77		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.73	67.10	16.51	0.00	150.0	± 9.6 %
		Υ	4.75	66.68	16.23		150.0	
		Z	4.57	66.79	16.16		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.94	67.48	16.62	0.00	150.0	± 9.6 %
		Y	4.96	67.08	16.34		150.0	
		Z	4.75	67.11	16.28		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.98	67.48	16.62	0.00	150.0	± 9.6 %
		Y	5.00	67.07	16.34		150.0	
		Z	4.79	67.14	16.30		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.76	67.21	16.55	0.00	150.0	±9.6%
		Y	4.78	66.80	16.27		150.0	
		Z	4.58	66.86	16.18		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.96	67.50	16.63	0.00	150.0	± 9.6 %
		Y	4.98	67.09	16.35		150.0	
10122		Z	4.76	67.14	16.30		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.99	67.50	16.63	0.00	150.0	±9.6 %
		Y	5.01	67.09	16.35		150.0	
10010		Z	4.79	67.16	16.31		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.71	67.23	16.53	0.00	150.0	± 9.6 %
		Y	4.73	66.82	16.24		150.0	
		Z	4.53	66.87	16.14		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.96	67.50	16.63	0.00	150.0	±9.6 %
		Y	4.98	67.10	16.35		150.0	
		Z	4.76	67.11	16.29		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.99	67.43	16.62	0.00	150.0	± 9.6 %
_		Y	5.01	67.03	16.34		150.0	
0000		Z	4.80	67.09	16.30		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.29	67.72	16.73	0.00	150.0	±9.6 %
		Y Z	5.31 5.12	67.38 67.29	16.49		150.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	x	5.67	68.03	16.90	0.00	150.0	± 9.6 %
CAB	QAM)			07.71	40.07		450.5	
		Y	5.70	67.71	16.67		150.0	
10004		Z	5.43	67.50	16.54	0.00	150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.35	67.84	16.72	0.00	150.0	± 9.6 %
		Y	5.37	67.51	16.48		150.0	
		Z	5.17	67.40	16.39		150.0	
10225- CAB	UMTS-FDD (HSPA+)	×	3.03	67.01	16.18	0.00	150.0	±9.6 %
		Y	3.00	66.12	15.59		150.0	
		Z	2.84	66.23	15.31		150.0	. <b>_</b> . <b>_</b>
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	125.13	35.58	6.02	65.0	± 9.6 %
		Y	23.60	98.91	28.82		65.0	
		Z	100.00	128.43	36.91		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	61.16	114.83	32.47	6.02	65.0	±9.6 %
		Y	19.96	94.87	27.16		65.0	
		Z	73.77	120.96	34.46		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	72.18	126.53	38.01	6.02	65.0	± 9.6 %
		Y	21.44	101.40	31.05		65.0	
		Z	53.16	123.89	37.96		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	94.57	123.93	35.21	6.02	65.0	± 9.6 %
		Y	22.66	98.06	28.49		65.0	
		Z	96.87	127.65	36.65		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	56.39	113.28	31.99	6.02	65.0	± 9.6 %
		Y	19.26	94.16	26.88		65.0	
		Ż	66.99	119.13	33.93		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	66.18	124.67	37.45	6.02	65.0	± 9.6 %
		İΥ	20.62	100.55	30.72		65.0	
		Ż	48.89	122.07	37.41	_	65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	94.69	123.96	35.21	6.02	65.0	± 9.6 %
		Y	22.64	98.05	28.48		65.0	
	· · · · · · · · · · · · · · · · · · ·	Z	97.00	127.68	36.66		65.0	
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	56.52	113.33	32.00	6.02	65.0	± 9.6 %
0,.0		Ý	19.26	94.17	26.88		65.0	
		Ż	67.07	119.16	33.94		65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	60.26	122.59	36.81	6.02	65.0	± 9.6 %
=-		Y	19.81	99.63	30.34	1	65.0	
		Ż	45.11	120.21	36.81		65.0	
10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	95.38	124.09	35.25	6.02	65.0	± 9.6 %
		+- <u>-</u> -	22.67	98.09	28.50		65.0	
-		Z	97.77	127.84	36.70		65.0	
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	57.18	113.50	32.04	6.02	65.0	±9.6 %
		Y	19.38	94.26	26.90		65.0	
		Z	68.10	119.39	33.99		65.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	67.28	125.01	37.54	6.02	65.0	± 9.6 %
		Y	20.74	100.68	30.76		65.0	
		Z	49.59	122.38	37.49		65.0	
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	95.00	124.02	35.23	6.02	65.0	±9.6 %
		Y	22.64	98.06	28.49	·	65.0	
							00.0	

10239- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	56.67	113.39	32.01	6.02	65.0	± 9.6 %
		Y	19.26	94.19	26.88	<u>†                                    </u>	65.0	<u> </u>
		Z	67.13	119.19	33.94	+	65.0	
10240- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	67.00	124.93	37.52	6.02	65.0	± 9.6 %
		Y	20.68	100.63	30.74		65.0	
		Z	49.37	122.30	37.47		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	14.43	89.77	28.56	6.98	65.0	± 9.6 %
		Y	12.31	85.00	26.80		65.0	
1		<u>Z</u>	13.89	90.56	28.94		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	13.70	88.57	28.03	6.98	65.0	±9.6 %
		Y	10.82	82.08	25.53		65.0	
40040		Z	13.16	89.30	28.37		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	10.55	84.90	27.56	6.98	65.0	± 9.6 %
		<u>Y</u>	8.88	79.49	25.25		65.0	
10244-		<u>Z</u>	9.99	85.03	27.70		65.0	
CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	11.43	83.67	22.47	3.98	65.0	± 9.6 %
		Υ	9.78	80.48	21.64		65.0	
10045		Z	9.76	81.22	20.90		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	11.21	83.09	22.22	3.98	65.0	± 9.6 %
		Υ	9.71	80.13	21,47		65.0	
10246-		Z	9.48	80.50	20.58		65.0	
CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.58	85.22	23.00	3.98	65.0	± 9.6 %
		Y	8.86	81.57	21.94		65.0	
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Z X	9.16 8.25	83.05 78.94	21.67 21.22	3.98	65.0 65.0	± 9.6 %
0/10		Y	7.85	77.00	00 70		<u> </u>	<u> </u>
		Z	7.85	77.32	20.79		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.20	77.61 78.37	20.18 20.99	3.98	<u>65.0</u> 65.0	±9.6%
		Y	7.89	76.93	20.61		65.0	<u> </u>
		Z	7.41	77.03	19.93		65.0	<u> </u>
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.20	86.28	23.89	3.98	65.0	± 9.6 %
		Y	9.29	82.26	22.62		65.0	
		Z	10.48	85.66	23.36		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	x	8.93	80.25	22.81	3.98	65.0	± 9.6 %
		<u>Y</u>	8.46	78.37	22.14		65.0	
40054		Z	8.46	79.88	22.48		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	8.39	77.98	21.64	3.98	65.0	± 9.6 %
		Y	8.12	76.54	21.14	_	65.0	
40050		Z	7.98	77.74	21.34		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.53	84.51	23.78	3.98	65.0	± 9.6 %
		Y	9.19	81.18	22.63		65.0	
40050		Z	10.24	84.82	23.86		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.25	76.95	21.44	3.98	65.0	±9.6 %
		Y	8.10	75.77	21.00		65.0	
40054		Z	7.89	76.78	21.28		65.0	
10254- C <u>AB</u>	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.62	77.66	22.02	3.98	65.0	±9.6 %
		Y	8.44	76.43	21.56		65.0	
		Z	8.28	77.57	21.89		65.0	

10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	×	9.25	80.67	22.52	3.98	65.0	± 9.6 %
		İΥ	8.61	78.53	21.74	···	65.0	
		Ż	9.00	80.97	22.67		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	10.45	81.80	21.06	3.98	65.0	± 9.6 %
		Y	9.25	79.43	20.63		65.0	
		Z	8.10	77.76	18.69		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	10.14	80.97	20.68	3.98	65.0	± 9.6 %
		Y	9.17	78.95	20.38		65.0	
		Z	7.78	76.81	18.23		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.51	83.16	21.76	3.98	65.0	± 9.6 %
		Y	8.34	80.46	21.12		65.0	
		Z	7.35	79.00	19.46		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.50	79.32	21.74	3.98	65.0	± 9.6 %
		Y	8.08	77.61	21.22		65.0	
		Z	7.86	78.44	21.00		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.50	79.04	21.65	3.98	65.0	± 9.6 %
		Y	8.14	77.44	21.18		65.0	
		Z	7.85	78.11	20.87		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.46	84.88	23.66	3.98	65.0	± 9.6 %
		Y	8.99	81.35	22.49		65.0	
		Z	9.90	84.54	23.31		65.0	
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.92	80.22	22.77	3.98	65.0	± 9.6 %
-		Y	8.45	78.35	22.11		65.0	
		Z	8.45	79.83	22.45		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.39	77.98	21.64	3.98	65.0	± 9.6 %
		Y	8.12	76.54	21.14		65.0	
		Z	7.97	77.72	21.33		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.46	84.37	23.71	3.98	65.0	± 9.6 %
		Y	9.15	81.08	22.57		65.0	
		Z	10.16	84.65	23.78		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.50	77.59	21.64	3.98	65.0	± 9.6 %
-		Y	8.29	76.32	21.16		65.0	
		Z	8.08	77.33	21.51		65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.85	78.27	22.25	3.98	65.0	± 9.6 %
		Υ	8.62	76.95	21.75		65.0	
		Z	8.48	78.14	22.17		65.0	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.58	81.04	22.42	3.98	65.0	± 9.6 %
		Y	8.86	78.85	21.63		65.0	
		Z	9.31	81.34	22.60		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.89	76.95	21.70	3.98	65.0	± 9.6 %
		Y	8.78	75.95	21.31		65.0	
		Z	8.54	76.83	21.69		65.0	
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.79	76.51	21.59	3.98	65.0	± 9.6 %
		Y	8.71	75.58	21.23		65.0	
		Z	8.47	76.42	21.58		65.0	
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.98	78.26	21.47	3.98	65.0	± 9.6 %
		ΤΥ	8.66	76.86	20.96		65.0	
-		Ż	8.70	78.39	21.61		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	x	2.76	67.40	16.12	0.00	150.0	± 9.6 %
		Y	2.68	66.20	45.05	<u> </u>		<u> </u>
		Ż	2.60	66.55	15.35	┢────	150.0	+
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.97	71.33	15.21 17.64	0.00	<u>150.0</u> 150.0	± 9.6 %
_		Y	1.71	67.84	15.61	·	150.0	<u> </u>
		Z	1.63	67.82	15.44	<u> </u>	150.0	-
10277- CAA	PHS (QPSK)	X	5.79	70.12	14.44	9.03	50.0	± 9.6 %
		<u>Y</u>	6.71	72.04	16.24		50.0	
40070		Z	5.20	69.01	13.39		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.14	81.72	21.64	9.03	50.0	± 9.6 %
		<u> </u>	10.00	81.13	22.16	L	50.0	
10279-		<u>Z</u>	8.80	79.36	20.19		50.0	
	PHS (QPSK, BW 884MHz, Rolloff 0.38)		10.33	81.92	21.72	9.03	50.0	± 9.6 %
		Y	10.19	81.33	22.24		50.0	
10290-			8.92	79.53	20.27		50.0	
AAB	CDMA2000, RC1, SO55, Full Rate	X	2.41	75.76	18.30	0.00	150.0	± 9.6 %
		<u>Y</u>	1.70	69.18	15.23		150.0	
10291-		Z	1.46	68.58	14.00		150.0	
AAB	CDMA2000, RC3, SO55, Full Rate	X	1.39	73.22	17.31	0.00	150.0	± 9.6 %
		Y	0.98	66.45	13.79		150.0	
10292-	CDM42000 DC2 CO22 Full D.1	Z	0.85	65.74	12.53		150.0	
AAB	CDMA2000, RC3, SO32, Full Rate	X	2.43	83.14	21.70	0.00	150.0	± 9.6 %
		Y	1.15	69.63	15.75		150.0	
10293-		Z	1.04	69.40	14.71		150.0	
AAB	CDMA2000, RC3, SO3, Full Rate	X	5.22	96.14	26.57	0.00	150.0	± 9.6 %
	<u> </u>	Υ	1.48	73.58	17.97		150.0	
10295-		Z	<u>1</u> .47	74.43	17.37		150.0	T
AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	10.48	83.75	24.32	9.03	50.0	±9.6%
		Y	9.84	81.54	23.85		50.0	
40007		Z	<u>11.88</u>	86.37	24.91		50.0	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.28	72.37	17.95	0.00	150.0	± 9.6 %
		Y	2.98	69.95	16.59		150.0	
10200		Z	2.77	69.63	16.49		150.0	
10298- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.26	72.62	17.48	0.00	150.0	± 9.6 %
	<u> </u>	Y	1.88	<u>68.5</u> 1	15.39		150.0	
10200		Z	1.59	67.65	14.14		150.0	
10299- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	6.40	81.89	20.37	0.00	150.0	± 9.6 %
		Y	3.78	<u>73.</u> 44	17.26		150.0	
10300-		Z	3.62	73.66	16.18		150.0	
AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.72	72.73	16.07	0.00	150.0	± 9.6 %
	<u> </u>	Y	2.96	68.88	14.55		150.0	
10301-		Z	2.44	67.52	12.75		150.0	
AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.70	68.03	18.84	4.17	80.0	± 9.6 %
		Y	5.77	67.36	18.35		80.0	
(0202		Z	5.64	68.37	18.74		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.21	68.72	19.60	4.96	80.0	± 9.6 %
		Y Z	6.41 6.13	68.65	19.47	+	80.0	

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10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	6.07	68.83	19.70	4.96	80.0	± 9.6 %
		Y	6.30	68.82	19.58		80.0	
		Z	5.97	69.08	19.56		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.71	68.13	18.89	4.17	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.89	68.01	18.73		80.0	
		Z	5.61	68.35	18.73		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	6.90	74.81	23.11	6.02	50.0	± 9.6 %
		Y	9.48	82.28	26.60		50.0	
10306-	IEEE 802.16e WIMAX (29:18, 10ms,	ZX	9.03 6.40	82.45 71.34	26.20 21.64	6.02	50.0 50.0	±9.6 %
AAA	10MHz, 64QAM, PUSC, 18 symbols)			74 50	04.57		50.0	
		Y	6.75	71.50	21.57		50.0	
10007		Z	6.43	72.04	21.56	0.00	50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.49	72.10	21.82	6.02	50.0	± 9.6 %
		Ý	6.85	72.21	21.70		50.0	
40000		Z	6.50	72.67	21.67	6.00	50.0	+000
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.53	72.49	22.02	6.02	50.0	± 9.6 %
		Y	6.89	72.58	21.88		50.0	
		Z	6.59	73.18	21.92	0.00	50.0	100.01
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.52	71.66	21.81	6.02	50.0	± 9.6 %
		Y	6.86	71.77	21.70		50.0	
		Z	6.53	72.35	21.74		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.41	71.57	21.66	6.02	50.0	± 9.6 %
		Y	6.75	71.71	21.56		50.0	
		Z	6.45	72.29	21.59		50.0	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.66	71.55	17.51	0.00	150.0	±9.6 %
		Y	3.33	69.32	16.27		150.0	
		Z	3.12	68.94	16.14		150.0	
10313- AAA	iDEN 1:3	X	8.19	79.62	19.16	6.99	70.0	±9.6 %
		Y	7.35	77.72	18.90		70.0	
		Z	8.21	80.46	19.57	10 00	70.0	
10314- AAA	iDEN 1:6	X	11.35	86.83	24.06	10.00	30.0	± 9.6 %
		Y	8.72	81.68	22.69		30.0	
		Z	10.81	87.34	24.49		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.24	66.34	16.99	0.17	150.0	± 9.6 %
		Y	1.18	64.44	15.46		150.0	
		Z	1.17	64.45	15.36		150.0	100%
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duly cycle)	X	4.83	67.25	16.68	0.17	150.0	± 9.6 %
		Y	4.86	66.88	16.43		150.0	
		Z	4.68	66.99	16.39		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.83	67.25	16.68	0.17	150.0	± 9.6 %
		Y	4.86	66.88	16.43	<u> </u>	150.0	<u>                                     </u>
	-	Z	4.68	66.99	16.39		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.96	67.54	16.61	0.00	150.0	±9.6 %
		Y	4.98	67.13	16.32	ļ	150.0	
		Z	4.75	67.19	16.29	1	150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duly cycle)	X	5.54	67.49	16.61	0.00	150.0	± 9.6 %
		Y	5.56	67.14	16.37		150.0	
· · ·		Z	5.45	67.43	16.49		150.0	

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10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM,	X	5.87	68.11	16.75	0.00	150.0	± 9.6 %
	99pc duty cycle)	+	F 00	-	10 71	I	1	L
		Y	5.89	67.80	16.54		150.0	
10403-	CDMA2000 (1xEV-DO, Rev. 0)	Z	5.70	67.70	16.47		150.0	
AAB			2.41	75.76	18.30	0.00	115.0	± 9.6 %
		<u>Y</u>	1.70	69.18	15.23	L	115.0	
		Z	1.46	68.58	14.00	L	115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.41	75.76	18.30	0.00	115.0	±9.6 %
		Y	<u>1.70</u>	69.18	15.23		115.0	
40400		Z	1.46	68.58	14.00		115.0	-
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	×	100.00	120.32	30.30	0.00	100.0	± 9.6 %
		Y	37.67	108.93	28.46		100.0	
40.140		Z	100.00	119.28	29.39		100.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.51	29.90	3.23	80.0	± 9.6 %
		Y	100.00	119.74	30.88		80.0	
40445		Z	100.00	120.99	30.71		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.06	64.54	16.02	0.00	150.0	± 9.6 %
		Y	1.03	62,90	14.57		150.0	
101/2		Z	1.03	63.04	14.51		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.73	67.12	16.55	0.00	150.0	±9.6 %
		Y	4.75	66.70	16.25		150.0	
10/17		Z	4.58	66.83	16.23		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.73	67.12	16.55	0.00	150.0	± 9.6 %
		Y	4.75	66.70	16.25		150.0	
		Z	4.58	66.83	16.23		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.72	67.27	16.56	0.00	150.0	± 9.6 %
		Y	4.73	66.83	16.25		150.0	
		Z	4.56	66.98	16.24		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.75	67.23	16.56	0.00	150.0	±9.6 %
		Y	4.76	66.80	16.26		150.0	
		Z	4.59	66.94	16.24		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.87	67.22	16.56	0.00	150.0	± 9.6 %
		Y	4.89	66.82	16.28		150.0	
		Z	4.71	66.94	16.26	_	150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	5.09	67.62	16.71	0.00	150.0	±9.6 %
		Y	5.12	67.23	16.44		150.0	
10.10		Z	4.88	67.27	16.38		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	5.00	67.56	16.68	0.00	150.0	± 9.6 %
		Y	5.02	67.15	16.39		150.0	
4040-		Z	4.80	67.22	16.35		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.55	67.83	16.78	0.00	150.0	± 9.6 %
		Y	5.59	67.55	16.57		150.0	
		Z	5.40	67.57	16.55		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.56	67.88	16.79	0.00	150.0	± 9.6 %
<u>vvi</u>		· · · ·						
		Y	5.60	67.58	16.58		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.59	67.91	16.80	0.00	150.0	± 9.6 %
		Y	5.63	67.61	16.59		150.0	
		Z	5.42	67.56	16.54		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.54	71.07	18.70	0.00	150.0	± 9.6 %
		Y_	4.46	69.99	18.11		150.0	
		Z	4.20	70.41	17.89		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.50	67.77	16.69	0.00	150.0	±9.6 %
		Y	4.51	67.23	16.34		150.0	
		Z	4.26	67.36	16.21		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.78	67.63	16.67	0.00	150.0	± 9.6 %
		Y	4.80	67. <u>18</u>	16.37		150.0	
		Z	4.56	67.25	16.29		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	5.01	67.62	16.71	0.00	150.0	± 9.6 %
		Y	5.04	67.21	16.43		150.0	
		Z	4.81	67.25	16.37		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.66	71.93	18.79	0.00	150.0	± 9.6 %
		Y	4.53	70.61	18.11		150.0	
		Z	4.27	71.15	17.82		150.0	
10435- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	118.35	29.82	3.23	80.0	± 9.6 %
		Y	100.00	119.61	30.82		80.0	
		Z	100.00	120.81	30.62		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.85	68.02	16.38	0.00	150.0	± 9.6 %
		Y	3.83	67.22	15.92		150.0	
		Ż	3.54	67.32	15.53		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.31	67.56	16.56	0.00	150.0	±9.6 %
,		Y	4.32	66.99	16.19		150.0	
	· · · · · · · · · · · · · · · · · · ·	z	4.10	67.13	16.07		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.56	67.47	16.59	0.00	150.0	± 9.6 %
		Y	4.57	66.98	16.26		150.0	
		Ż	4.37	67.07	16.19		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.73	67.38	16.58	0.00	150.0	±9.6 %
		Y	4.74	66.94	16.27		150.0	
		Z	4.56	67.01	16.22	1	150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.81	68.42	16.23	0.00	150.0	±9.6 %
		Y	3.77	67.50	15.73		150.0	
		Ż	3.44	67.49	15.16		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	TX-	6.40	68.45	16.93	0.00	150.0	±9.6 %
		Y	6.44	68.23	16.77		150.0	
		Z	6.27	68.12	16.71		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.89	65.77	16.30	0.00	150.0	± 9.6 %
		Y.	3.90	65.36	15.99		150.0	
		Z	3.82	65.47	15.93	L	150.0	L
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.60	67.53	15.71	0.00	150.0	± 9.6 %
		Y	3.56	66.59	15.22		150.0	
		Z	3.27	66.88	14.62		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.70	65.53	16.21	0.00	150.0	± 9.6 %
		Y	4.63	64.60	15.71		150.0	
		Ż	4.27	64.85	15.38	1	150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	x	1.28	75.29	20.20	0.00	150.0	± 9.6 %
		-  Y	0.92	67.71	15.91		150.0	
		Ż	0.90	67.71	15.78	<u> </u>	150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.97	32.01	3.29	80.0	± 9.6 %
		Y	100.00	121.34	31.70	<u> </u>	80.0	<u> </u>
		Z	100.00	125.58	32.88		80.0	<u> </u>
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.03	24.84	3.23	80.0	± 9.6 %
		<u>Y</u>	100.00	109.86	26.18		80.0	
10463-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,		100.00	108.99	24.93		80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.21	23.49	3.23	80.0	± 9.6 %
	·	<u>Y</u> Z	47.92	99.26	23.13	ļ	80.0	
10464-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz,		100.00	105.71	23.36		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X Y	100.00	121.12	31.00	3.23	80.0	± 9.6 %
		Z	100.00	119.76	30.82	<u> </u>	80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	$\frac{1}{x}$	100.00	123.61	31.80		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	Y	92.10	107.54	24.59	3.23	80.0	± 9.6 %
	<u> </u>		<u>92.10</u> 100.00	108.50	25.75		80.0	<u> </u>
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	$\frac{2}{x}$	100.00	108.47 104.76	24.68		80.0	
	QAM, UL Subframe=2,3,4,7,8,9)	$\frac{1}{Y}$	27.79	92.79	23.28	3.23	80.0	± 9.6 %
		z	53.71	98.96	21.40 21.73		80.0	
10467- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.32	31.10	3.23	80.0 80.0	± 9.6 %
		Y	100.00	119.93	30.90		80.0	
		Ż	100.00	123.83	31.91		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.68	24.66	3.23	80.0	± 9.6 %
		Y	100.00	109.58	26.02		80.0	
		Z	100.00	108.64	24.75		80.0	<u> </u>
10469- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.76	23.27	3.23	80.0	±9.6 %
		Y	28.45	93.06	21.47		80.0	
		Z	57.15	99.60	21.88		80.0	
10470- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	121.35	31.10	3.23	80.0	± 9.6 %
		Y	100.00	119.95	30.90		80.0	
10471-		Z	100.00	123.86	31.91		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.63	24.63	3.23	80.0	±9.6 %
		Y	100.00	109.54	26.00		80.0	
10472- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	ZX	100.00 100.00	108.59 104.72	24.73 23.24	3.23	80.0 80.0	± 9.6 %
		Y	28.52	93.08	24.40			
		Z	57.07	<u>93.08</u> 99.54	21.46 21.85		80.0	
10473- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.32	31.09	3.23	<u>80.0</u> 80.0	± 9.6 %
		Y	100.00	119.92	30.89			
		z	100.00	123.84	31.90		80.0	
10474- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.64	<u>31.90</u> 24.63	3.23	80.0 80.0	± 9.6 %
		Y	100.00	109.55	26.00		80.0	
		Z	100.00	108.60	24.73		80.0	
10475- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.73	23.25	3.23	80.0	± 9.6 %
<u>~~~</u>								
		Y	28.13	92.93	21.42		80.0	

10477-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-	X	100.00	107.49	24.56	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)	v		400.04	25.85		00.0	
		Y Z	<u>96.57</u> 100.00	109.01 108.42	25.85		80.0 80.0	
10478-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-	X	100.00	106.42	23.23	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)					0.20		± 3.0 %
		Y	27.68	92.72	21.36		80.0	
		Z	53.23	98.81	21.67	0.00	80.0	1068/
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	26.63	104.01	29.13	3.23	80.0	± 9.6 %
		Y	9.63	86.48	23.96		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Z X	24.30 38.31	102.59 102.90	28.22 27.02	3.23	80.0 80.0	± 9.6 %
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Y	11.50	85.06	22.20		80.0	
		Z	29.11	98.49	25.10		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	30.40	98.59	25.52	3.23	80.0	± 9.6 %
<u></u>		Y	10.74	83.47	21.41		80.0	
		Z	20.94	92.98	23.18		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	х	8.51	84.82	22.25	2.23	80.0	± 9.6 %
		Y	5.60	77.58	19.80		80.0	
		Z	5.41	78.09	19.19		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	14.01	88.92	23.41	2.23	80.0	± 9.6 %
		Y	8.14	80.18	20.73		<u>80.0</u>	
		Z	9.32	82.50	20.44		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	12.47	87.00	22.82	2.23	80.0	± 9.6 %
		Y	7.81	79.33	20.43		80.0	
		Ζ_	8.26	80.64	19.81		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.06	84.25	22.66	2.23	80.0	± 9.6 %
		Y	5.75	77.87	20.37		80.0	
		Z	5.68	79.10	20.42		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5,66	75.87	19.43	2.23	80.0	± 9.6 %
		Y	4.94	72.86	18.29		80.0	
		Z	4.62	73.05	17.69		80.0	
10487- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.56	75.25	19.19	2.23	80.0	± 9.6 %
		Y	4.94	72.51	18.16		80.0	
		Z	4.56	72.51	17.46		80.0	
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.10	80.82	21.84	2.23	80.0	± 9.6 %
		Y	5.79	76.47	20.13		80.0	ļ
		Z	5.49	77.19	20.36	<u> </u>	80.0	
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.34	73.87	19.44	2.23	80.0	± 9.6 %
		Y	5.00	7 <u>1.87</u>	18.57	L	80.0	
		Z	4.68	72.17	18.47		80.0	
10490- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.35	73.36	19.26	2.23	80.0	± 9.6 %
		Y	5.06	71.53	18.46	I	80.0	
		Z	4.74	71.87	18.36		80.0	1000
10491- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.36	77.12	20.56	2.23	80.0	± 9.6 %
		Y	5.66	74.28	19.36		80.0	<u> </u>
		Z	5.31	74.67	19.54		80.0	1000
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.41	72.24	18.98	2.23	80.0	± 9.6 %
		Y	5.23	70.84	18.33	L	80.0	·
r —		Z	4.89	71.01	18.29	1	80.0	

10493- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.44	71.94	18.88	2.23	80.0	± 9.6 %
		Y	5.28	70.63	18.27		00.0	
		Ż	4.94	70.81	18.22	<u> </u>	80.0	
10494-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	$\frac{1}{x}$	7.43	79.70			80.0	1.000
AAA	QPSK, UL Subframe=2,3,4,7,8,9)				21.31	2.23	80.0	± 9.6 %
		Y	6.30	76.13	19.88	L	80.0	
10495-	LTE TOD (00 FOMA FOX DD CO MIL	Z	5.88	<u>76.4</u> 0	20.05		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.56	72.97	19.25	2.23	80.0	± 9.6 %
	<u> </u>	Y	5.33	71.45	18.55		80.0	
10496-		Z	4.97	71.48	18.50		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.54	72.39	19.06	2.23	80.0	± 9.6 %
		Y	5.37	71.03	18.42		80.0	
10107		Z	5.01	71.08	18.38		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.31	82.38	20.82	2.23	80.0	±9.6 %
		Y	4.87	75.75	18.64		80.0	
40.000		Z	4.03	73.68	16.68		80.0	<u> </u>
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe≂2,3,4,7,8,9)	X	4.73	73.29	16.69	2.23	80.0	± 9.6 %
		Y	4.12	70.77	15.97		80.0	
·		Z	2.73	66.24	12.60		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	72.54	16.27	2.23	80.0	±9.6 %
		Y	4.10	70.38	15.70		80.0	
		Z	2.62	65.47	12.11		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	81.83	22.01	2.23	80.0	± 9.6 %
		Y	5.57	76.69	20.07		80.0	
		Z	5.44	77.85	20.24		80.0	<u> </u>
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.46	74.81	19.33	2.23	80.0	± 9.6 %
		Y	4.94	72.30	18.33		80.0	
		Z	4.65	72.67	17.97		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.46	74.43	19.15	2.23	80.0	± 9.6 %
		Y	4.98	72.05	18.20		80.0	
		Z	4.68	72.41	17.81		80.0	<u> </u>
10503- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.99	80.56	21.73	2.23	80.0	± 9.6 %
		Y	5.72	76.28	20.04		80.0	
		Z	5.42	76.98	20.27		80.0	
10504- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.31	73.78	19.39	2.23	80.0	± 9.6 %
		Y	4.98	71.79	18.52		80.0	
		Z	4.66	72.08	18.42		80.0	
10505- \AA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.32	73.26	19.21	2.23	80.0	±9.6 %
		Y	5.03	71.44	18.41		80.0	
		Z	4.72	71.78	18.31		80.0	
10506- \AA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.35	79.52	21.23	2.23	80.0	±9.6 %
		Y	6.24	75.99	19.82		80.0	
0.505		Z	5.83	76.25	19.98		80.0	
10507- \AA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	х	5.53	72.90	19.22	2.23	80.0	± 9.6 %
		Y	5.31	71.39	18.51			
		z	0.01	11.00	10.01		80.0	

10508- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.52	72.31	19.02	2.23	80.0	± 9.6 %
		Y	5.35	70.96	18.38		80.0	
		Z	4.99	71.02	18.34		80.0	
10509- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.86	76.40	20.08	2.23	80.0	± 9.6 %
		Y	6.23	74.05	19.09		80.0	
		Z	5.83	74.13	19.18		80.0	
10510- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.89	72.04	18.91	2.23	80.0	±9.6 %
		Y	5.75	70.91	18.36		80.0	
		Z	5.36	70.80	18.32		80.0	
10511- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.86	71.58	18.77	2.23	80.0	± 9.6 %
		Y	5.75	70.55	18.27		80.0	
		Z	5.39	70.48	18.23		80.0	
10512- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.85	79.24	20.97	2.23	80.0	±9.6 %
		Y	6.7 <u>5</u>	76.04	19.69		80.0	
		Z	6.30	76.05	19.77		80.0	
10513- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.88	72.72	19.16	2.23	80.0	±9.6 %
		Y	5.70	71.43	18.55		80.0	-
		Z	5,29	71.21	18.47		80.0	· · · · · · · · · · · · · · · · · · ·
10514- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.77	72.00	18.94	2.23	80.0	±9.6 %
		Y	5.64	70.86	18.38		80.0	
		Z	5.26	70.6 <u>9</u>	18.32		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.03	64.88	16.19	0.00	150.0	± 9.6 %
		Y	0.99	63.07	14.62		150.0	
		Z	0.99	63.20	14.56		150.0	106%
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1.64	91.04	26.85	0.00	150.0	± 9.6 %
		Y	0.59	69.22	16.60		150.0	
		Z	0.59	69.23	16.57	0.00	150.0	+06%
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duly cycle)	X	0.96	68.68	17.89	0.00	150.0 150.0	± 9.6 %
		Y Z	0.84	<u>64.94</u> 64.94	15.18 15.09		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	<u>0.84</u> 4.73	67.22	16.54	0.00	150.0	± 9.6 %
		Y	4.75	66.79	16.24		150.0	
		Z	4.57	66.91	16.20		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.96	67.51	16.67	0.00	150.0	± 9.6 %
		Υ	4.99	67.12	16.39	<u> </u>	150.0	
		Z	4.76	67.15	16.33	<u> </u>	150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.82	67.52	16.62	0.00	150.0	± 9.6 %
<u> </u>		<u>Υ</u>	4.84	67.09	16.32		150.0 150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.61 4.75	67.11 67.54	16.25 16.61	0.00	150.0	± 9.6 %
1001		ΤY-	4.77	67.10	16.31		150.0	
		Ż	4.54	67.10	16.23		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.79	67.47	16.62	0.00	150.0	± 9.6 %
		Y	4.80	67.00	16.30		150.0	
		Z	4.60	67.19	16.31		150.0	

10523- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.66	67.41	16.50	0.00	150.0	± 9.6 %
		Y	4.67	66.95	16.18	+	150.0	
		Ż	4.48	67.04	16.16	<u> </u>		
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.74	67.44	16.62	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	4.76	66.99	16.31		150.0	<u> </u>
		Z	4.54	67.10	16.28	<u> </u>	150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.69	66.48	16.21	0.00	150.0	± 9.6 %
		Y	4.70	66.02	15.89		150.0	
40500		Z	4.53	66.15	15.87		150.0	T
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.91	66.90	16.35	0.00	150.0	± 9.6 %
		Y	4.91	66.43	16.04		150.0	
10527-		Z	4.70	66.52	16.01		150.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)		4.82	66.89	16.32	0.00	150.0	± 9.6 %
		Y	4.83	66.42	16.00		150.0	
10528-		Z	4.62	66.47	15.95	L _	150.0	
AAA 	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.84	66.91	16.35	0.00	150.0	± 9.6 %
	<u> </u>	<u>Y</u> .	4.85	66.44	16.03		150.0	
10529-	IEEE 802.11ac WIFi (20MHz, MCS4,	Z	4.63	66.49	15.99		150.0	
AAA	99pc duly cycle)	X	4.84	66.91	16.35	0.00	150.0	± 9.6 %
		Y	4.85	66.44	16.03		150.0	
10531-		Z	4.63	66.49	15.99		150.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	×	4.86	67.08	16.39	0.00	150.0	± 9.6 %
		Y	4.87	66.60	16.06		150.0	
10500		Z	4.63	66.60	16.00		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.71	66.97	16.35	0.00	150.0	± 9.6 %
		Y	4.72	66.49	16.02		150.0	
40500		Z	4.49	66.45	15.93		150.0	F — -
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.86	66.93	16.33	0.00	150.0	±9.6 %
		Y	4.87	66.45	16.01		150.0	
		Z	4.64	66.54	15.97		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duly cycle)	X	5.34	67.03	16.36	0.00	150.0	± 9.6 %
		Y	5.36	66.66	16.11		150.0	
10525		Ζ	5.17	66.62	16.06		150.0	<u> </u>
10535- \AA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.42	67.17	16.42	0.00	150.0	± 9.6 %
		Y	5.43	66.80	16.16		150.0	
0536-		Z	5.24	66.80	16.14		150.0	
10536- 1AA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duly cycle)	X	5.29	67.18	16.41	0.00	150.0	±9.6 %
	<u> </u>	_Y	5.30	66.78	16.13		150.0	
0537-		Z	<u>5.</u> 11	66.74	16.09		150.0	
10537- \AA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.35	67.14	16.39	0.00	150.0	±9.6 %
·		Y	5.36	66.75	16.12		150.0	
0538-		Z	5.16	66.71	16.08		150.0	
0538- AA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	×	5.47	67.20	16.46	0.00	150.0	± 9.6 %
		Y	5.49	66.85	16.21		150.0	
0540		Z	5.26	66.74	16.13		150.0	
0540- AA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.36	67.15	16.45	0.00	150.0	± 9.6 %
		Y	C 00	00 77				
		Z	5.38 5.19	66.77	16.18	1	150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.35	67.08	16.42	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							- 0.0 /0
		Y.	5.38	66.75	16.17		150.0	
		Z	5.16	66.62	16.08		150.0	<b>-</b> .
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.49	67.08	16.42	0.00	150.0	± 9.6 %
		Y	5.51	66.73	16.18		150.0	
		Z	5.31	66.69	16.13		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duly cycle)	X	5.58	67.09	16.44	0.00	150.0	± 9.6 %
		<u>Y</u>	5.61	66.77	16.21		150.0	
		Z	5.39	66.74	16.17		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.61	67.12	16.33	0.00	150.0	± 9.6 %
		Y	5.62	66.77	16.09		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	Z X	5.48 5.83	66.74 67.51	16.05 16.46	0.00	150.0 150.0	± 9.6 %
AAA	99pc duty cycle)					0.00		I 9.0 %
		Y Z	5.84	67.15	16.22 16.22		150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	X	5.68 5.72	67.16 67.42	16.22	0.00	150.0 150.0	± 9.6 %
10546- AAA	99pc duty cycle)					0.00		19.0 %
		Y 7	5.73	67.08	16.20		150.0	
10547-		ZX	5.55	66.95	16.13 16.46	0.00	150.0 150.0	± 9.6 %
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)		5.81	67.48		0.00		± 9.0 %
		Y	5.83	67.17	16.24		150.0	
40540		Z	5.62	66.99	16.14	0.00	150.0	+06%
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.10	68.50	16.94	0.00	150.0	±9.6 %
		Y	6.15	68.24	16.74		150.0	
10550		Z	5.89	67.98	16.61	0.00	150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duly cycle)	X	5.74	67.36	16.42	0.00	150.0	± 9.6 %
		Y	5.75	67.01	16.18		150.0	
40554		Z	5.57	66.96	16.14	0.00	150.0	1069/
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.76	67.47	16.43	0.00	150.0	± 9.6 %
		Y	5.78	67.14	16.20		150.0	
		Z	5.58	67.00	16.12		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.66	67.23	16.33	0.00	150.0	± 9.6 %
		Y	5.67	66.89	16.10		150.0	
10553-	IEEE 802.11ac WiFi (80MHz, MCS9,	Z X	5.49 5.75	66.80 67.26	16.03 16.37	0.00	150.0 150.0	± 9.6 %
AAA	99pc duly cycle)	$\left  \cdot \right $		-			450.0	
		Y	5.76	66.93	16.14		150.0	
4055 -		Z	5.58	66.84	16.08	0.00	150.0	1069/
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.01	67.49	16.42	0.00	150.0	± 9.6 %
		Y	6.02	67.17	16.20		150.0	
10		Z	5.89	67.10	16.15	0.00	150.0	1000
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.17	67.85	16.56	0.00	150.0	±9.6 %
		Y	6.20	67.56	16.36		150.0	
		Z	6.02	67.41	16.28		150.0	+0.0 %
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duly cycle)	X	6.18	67.83	16.55	0.00	150.0	± 9.6 %
		Y	6.19	67.51	16.33		150.0	
		Z	6.04	67.46	16.30		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.17	67.82	16.57	0.00	150.0	± 9.6 %
		Y	6.19	67.52	16.36		150.0	<u> </u>
		Z	6.00	67.36	16.27		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duly cycle)	x	6.23	68.01	16.68	0.00	150.0	± 9.6 %
		Y	6.25	67.72	16.47		150.0	<del>                                     </del>
		Ż	6.05	67.53	16.37		150.0	+
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.22	67.85	16.63	0.00	150.0	± 9.6 %
		Υ	6.25	67.56	16.43	<u> </u>	150.0	
		Z	6.05	67.37	16.33		150.0	
10561- AAA	IEEE 1602.11ac WIFi (160MHz, MCS7, 99pc duty cycle)	X	6.13	67.79	16.64	0.00	150.0	± 9.6 %
		Y	6.15	67.49	16.43		150.0	
10500		Z	5.97	67.35	16.35		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.29	68.28	16.89	0.00	150.0	±9.6%
		Y	6.33	68.01	16.70		150.0	
10560		Z	6.10	67.74	16.55		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duly cycle)	X	6.57	68.63	17.00	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	<u>Y</u>	6.57	68.27	16.77		150.0	
40504		Z	6.35	<u>68.10</u>	16.68		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.07	67.31	16.69	0.46	150.0	± 9.6 %
		<u>Y</u>	5.10	66.95	16.44		150.0	
10565-		Z	4.91	67.04	16.40		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.34	67.80	17.01	0.46	150.0	± 9.6 %
		Y	5.38	67.46	16.78		150.0	
10566-		Z	5.14	67.47	16.71		150.0	
<u>AAA</u>	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.17	67.69	16.85	0.46	150.0	± 9.6 %
		Y	5.21	67.33	16.61		150.0	
10567-		Z	4.97	67.33	16.54		150.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.20	68.09	17.20	0.46	150.0	± 9.6 %
		Y	5.23	67.71	16.94		150.0	Γ — —
10568-		Z	5.00	67.68	16.86		150.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.08	67.38	16.59	0.46	150.0	±9.6%
		<u>Y</u>	5.11	67.01	16.33		150.0	T
10560		Z	4.90	67.16	16.34		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.14	68.11	17.22	0.46	150.0	± 9.6 %
	<u> </u>	Y	5.16	67.71	16.95		150.0	
10570		Z	4.96	67.77	16.91		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.18	67.92	17.15	0.46	150.0	± 9.6 %
		Y	5.21	67.52	16.88		150.0	
10571-		Z	4.99	67.63	16.86		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.45	67.97	17.69	0.46	130.0	±9.6 %
	<u> </u>	Y	1.38	65.84	16.15		130.0	
10572-		Z	1.34	65.80	16.05		130.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.49	68.86	18.18	0.46	130.0	± 9.6 %
		Y	1.40	66.47	16.51		130.0	· · · · · · · · · · · · · · · · · · ·
0573-		Z	1.36	66.39	16.40		130.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	149.30	40.22	0.46	130.0	±9.6 %
		Y	3.11	88.03	23.54		130.0	
0574-		Z	3.23	89.37	24.00		130.0	
AA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	X	2.21	80.01	23.13	0.46	130.0	± 9.6 %
	<u> </u>	Y	1.65	72.75	19.44		130.0	
	1	Z	1.56	72.33	19.21		130.0	

40575		1 1						
10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.88	67.15	16.77	0.46	130.0	± 9.6 %
~~~		Y	4.92	66.81	16.54		130.0	
		Z	4.92	66.93	16.54		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.91	67.32	16.84	0.46	130.0	± 9.6 %
AAA	OFDM, 9 Mbps, 90pc duty cycle)	^	1.01	01.02	10.04	0.10	100.0	1 0.0 %
		Y	4.94	66.97	16.61		130.0	
		Z	4.75	67.08	16.56		130.0	
10577-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	5.15	67.65	17.01	0.46	130.0	± 9.6 %
AAA	OFDM, 12 Mbps, 90pc duty cycle)				_			
		Y	5.20	67.33	16.79		130.0	
		Z	4.96	67.36	16.73		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	5.05	67.86	17.13	0.46	130.0	± 9.6 %
AAA	OFDM, 18 Mbps, 90pc duty cycle)					_		
		Y	5.09	67.50	16.89		130.0	
		Z	4.85	67.51	16.82		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.82	67.24	16.51	0.46	130.0	± 9.6 %
AAA	OFDM, 24 Mbps, 90pc duty cycle)			1.1.1.0				
		Y	4.87	66.90	16.27		130.0	
40500		Z	4.63	66.89	16.19	0.40	130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.86	67.17	16.48	0.46	130.0	± 9.6 %
AAA	OFDM, 36 Mbps, 90pc duty cycle)	Y	4.91	66.83	16.25		130.0	
		Z	4.68	66.92	16.23		130.0	
10581-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.96	67.97	17.11	0.46	130.0	± 9.6 %
AAA	OFDM, 48 Mbps, 90pc duty cycle)	$  \uparrow  $	4.50	01.51	17.11	0.40	130.0	1 0.0 %
1001		Y	5.00	67.61	16.86		130.0	
		Z	4.76	67.57	16.77		130.0	
10582-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.78	66.97	16.29	0.46	130.0	± 9.6 %
AAA	OFDM, 54 Mbps, 90pc duty cycle)							
-		Y	4.83	66.64	16.06		130.0	
		Z	4.58	66.67	16.00		130.0	
10583-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	X	4.88	67.15	16.77	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)							
		Y	4.92	66.81	16.54	_	130.0	
		Z	4.73	66.93	16.51		130.0	
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.91	67.32	16.84	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)						L	
		Y	4.94	66.97	16.61		130.0	
		Z	4.75	67.08	16.56		130.0	
10585-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	X	5.15	67.65	17.01	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)		5.00	07.00	40.70		400.0	
		Y	5.20	67.33	16.79		130.0	
40500		Z	4.96	67.36	16.73	0.46	130.0	+06%
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duly cycle)	X	5.05	67.86	17.13	0.46	130.0	±9.6 %
		Ŷ	5.09	67.50	16.89		130.0	
		Z	4.85	67.50	16.82		130.0	
10587-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.82	67.24	16.51	0.46	130.0	±9.6 %
AAA	Mbps, 90pc duty cycle)	^	4.04	01.24	10.01	0.70	100.0	/
7991		Y	4.87	66.90	16.27		130.0	
		z	4.63	66.89	16.19		130.0	
10588-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	4.86	67.17	16.48	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)							
-		Y	4.91	66.83	16.25		130.0	
		Z	4.68	66.92	16.22		130.0	
10589-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.96	67.97	17.11	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)						l	
		Υ	5.00	67.61	16.86		130.0	
		Z	4.76	67.57	16.77		130.0	
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.78	66.97	16.29	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duly cycle)			1		L	<u> </u>	<u> </u>
		Y	4.83	66.64	16.06		130.0	
		ΤZ	4.58	66.67	16.00		130.0	1

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	5.03	67.20	16.86	0.46	130.0	± 9.6 %
_///H				+	+	L	<u> </u>	
		Y	5.07	66.88	16.64	<u> </u>	130.0	
40500		Z	4.88	66.97	16.60		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.21	67.55	16.98	0.46	130.0	± 9.6 %
		Υ	5.26	67.23	16.76	· · ·	130.0	1
		Z	5.03	67.30	16.73		130.0	
1059 <del>3-</del> AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.14	67.52	16.89	0.46	130.0	± 9.6 %
		- Y	5.19	67.20	16.68		130.0	
		Ż	4.96	67.23	16.62		130.0	+
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duly cycle)	X	5.19	67.66	17.03	0.46	130.0	± 9.6 %
		Y	5.24	67.33	16.81		130.0	
		Z	5.01	67.38	16.76		130.0	ł
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.17	67.65	16.95	0.46	130.0	± 9.6 %
		Y	5.23	67.33	16.73		130.0	
		Z	4.98	67.35	16.67		130.0	<u> </u>
10596-	IEEE 802.11n (HT Mixed, 20MHz,		5.11	67.64	16.94	0.46	130.0	± 9.6 %
AAA	MCS5, 90pc duty cycle)	Y	5.16	67.30	16.71		130.0	1 9.0 %
		Z	4.92	67.35	16.67			
10597-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.06	67.59		0.40	130.0	1000
AAA	MCS6, 90pc duty cycle)	- ^ Y	5.00		16.86	0.46	130.0	± 9.6 %
				67.26	16.64		130.0	
10598-		Z	4.87	67.26	16.56		130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.05	67.87	17.14	0.46	130.0	± 9.6 %
		Y	5.09	67.53	16.91		130.0	
		_ Z	4.85	67.47	16.80		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.68	67.76	17.01	0.46	130.0	± 9.6 %
		Y	5.74	67.54	16.84		130.0	
		Z	5.54	67.51	16.80		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.91	68.42	17.31	0.46	130.0	± 9.6 %
		Y	6.00	68.29	17.19		130.0	
		Z	5.69	67.96	17.01		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	x	5.75	68.03	17.13	0.46	130.0	±9.6 %
		-   Y	5.81	67.81	16.96		130.0	
		Z	5.57	67.70	16.89		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.85	68.05	17.05	0.46	130.0	± 9.6 %
		Y	5.93	67.91	16.93		130.0	
		Z	5.67	67.73	16.83		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.97	68.46	17.38	0.46	130.0	± 9.6 %
		Y	6.05	68.29	17.25		130.0	
		Z	5.74	68.01	17.09		130.0	
10604-	IEEE 802.11n (HT Mixed, 40MHz,	- <del>x</del> -	5.70	67.75	17.03	0.46	130.0	+0.0.0/
AAA	MCS5, 90pc duty cycle)	Y	5.76	67.53	16.86	0.40		± 9.6 %
							130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.55 5.80	67.48 68.03	16.81 17.16	0.46	130.0 130.0	± 9.6 %
		TY T	5.86	67.81	17.00			
		- T	5.67		17.00		<u>130.0</u>	
10606-	IEEE 802.11n (HT Mixed, 40MHz,	$-\frac{2}{x}$		67.84	17.00		130.0	
AAA	MCS7, 90pc duty cycle)		5.58	67.53	16.79	0.46	130.0	± 9.6 %
		Y Z	5.62 5.41	67.26	16.60		130.0	
				67.19	16.54		130.0	

10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.86	66.52	16.48	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)		4.00	00.02	10.40	0.40	100.0	1 9.0 %
		Y	4.89	66.14	16.23		130.0	
		Z	4.71	66.27	16.21		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.09	66.96	16.64	0.46	130.0	± 9.6 %
		Ϋ́	5.12	66.58	16.39		130.0	
		Z	4.90	66.67	16.37		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.98	66.85	16.52	0.46	130.0	± 9.6 %
		Y	5.01	66.47	16.26		130.0	
10010		Z	4.79	66.53	16.22		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.03	67.01	16.67	0.46	130.0	± 9.6 %
		Y Z	5.06	66.63	16.42		130.0	
10611-	IEEE 802.11ac WiFi (20MHz, MCS4,		<u>4.84</u> 4.96	66.68 66.86	16.37	0.40	130.0	1000
	90pc duty cycle)				16.54	0.46	130.0	± 9.6 %
_		Y	4.99	66.50	16.29		130.0	
10612-	IEEE 802.11ac WiFi (20MHz, MCS5,	ZX	<u>4.76</u> 4.97	66.50	16.23	0.40	130.0	+00%
10612- AAA	90pc duty cycle)			67.00	16.58	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.01	66.61	16.31		130.0	
10613-	IEEE 802.11ac WiFi (20MHz, MCS6,	Z X	<u>4.77</u> 4.99	66.66 66.94	16.28	0.40	130.0	1000
AAA	90pc duty cycle)	^ Y			16.49	0.46	130.0	± 9.6 %
			5.03	66.55	16.23		130.0 130.0	
10614		Z	4.77	66.56	16.17	0.40		
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.92	67.15	16.73	0.46	130.0	± 9.6 %
		Y	4.95	66.76	16.47		130.0	
40045		Z	4.71	66.71	16.38	0.40	130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.95	66.65	16.31	0.46	130.0	± 9.6 %
		Y	4.99	66.28	16.06		130.0	
10010		Z	4.76	66.36	16.03	0.10	130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.51	67.07	16.65	0.46	130.0	± 9.6 %
<b>_</b> .		Y	5.55	66.78	16.45		130.0	
1001-		Z	5.35	66.74	16.40		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.58	67.18	16.67	0.46	130.0	± 9.6 %
		Y	5.62	66.89	16.46		130.0	
10010		Z	5.43	66.92	16.46	<u> </u>	130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.47	67.27	16.74	0.46	130.0	±9.6 %
	<u>+</u>	Y	5.50	66.95	16.52		130.0	
		Z	5.31	66.92	16.47	0.10	130.0	1000
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duly cycle)	X	5.49	67.07	16.57	0.46	130.0	± 9.6 %
-		Y	5.52	66.76	16.36		130.0	
40000		Z	5.33	66.76	16.33		130.0	100%
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.62	67.19	16.68	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.67	66.93	16.49		130.0	
10051		Z	5.42	66.79	16.40	0.10	130.0	100%
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.59	67.25	16.82	0.46	130.0	± 9.6 %
<u>-</u>		Y	5.63	66.98	16.62		130.0	
		Z	5.41	66.88	16.56		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duly cycle)	X	5.58	67.35	16.86	0.46	130.0	± 9.6 %
		Y	5.62	67.06	16.66		130.0	
		Z	5.43	67.06	16.64		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duly cycle)	X	5.48	66.99	16.57	0.46	130.0	± 9.6 %
		Y	5.54	66.75	16.40		130.0	
		Z	5.31	66.61	16.29		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duly cycle)	X	5.65	67.09	16.68	0.46	130.0	± 9.6 %
		Y	5.69	66.81	16.49		130.0	
		Z	5.50	66.79	16.45		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.03	68.01	17.18	0.46	130.0	± 9.6 %
		Y	6.05	67.65	16.95		130.0	
		Z	5.88	67.81	17.01		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.76	67.09	16.57	0.46	130.0	± 9.6 %
		Y	5.79	66.81	16.38		130.0	
		Z	5.64	66.79	16.35		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.01	67.60	16.77	0.46	130.0	± 9.6 %
		Y	6.04	67.32	16.58		130.0	
		Z	5.89	67.37	16.60		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.83	67.28	16.56	0.46	130.0	± 9.6 %
		Y	5.87	67.01	16.37		130.0	
		Z	5.69	66.92	16.32		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.93	67.36	16.58	0.46	130.0	± 9.6 %
		Y	5.99	67.16	16.43		130.0	
		Z	5.77	67.00	16.35		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.47	69.11	17.45	0.46	130.0	± 9.6 %
		Y	6.56	68.99	17.34		130.0	
		Z	6.24	68.58	17.14		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.36	68.89	17.53	0.46	130.0	± 9.6 %
		Y	6.44	68.71	17.39		130.0	
		Z	6.09	68.24	17.15		130.0	•
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.00	67.73	16.97	0.46	130.0	± 9.6 %
		Y	6.05	67.48	16.79		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.85	67.39	16.74		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	X	5.95	67.59	16.73	0.46	130.0	± 9.6 %
		Y	6.01	67.38	16.58		130.0	
		Z	5.74	67.05	16.41		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.92	67.56	16.78	0.46	130.0	± 9.6 %
		Y	5.98	67.34	16.62		_130.0	
		Z	5.72	67.07	16.47		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.80	66.87	16.18	0.46	130.0	± 9.6 %
		Y	5.85	66.64	16.01		130.0	
		Z	5.62	66.48	15.93		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duly cycle)	X	6.16	67.47	16.65	0.46	130.0	± 9.6 %
		Y	6.19	67.22	16.49		130.0	
		Z	6.06	67.16	16.44		130.0	
10637- <u>A</u> AA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.34	67.89	16.84	0.46	130.0	± 9.6 %
		Y	6.39	67.69	16.69		130.0	
		Z	6.22	67.55	16.62		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.33	67.82	16.78	0.46	130.0	±9.6 %
		Y	6.36	67.57	16.61		130.0	
		Z	6.21	67.52	16.58		130.0	

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.34	67.88	16.86	0.46	130.0	± 9.6 %
		Y	6.38	67.64	16.70		130.0	
		Z	6.19	67.47	16.60		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duly cycle)	X	6.37	67.96	16.84	0.46	130.0	± 9.6 %
		Y	6.42	67.75	16.69		130.0	
		Z	6.20	67.51	16.57		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.36	67.66	16.71	0.46	130.0	± 9.6 %
		Y	6.40	67.44	16.56		130.0	
		Z	6.24	67.40	16.53		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.44	68.03	17.05	0.46	130.0	±9.6 %
		Y	6.49	67.81	16.91		130.0	
		Z	6.28	67.62	16.80		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.26	67.70	16.80	0.46	130.0	± 9.6 %
		Y	6.31	67.48	16.64		130.0	
		Z	6.12	67.34	16.57		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.50	68.41	17.18	0.46	130.0	± 9.6 %
		Y	6.57	68.25	17.05		130.0	
		Z	6.29	67.86	16.85		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.78	68.77	17.29	0.46	130.0	±9.6 %
		Y	6.81	68.48	17.11		130.0	_
		Z	6.68	68.60	17.18		130.0	
10646- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	37.14	116.21	38.03	9.30	60.0	± 9.6 %
		Y	19.95	100.33	33.06		60.0	
		Z	62.05	131.91	43.22		60.0	
10647- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	38.52	117.84	38.64	9.30	60.0	± 9.6 %
		Y	20.25	101.35	33.50		60.0	
		Z	63.43	133.45	43.81		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	1.03	68.68	14.68	0.00	150.0	± 9.6 %
		Y	0.85	64.54	12.30		150.0	
		Z	0.71	63.65	10.90		150.0	

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

#### Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client PC Test

#### Certificate No: EX3-7409\_May16

## CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7409

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

May 17, 2016

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-15 (No. ES3-3013_Dec15)	Dec-16
DAE4	SN: 660	23-Dec-15 (No. DAE4-660_Dec15)	Dec-16
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (No. 217-02285/02284)	In house check: Jun-16
Power sensor E4412A	SN: MY41498087	06-Apr-16 (No. 217-02285)	In house check: Jun-16
Power sensor E4412A	SN: 000110210	06-Apr-16 (No. 217-02284)	In house check: Jun-16
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Apr-13)	In house check: Jun-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Name Michael Weber	Function Laboratory Technician	Signature M. Weses
Katja Pokovic	Technical Manager	fol the
		Issued: May 18, 2016
	Michael Weber Katja Pokovic	Michael Weber Laboratory Technician



Schweizerischer Kallbrierdienst Service suisse d'étalonnage

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- Service suisse d'etalonnage Servizio svizzero di taratura
- Swiss Calibration Service

Accreditation No.: SCS 0108

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#### **Glossary:**

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DACV system to align probe some V to the vehat searchingto system

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
  b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close
- proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices C) used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx, v.z; Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  MHz in TEM-cell: f > 1800 MHz; R22 waveguide). NORMx, v.z are only intermediate values, i.e., the uncertainties of NORMx, v.z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx.v.z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters; Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe EX3DV4

## SN:7409

Calibrated:

Manufactured: November 24, 2015 May 17, 2016

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.39	0.34	0.39	± 10.1 %
DCP (mV) <sup>B</sup>	106.3	102.2	99.4	

#### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc <sup>⊭</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	141.2	±3.3 %
		Y	0.0	0.0	1.0		127.3	
		Z	0.0	0.0	1.0		131.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	0.39	53.8	5.5	10.00	42.5	±1.2 %
		Y	0.55	54.7	5.9		41.8	
		Z	0.85	58.7	9.1		41.6	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	3.55	75.3	22.2	1.87	149.7	±0.7 %
		Y	3.32	72.6	21.0		139.7	
		Z	2.84	68.8	19.0		144.7	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	х	5.98	66.6	19.3	5.67	113.6	±0.9 %
		Y	6.17	66.7	19.4		107.1	
		z	6.13	66.1	18.8	ļ	110.9	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.59	66.2	21.1	9.29	123.5	±1.4 %
		Y	7.27	67.9	22.1		121.1	
		Z	7.01	66.4	21.1		119.9	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	5.72	66.1	19.2	5.80	111.4	±1.2 %
		Y	6.34	67.6	20.0		149.2	
		Z	6.02	65.9	19.0		109.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	6.27	66.1	21.2	9.28	116.8	±1.4 %
		Y	6.89	67.6	22.1	L	114.7	
		Z	6.69	66.0	21.0		116.4	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	5.37	65.9	19.1	5.75	107.3	±1.2 %
		Y	5.98	67.2	19.9		143.3	
		Z	6.01	66.7	19.4		149.2	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	5.76	66.2	19.2	5.82	109.5	±1.2 %
		Y	6.43	67.6	20.0		148.3	
		Z	6.05	65.6	18.7		107.5	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.24	65.6	19.3	5.73	127.4	±0.9 %
		Y	4.54	66.4	19.8		120.4	
		Z	4.62	65.9	19.3		123.8	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	х	4.91	68.0	22.7	9.21	126.7	±1.4 %
		Y	5.24	68.8	23.3		124.0	
		Z	5.35	68.1	22.5		125.0	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.27	65.8	19.4	5.72	128.9	±0.9 %
		Y	4.52	66.2	19.7		121.2	
		Z	4.63	65.9	19.3		125.2	

#### EX3DV4- SN:7409

10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.26	65.7	19.4	5.72	125.9	±0.9 %
		Y	4.47	66.0	19.5		120.6	
		Z	4.60	65.7	19.2		123.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.89	67.9	22.6	9.21	125.9	±1.7 %
		Y	5.26	69.0	23.4		123.8	
		Z	5.32	67.8	22.3		124.3	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.04	66.8	21.7	9.24	149.2	±1.4 %
		Y	6.64	68.1	22.6		148.9	
		Z	6.48	66.5	21.4		147.5	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.27	66.1	21.2	9.30	119.1	±1.4 %
		Y	6.88	67.4	22.0		115.9	
		Z	6.73	66.1	21.1		117.6	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	5.71	66.0	19.2	5.81	110.7	±0.9 %
		Y	6.41	67.8	20.2		149.8	
		Z	5.98	65.7	18.9		107.9	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.23	66.3	19.4	6.06	112.8	±0.9 %
		Y	6.51	66.6	19.5		107.4	
		Z	6.49	66.1	19.0		109.4	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 6 and 7). <sup>B</sup> Numerical linearization parameter: uncertainty not required. <sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	10.73	10.73	10.73	0.62	0.83	± 12.0 %
835	41.5	0.90	10.04	10.04	10.04	0.45	0.93	± 12.0 %
1750	40.1	1.37	8.05	8.05	8.05	0.38	0.80	± 12.0 %
1900	40.0	1.40	7.69	7.69	7.69	0.41	0.80	± 12.0 %
2300	39.5	1.67	7.22	7.22	7.22	0.25	0.92	± 12.0 %
2450	39.2	1.80	6.90	6.90	6.90	0.30	0.93	± 12.0 %
2600	39.0	1.96	6.77	6.77	6.77	0.32	0.83	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe lip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

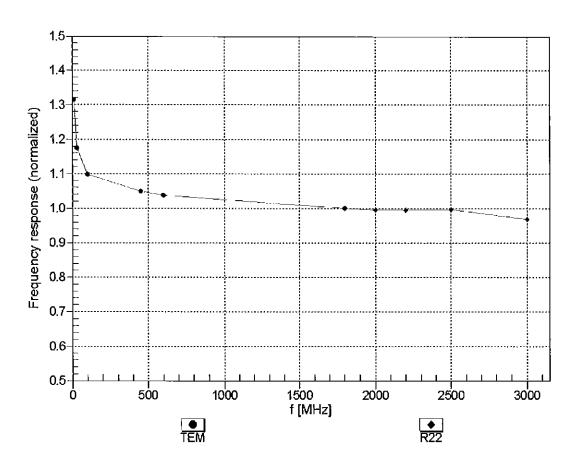
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	9.46	9.46	9.46	0.52	0.80	± 12.0 %
835	55.2	0.97	9.33	9.33	9.33	0.34	1.04	<u>± 12.0 %</u>
1750	53.4	1.49	7.72	7.72	7.72	0.44	0.80	± 12.0 %
1900	53.3	1.52	7.47	7.47	7.47	0.43	0.80	± <u>12.0 %</u>
2300	52.9	1.81	7.22	7,22	7.22	0.36	0.85	± 12.0 %
2450	52.7	1.95	7.10	7.10	7.10	0.39	0.80	± 12.0 %
2600	52.5	2.16	6.83	6.83	6.83	0.39	0.86	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

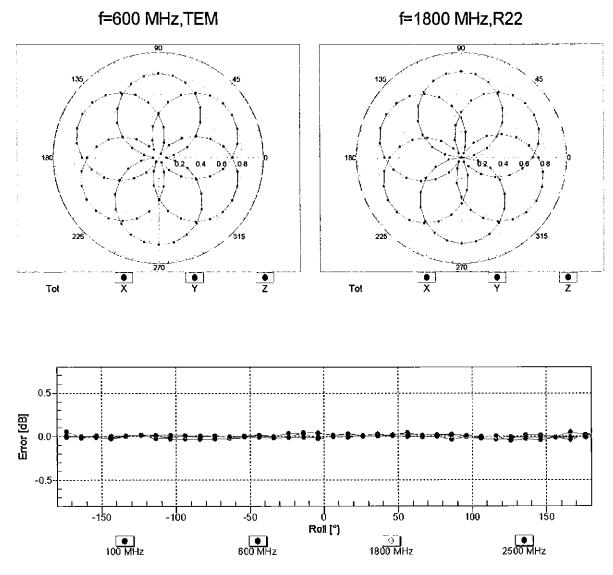
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



### Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

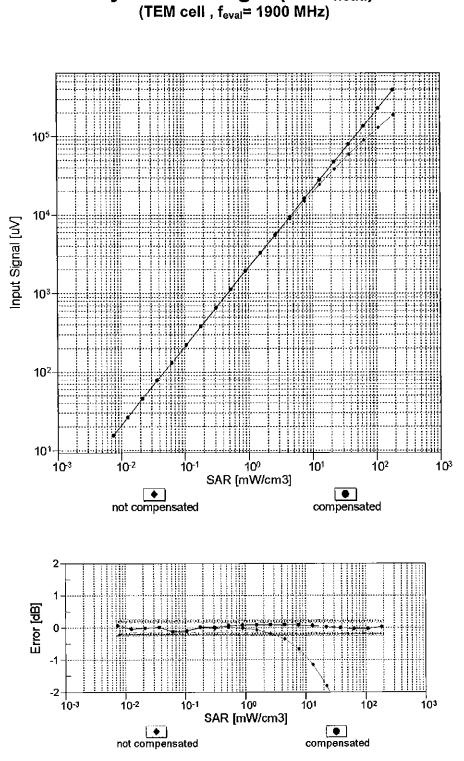
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

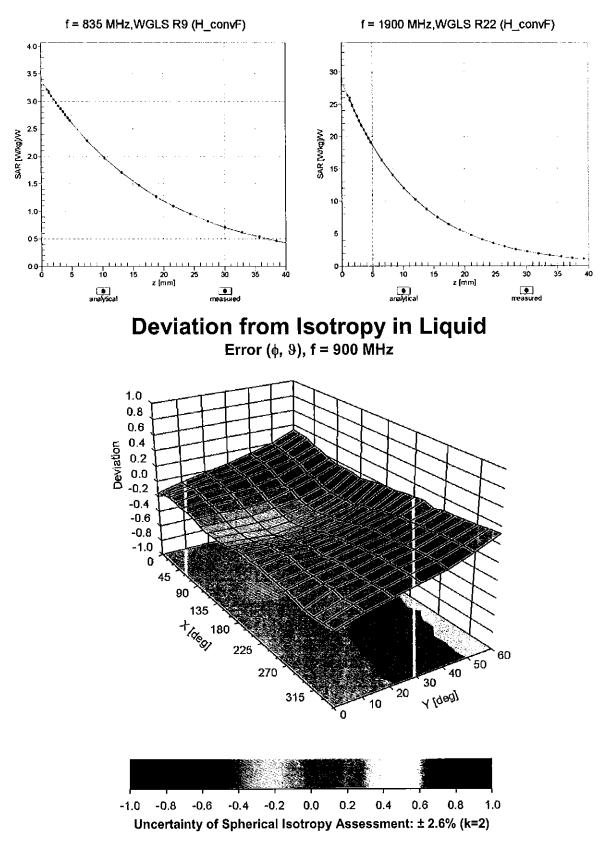
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

May 17, 2016



## Dynamic Range f(SAR<sub>head</sub>)

Uncertainty of Linearity Assessment: ± 0.6% (k=2)



## **Conversion Factor Assessment**

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	36.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

#### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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BN 04/26/206

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Client PC Test

Certificate No: EX3-7406\_Apr16

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EX3DV4 - SN:7406

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Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

April 19, 2016

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-15 (No. ES3-3013_Dec15)	Dec-16
DAE4	SN: 660	23-Dec-15 (No. DAE4-660_Dec15)	Dec-16
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (No. 217-02285/02284)	In house check: Jun-16
Power sensor E4412A	SN: MY41498087	06-Apr-16 (No. 217-02285)	In house check: Jun-16
Power sensor E4412A	SN: 000110210	06-Apr-16 (No. 217-02284)	In house check: Jun-16
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Apr-13)	In house check: Jun-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	de la
		· · · · · · · · · · · · · · · · · · ·	
Approved by:	Katja Pokovic	Technical Manager	RKK
	3		Very Andrew
			Issued: April 20, 2016
This calibration certificat	e shall not be reproduced except in full witho	ut written approval of the labor	ratory.

## Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



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#### Glossary: TSL tissue simulating liquid

ISL	
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization $\phi$	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

#### Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe EX3DV4

## SN:7406

Calibrated:

Manufactured: November 24, 2015 Calibrated: April 19, 2016 April 19, 2016

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
<u>Norm (μV/(V/m)<sup>2</sup>)<sup>A</sup></u>	0.48	0.44	0.47	± 10.1 %
DCP (mV) <sup>B</sup>	100.7	97.9	98.6	

#### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Unc <sup>E</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	120.4	±3.3 %
		Y	0.0	0.0	1.0		148.3	
		Z	0.0	0.0	1.0		146.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	0.81	54.6	7.4	10.00	50.3	±2.2 %
		Y	0.68	55.1	7.9	· · ·	47.9	
		Z	1.34	61.0	11.0	[	46.8	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	2.83	68.0	18.3	1.87	127.8	±0.5 %
		Y	2.82	68.4	18.4	_	117.8	
<u> </u>		Z	3.00	69.2	19.0		115.9	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.54	67.4	19.5	5.67	142.1	±1.2 %
		Y	6.19	66.7	19.3		127.6	<u> </u>
40400		Z	6.37	66.7	19.2		125.7	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	×	7.58	67.9	21.8	9.29	114.4	±1.7 %
		Y	7.34	68.3	22.5		144.3	
10100		Z	7.53	67.7	21.8		139.5	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	×	6.34	66.9	19.4	5.80	137.5	±1.2 %
-		Y	5.90	65.9	19.0		123.8	
40454		Z	6.24	66.4	19.2		123.7	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	×	7.17	67.2	21.5	9.28	109.5	±1.7 %
		Y	6.83	67.6	22.3		137.0	_
10454		Z	7.23	67.4	21.7		135.1	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	5.99	66.4	19.2	5.75	132.4	±0.9 %
		Y	5.61	65.8	19.1		119.4	
10160-		Z	5.91	65.9	19.0	5.00	120.1	
CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.47	67.0	19.5	5.82	137.0	±1.2 %
		Y	5.96	66.0	19.1		123.9	
10169-	LTE-FDD (SC-FDMA, 1 RB, 20 MHz,	Z	6.33	66.3	19.1	5 70	124.2	14.0.0/
CAB	QPSK)	X	4.71	65.5	18.9	5.73	113.2	±1.2 %
		Y	4.60	66.2	19.6		144.2	
10172-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	Z	4.93	66.5	19.5	0.01	143.2	14 7 0/
<u>CAB</u>	QPSK)	X	5.68	68.2	22.4	9.21	117.6	±1.7 %
	<u> </u>	Y	5.56	70.1	24.1		146.1	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	z X	<u>5.87</u> 4.75	69.4 65.7	23.2 19.1	5.72	143.7 112.3	±0.9 %
		Y	4.58	66.1	19.5		143.2	
	·	z	4.95	66.7	19.6		140.2	

#### EX3DV4- SN:7406

April 19, 2016

10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.71	65.5	18.9	5.72	110.2	±0.9 %
		Y	4.53	65.8	19.4		141.4	
		Z	4.90	66.5	19.5		138.1	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	5.69	68.3	22.5	9.21	117.3	±1.7 %
		Y	5.47	69.5	23.8		145.1	
		Z	5.85	69.3	23.1	-	142.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	7.04	68.1	22.2	9.24	141.2	±1.9 %
		Y	6.35	67.2	22.2		125.4	
-		Z	6.82	67.1	21.7		127.5	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	7.45	68.3	22.2	9.30	148.0	±1.9 %
		Y	6.84	67.5	22.3		132.0	
		Z	7.24	67.4	21.8		134.6	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	6.35	66.9	19.4	5.81	135.3	±1.2 %
		Y	5.92	65.9	19.0		122.9	
		Z	6.26	66.4	19.2		122.1	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	6.92	67.4	19.7	6.06	139.3	±1.2 %
		Y	6.52	66.6	19.5		127.9	
		Z	6.82	66.9	19.5		126.8	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 6 and 7).
 <sup>B</sup> Numerical linearization parameter: uncertainty not required.
 <sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	10.52	10.52	10.52	0.52	0.89	± 12.0 %
835	41.5	0.90	9.83	9.83	9.83	0.54	0.80	± 12.0 %
1750	40.1	1.37	8.85	8.85	8.85	0.49	0.85	± 12.0 %
1900	40.0	1.40	8.22	8.22	8.22	0.40	0.88	± 12.0 %
2300	39.5	1.67	7.67	7.67	7.67	0.36	0.89	± 12.0 %
2450	39.2	1.80	7.29	7.29	7.29	0.40	0.80	± 12.0 %
2600	39.0	1.96	7.08	7.08	7.08	0.37	0.95	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity validity can be extended to  $\pm$  110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

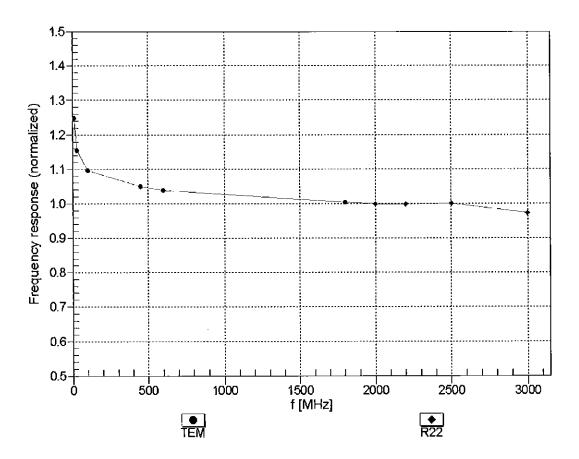
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	9.54	9.54	9.54	0.46	0.80	± <u>12.0 %</u>
835	55.2	0.97	9.35	9.35	9.35	0.45	0.84	± 12.0 %
1750	53.4	1.49	7.78	7.78	7.78	0.37	0.85	<u>± 12.0_%</u>
1900	53.3	1.52	7.49	7.49	7.49	0.33	0.91	<u>± 12.0 %</u>
2300	52.9	1.81	7.37	7.37	7.37	0.42	0.80	± 12.0 %
2450	52.7	1.95	7.24	7.24	7.24	0.37	0.88	± <u>12.0 %</u>
2600	52.5	2.16	6.94	6.94	6.94	0.27	0.99	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

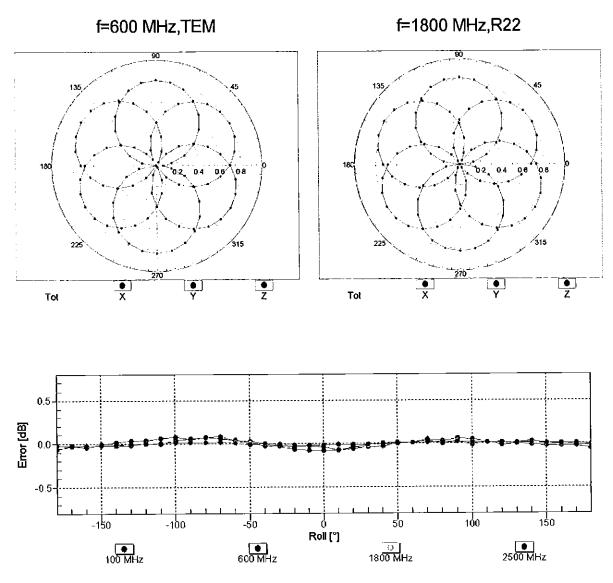
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



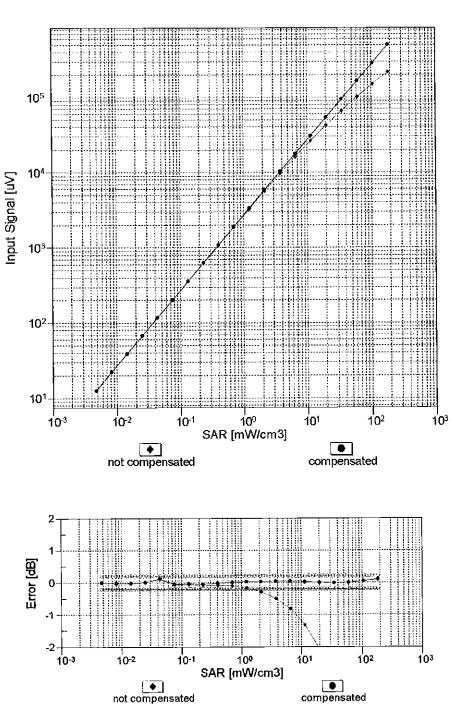
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



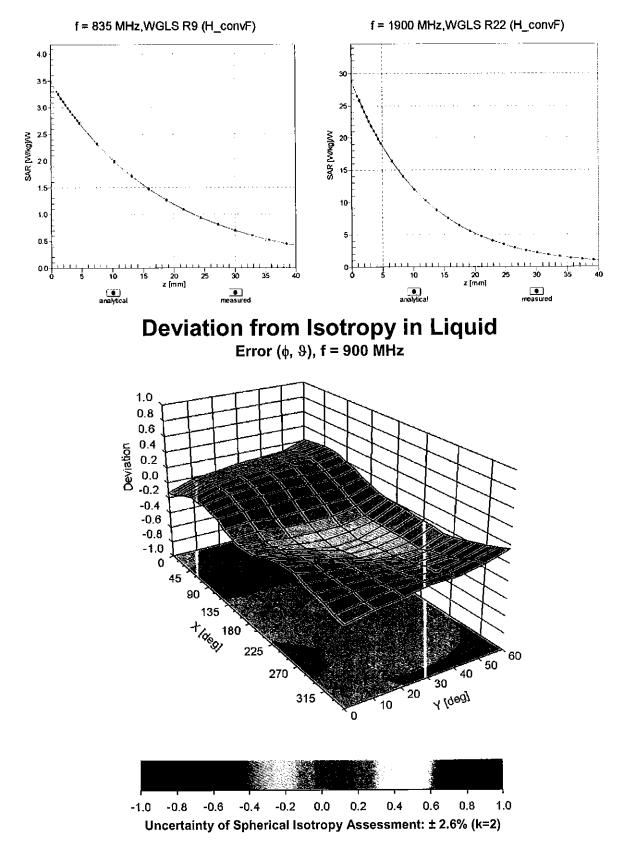
## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



### Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

Uncertainty of Linearity Assessment: ± 0.6% (k=2)



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	0.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

#### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Certificate No: ES3-3213\_Feb17

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Object

ES3DV3 - SN:3213

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

February 10, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	Ð	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
			V <del>G</del> V
Approved by:	Katja Pokovic	Technical Manager	PAL
			/~ · ~ 55
			Issued: February 13, 2017
This calibration certificate	e shall not be reproduced except in fu	Il without written approval of the lab	oratory.

#### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: SCS 0108

- S Servizio svizzero di taratura
- Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossary:

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TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

#### Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z*; *Bx,y,z*; *Cx,y,z*; *Dx,y,z*; *VRx,y,z*: *A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe ES3DV3

## SN:3213

Calibrated:

Manufactured: October 14, 2008 February 10, 2017

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) <sup>2</sup> ) <sup>A</sup>	1.44	1.32	1.29	± 10.1 %
DCP (mV) <sup>B</sup>	101.3	102.3	101.6	

#### **Modulation Calibration Parameters**

UID	Communication System Name		Α	В	С	D	VR	Unc <sup>E</sup>
			dB	dB√μV		dB	m∨	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	228.2	±3.5 %
		Y	0.0	0.0	1.0		230.0	
		Z	0.0	0.0	1.0		221.7	

Note: For details on UID parameters see Appendix.

#### Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	Т6
	fF	fF	V-1	ms.V⁻²	ms.V⁻¹	ms	V-2	V⁻¹	
Х	56.23	407.2	35.93	28.85	2.251	5.1	1.129	0.439	1.012
Y	55.47	400.7	35.87	28.65	2.277	5.1	1.321	0.386	1.013
Z	51.67	374.7	36	28.45	2.103	5.1	0.358	0.504	1.009

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>6</sup> Numerical linearization parameter: uncertainty not required. <sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.85	6.85	6.85	0.80	1.18	± 12.0 %
835	41.5	0.90	6.49	6.49	6.49	0.49	1.52	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.60	1.35	± 12.0 %
1900	40.0	1.40	5.29	5.29	5,29	0.68	1.27	± 12.0 %
2300	39.5	1.67	4.95	4.95	4.95	0.70	1.28	± 12.0 %
2450	39.2	1.80	4.70	4.70	4.70	0.80	1.24	± 12.0 %
2600	39.0	1.96	4.52	4.52	4.52	0.78	1.28	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 end 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

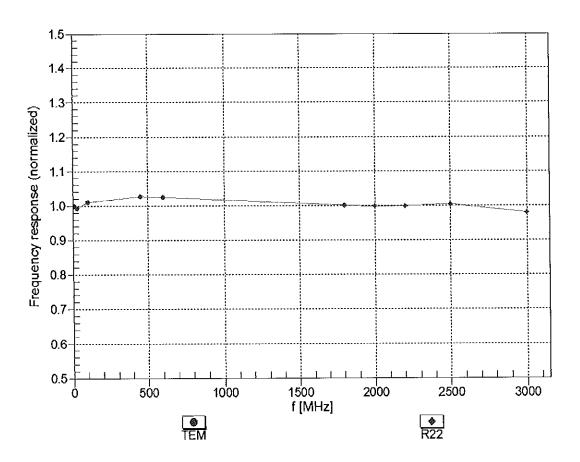
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.38	6.38	6.38	0.60	1.31	± 12.0 %
835	55.2	0.97	6.28	6.28	6.28	0.80	1.20	± 12.0 %
1750	53.4	1.49	5.09	5.09	5.09	0.66	1.33	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.40	1.85	± 12.0 %
2300	52.9	1.81	4.69	4.69	4.69	0.80	1.24	± 12.0 %
2450	52.7	1.95	4.53	4.53	4.53	0.72	1.28	± 12.0 %
2600	52.5	2.16	4.32	4.32	4.32	0.80	1.20	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity validity can be extended to  $\pm$  110 MHz.

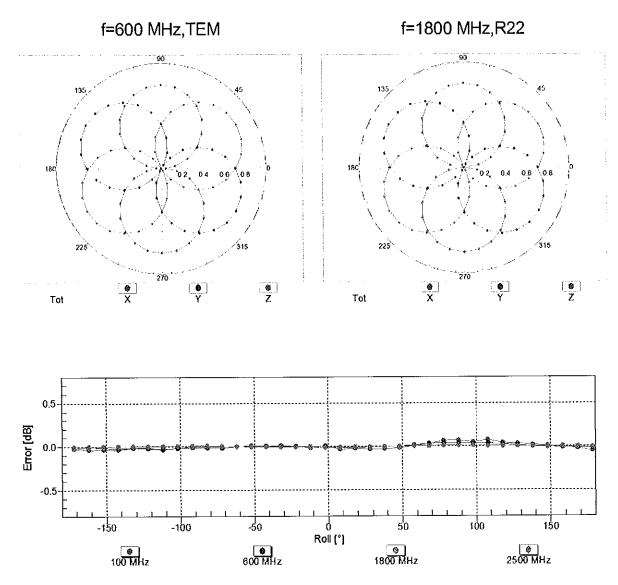
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



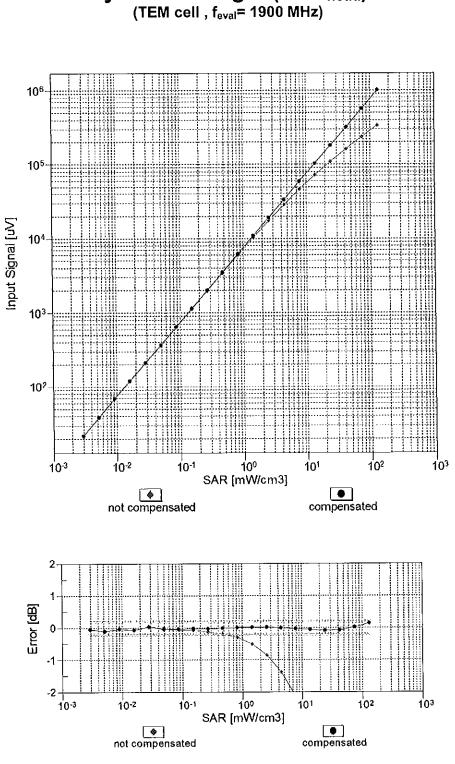
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



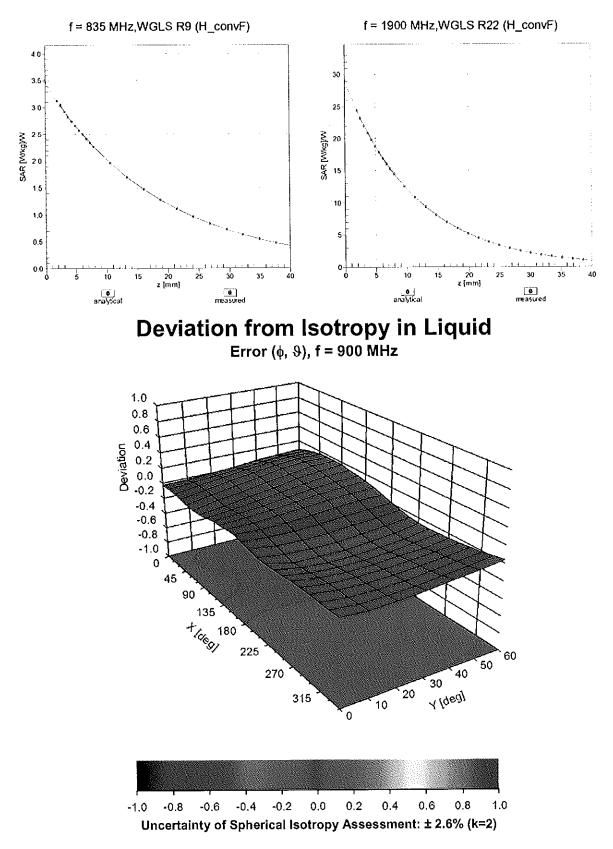
## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



Dynamic Range f(SAR<sub>head</sub>)

Uncertainty of Linearity Assessment: ± 0.6% (k=2)



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	98.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

### Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	228.2	± 3.5 %
		Y	0.00	0.00	1.00		230.0	
40040		Z	0.00	0.00	1.00		221.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	11.07	84.26	20.62	10.00	25.0	± 9.6 %
		Y	10.49	83.36	20.27		25.0	
40044		Z	11.03	84.22	20.43		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.04	66.65	14.82	0.00	150.0	± 9.6 %
		Y	1.16	69.13	16.33		150.0	
40040		Z	1.01	66.30	14.54		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	1.30	64.60	15.49	0.41	150.0	± 9.6 %
		Y	1.33	65.49	16.22		150.0	
		Ζ	1.28	64.47	15.36		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.14	67.15	17.39	1.46	150.0	± 9.6 %
		Y	5.14	67.35	17.57		150.0	
(000)		Z	5.09	67.17	17.37		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	Х	62.94	114.81	31.61	9.39	50.0	± 9.6 %
		Y	41.95	107.82	29.66		50.0	
		Ζ	94.76	121.25	33.03		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	Х	46.50	109.76	30.33	9.57	50.0	± 9.6 %
		Y	33.70	104.15	28.69		50.0	
		Ζ	62.69	114.46	31.37		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.19	30.75	6.56	60.0	± 9.6 %
		Y	100.00	118.97	30.64		60.0	
		Z	100.00	118.83	30.48		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	×	18.95	107.68	41.29	12.57	50.0	± 9.6 %
		Y	31.91	124.81	47.58		50.0	
		Z	17.05	104.98	40.36	0 - 0	50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Х	20.29	105.23	36.57	9.56	60.0	± 9.6 %
		Y	28.92	114.92	39.99		60.0	
10007		Z	20.11	105.49	36.71	4.00	60.0	10.0.0/
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.17	29.38	4.80	80.0	± 9.6 %
		Y	100.00	118.12	29.34		80.0	
10028-	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	117.81 118.40	29.12 28.68	3.55	80.0 100.0	± 9.6 %
DAC			400.00	440.00	00.70		1000	<b> </b>
		Y Z	100.00	118.60	28.76		100.0	
10020	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Z X	100.00 12.78	118.00 94.46	28.41 31.72	7.80	100.0	± 9.6 %
10029- DAC						7.00		1 3.0 %
		Y	16.27 12.37	100.85	34.22 31.64		80.0 80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	12.37	<u>94.11</u> 117.61	29.45	5.30	70.0	± 9.6 %
CAA		Y	100.00	117.52	29.40		70.0	
		Z	100.00	117.52	29.40		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	119.11	27.47	1.88	100.0	± 9.6 %
		Y	100.00	120.30	27.96	<u>+</u> .	100.0	1
		Ż	100.00	118.27	27.02	1	100.0	1

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10032-		1.1.	1		·			aly 10, 20
CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	×	100.00	123.13	28.10	1.17	100.0	± 9.6 %
		Y	100.00	125.86	29.19		100.0	
10000		Z	100.00	121.81	27.46		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	19.81	99.27	27.58	5.30	70.0	± 9.6 %
		Y	23.75	102.32	28.48		70.0	
10004		Ż	20.10	99.19	27.31		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	6.18	84.61	21.36	1.88	100.0	± 9.6 %
		Y	8.74	90.01	23.19		100.0	
10035-		Z	6.07	84.02	20.83		100.0	
<u>CAA</u>	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3.50	78.04	18.75	1.17	100.0	± 9.6 %
<u> </u>		Y	4.77	82.88	20.59		100.0	
40000		Z	3.40	77.42	18.19		100.0	· · · · ·
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	×	25.06	103.36	28.83	5.30	70.0	± 9.6 %
		Y	30.48	106.66	29.76		70.0	
10007		Z	25.78	103.46	28.61		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.91	84.02	21.13	1.88	100.0	± 9.6 %
		Y	8.37	89.43	22.97		100.0	
10038-		Z	5.74	83.28	20.55		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.58	78.59	19.05	1.17	100.0	± 9.6 %
		Y	4.93	83.62	20.94		100.0	·
10000		Ζ	3.47	77.94	18.48		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.75	70.49	15.41	0.00	150.0	± 9.6 %
		Y	2.11	73.63	16.88		150.0	·
		Z	1.63	69.80	14.78		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	117.99	30.44	7.78	50.0	±9.6 %
		Y	100.00	117.70	30.30		50.0	· · · · ·
- · · · · · · · · · · · · · · · · · · ·		Z	100.00	117.57	30.13		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.01	92.86	0.28	0.00	150.0	± 9.6 %
		Y	0.00	128.30	10.22		150.0	
		Z	0.01	91.94	0.27		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	16.43	91.36	26.72	13.80	25.0	± 9.6 %
		Y	14.26	88.55	25.69		25.0	
		Z	18.21	93.36	27.20		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	х	21.81	96.95	27.09	10.79	40.0	± 9.6 %
·		Y	18.36	93.74	25.99		40.0	
		Ζ	24.94	99.20	27.59		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	16.12	92.43	26.40	9.03	50.0	±9.6 %
		Y	16.40	92.69	26.46		50.0	
		Ζ	16.84	93.23	26.48		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.13	87.64	28.49	6.55	100.0	±9.6 %
		Y	10.85	92.11	30.40		100.0	
		Ζ	8.80	87.14	28.33		100.0	
100	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	X	1.45	66.53	16.46	0.61	110.0	± 9.6 %
	Mbps)				1			
		Y	1.51	67.75	17.33	-	110.0	
CAB	Mbps)	Y Z	1.51 1.43	67.75 66.36	17.33 16.31		110.0 110.0	
CAB						1.30	110.0 110.0 110.0	± 9.6 %
10059- CAB 10060- CAB	Mbps) IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	Z	1.43	66.36	16.31	1.30	110.0	± 9.6 %

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Y         12.85         101.15         28.77         110.0           10062-         IEEE 802.11a/h WIF15 GHz (OFDM, 6         X         4.86         66.91         16.67         0.49         100.0         ± 9.6 %           CAB         Mbps)         Y         4.87         67.10         18.85         100.0         ± 9.6 %           IO063-         IEEE 802.11a/h WIF15 GHz (OFDM, 9         X         4.90         67.06         16.81         0.72         100.0         ± 9.6 %           Mbps)         Y         4.91         67.26         16.89         100.0         ± 9.6 %           CAB         Mbps)         Y         4.91         67.26         16.89         100.0         ± 9.6 %           I0004-         IEEE 602.11a/h WIF15 GHz (OFDM, 12         X         5.22         67.40         17.08         0.86         100.0         ± 9.6 %           Mbps)         Y         5.23         67.59         17.25         1.00.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.46         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.41         100.0         ± 9.6 %	10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11   Mbps)	X	7.70	91.83	25.70	2.04	110.0	± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	0/10	mopo/		12.85	101 15	28 77		110.0	
ID002- CAB         IEEE F02.11a/n WIF15 GHz (OFDM, 6 Mbps)         X         4.86 4.87         66.91 67.10         16.67 16.85         0.00 100.0         ± 0.49 4.87         0.00 67.06         16.81 16.84         0.00 000.0           10063- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 9 Mbps)         X         4.90 4.86         67.06 67.06         16.81 16.84         0.72 00.00         ± 9.6 % 4.86           10064- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 12 X         X         5.22 5.23         67.40 67.40         17.08 17.08         0.86 0.86         100.0         ± 9.6 % 17.25           10064- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 12 X         X         5.12 5.16         67.33 7.42         17.25 1.21         100.0         ± 9.6 % 17.25           10066- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 18 X         X         5.12 5.16         67.35 67.74         17.48 1.46         140.0         ± 9.6 % 17.41           10066- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 24 X         X         5.19 5.50         67.74 7.74         17.95 7.748         14.6 100.0         ± 9.6 % 17.43           10067- CAB         IEEE 802.11a/n WIF15 GHz (OFDM, 36 X         5.50         67.74 7.74         17.95 7.748         14.00         ± 9.6 % 17.83           10068- IEEE 802.11a/n WIF15 GHz (OFDM, 48 X         5.50         67.74 7.74 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Y         4.87         67.10         16.85         100.0           2         2.481         66.941         16.64         100.0           10063-         EEE 802.11a/h WiFi 5 GHz (OFDM, 9         X         4.90         67.06         16.81         0.72         100.0         ± 9.6 %           CAB         Mbps)         Y         4.91         67.26         16.84         100.0         ± 9.6 %           CAB         Mbps)         Y         4.91         67.26         16.89         100.0         ± 9.6 %           CAB         Mbps)         Y         5.23         67.59         17.26         100.0         ± 9.6 %           CAB         Mbps)         Y         5.23         67.69         17.25         1.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.16         67.33         17.04         100.0         ± 9.6 %           CAB         Mbps)         Y         5.16         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Mbps)         Y         5.11         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Mbps)         Y         <							0.49		±9.6 %
ID063- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)         X         4.90         67.06         16.81         0.72         100.0         ± 9.6 % 100.0           CAB         Mbps)         Y         4.91         67.26         16.99         100.0         ± 9.6 %           CAB         Mbps)         Y         4.95         67.00         17.08         0.86         100.0         ± 9.6 %           CAB         Mbps)         Y         5.23         67.69         17.25         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.44         100.0         ± 9.6 %           10066-         IEEE 802.11a/h WiF15 GHz (OFDM, 18         X         5.12         67.40         17.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.19         67.76         17.76         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.61         67.76         17.76 <td></td> <td></td> <td>Y</td> <td>4.87</td> <td>67.10</td> <td>16.85</td> <td></td> <td>100.0</td> <td></td>			Y	4.87	67.10	16.85		100.0	
ID063         IEEE 802.11a/h WiFi 5 GHz (OFDM, 9         X         4.90         67.06         16.81         0.72         100.0         ± 9.6 %           CAB         Mbps)         Y         4.91         67.26         16.89         100.0           CAB         Mbps)         Y         4.95         67.06         16.78         100.0           10064         IEEE 802.11a/h WiFi 5 GHz (OFDM, 12         X         5.22         67.40         17.04         100.0           10065-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 18         X         5.12         67.42         17.25         1.21         100.0           10066-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 24         X         5.13         67.61         17.64         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.16         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %			Z	4.81	66.91	16.64		100.0	
IEEE 802.11a/h WiFi 5 GHz (OFDM, 12         X         5.22         67.06         16.78         100.0           CAB         Mbps)         Y         5.23         67.40         17.08         0.86         100.0           10065- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 18         X         5.12         67.49         17.25         1.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.41         17.25         1.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.40         17.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.18         67.52         17.44         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.95         2.04         100.0         ± 9.6 %           CAB         Mbps)         Y         5.61         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.53         100.0         ± 9			X	4.90	67.06	16.81	0.72	100.0	± 9.6 %
ID064.         IEEE 802.11a/h WIFI 5 GHz (OFDM, 12         X         5.22         67.40         17.08         0.86         100.0         ± 9.6 %           CAB         Mbps)         Y         5.23         67.50         17.25         100.0           10065-         IEEE 802.11a/h WIFI 5 GHz (OFDM, 18         X         5.12         67.42         17.25         1.21         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.43         100.0         ± 9.6 %           CAB         Mbps)         Y         5.13         67.61         17.43         100.0         ± 9.6 %           CAB         Mbps)         Y         5.18         67.60         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.11         67.55         17.44         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.96         18.15         100.0         ± 9.8 %           CAB         Mbps)         Y         5.61         68.03         18.28         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.50         2.67         100									
Y         5.23         67.59         17.25         100.0           10065- CAB         IEEE 802.11a/n WIFI 5 GHz (OFDM, 18         X         5.16         67.38         17.04         100.0           10066- CAB         Y         5.13         67.61         17.43         100.0         ± 9.6 %           10066- CAB         Y         5.13         67.61         17.43         100.0         ± 9.6 %           10066- CAB         IEEE 802.11a/n WIFI 5 GHz (OFDM, 24         X         5.18         67.55         17.44         1.46         100.0         ± 9.6 %           10067- IEEE 802.11a/n WIFI 5 GHz (OFDM, 36         X         5.50         67.74         17.95         2.04         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.85         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)	10064- CAB						0.86		± 9.6 %
Z         5.16         67.38         17.04         100.0           CAB         WiFi 5 GHz (OFDM, 18         X         5.12         67.42         17.25         1.21         100.0         ± 9.6 %           CAB         Y         5.13         67.61         17.43         100.0         ± 9.6 %           CAB         Mps)         Y         5.13         67.61         17.43         100.0         ± 9.6 %           CAB         Mps)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mps)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mps)         Y         5.64         68.06         18.32         2.55         100.0         ± 9.6 %           CAB         Mps)         Y         5.64         68.03         18.28         100.0         ± 9.6 %           CAB         Mps)         Y         5.71 <td< td=""><td>0/10</td><td></td><td>Y</td><td>5.23</td><td>67.59</td><td>17.25</td><td></td><td>100.0</td><td></td></td<>	0/10		Y	5.23	67.59	17.25		100.0	
10065         IEEE 802.11a/n WiFi 5 GHz (OFDM, 18         X         5.12         67.42         17.25         1.21         100.0         ± 9.6 %           CAB         Y         5.13         67.61         17.43         100.0           10066-         IEEE 802.11a/n WiFi 5 GHz (OFDM, 24         X         5.18         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Mbps)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.19         67.76         17.46         1.00.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.44         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.28         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         66.29         18.74         100.0         ± 9.6 %									
Z         5.06         67.40         17.21         100.0           10066- CAB         IEEE 802.11a/h WIFI 5 GHz (OFDM, 24         X         5.18         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Mpp)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mpp)         Y         5.19         67.76         17.44         100.0         ± 9.6 %           CAB         Mpp)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mpps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mpps)         Y         5.64         68.30         18.32         2.55         100.0         ± 9.6 %           CAB         Mpps)         Y         5.64         68.03         18.28         100.0         ± 9.6 %           CAB         Mpps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mpps)         Y         5.29         67.38         17.78         1.99         100.0         ± 9.6 %           CAB	10065- CAB		X	5.12	67.42	17.25	1.21	100.0	± 9.6 %
10066- CAB         IEEE 802.11a/n WiFi 5 GHz (OFDM, 24 Mbps)         X         5.18         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Y         5.19         67.76         17.66         100.0           00667- CAB         IEEE 802.11a/n WiFI 5 GHz (OFDM, 36         X         5.50         67.74         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.74         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.32         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 % <td></td> <td></td> <td>Y</td> <td></td> <td>67.61</td> <td></td> <td></td> <td></td> <td></td>			Y		67.61				
10066- CAB         IEEE 802.11a/n WiFi 5 GHz (OFDM, 24 Mbps)         X         5.18         67.55         17.48         1.46         100.0         ± 9.6 %           CAB         Mbps)         Y         5.19         67.76         17.66         100.0         ± 9.6 %           CAB         Mbps)         Y         5.11         67.52         17.44         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.74         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.76         17.93         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.00         18.32         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.50         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)         Y         5.22         67.59         17.76         1									
Z         5.11         67.52         17.44         100.0           10067- CAB         Mbps)         Y         5.50         67.74         17.95         2.04         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mbps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         Mbps)         Y         5.61         68.06         18.32         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.28         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         (DSS:/OFDM, 9 Mbps)         Y         5.23         67.93         17.78         1.99         100.0         ± 9.6 %           CAB         (DSS:/OFDM, 12 Mbps)         Y         5.23         67.91         18.09         2.30         100.0         ± 9.6 %	10066- CAB		X				1.46		± 9.6 %
10067- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)         X         5.50         67.74         17.95         2.04         100.0         ± 9.6 % ± 9.6 %           CAB         Mbps)         Y         5.51         67.96         18.15         100.0         ± 9.6 %           CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 48         X         5.63         68.06         18.32         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.06         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.28         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.28         67.38         17.76         1.99         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 MBps) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
CAB         Mbps)         Y         5.51         67.96         18.15         100.0           10068- CAB         IEEE 802.11a/n WiF1 5 GHz (OFDM, 48         X         5.63         68.06         18.32         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.30         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.76         68.03         18.50         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           CAB         MDSS         Y         5.28         67.38         17.78         1.99         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.23         67.40         17.76         100.0         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46									
Z         5.44         67.76         17.93         100.0           10068- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 48         X         5.63         68.06         18.52         2.55         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.53         100.0         ± 9.6 %           CAB         Mbps)         Y         5.64         68.03         18.28         100.0         ± 9.6 %           CAB         Mbps)         Y         5.74         68.03         18.26         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.03         18.48         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.72         67.38         17.76         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.46         68.24         18.51         2.83         100.0	10067- CAB						2.04		± 9.6 %
10068- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)         X         5.63         68.06         18.32         2.55         100.0         ± 9.6 %           10069- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)         Y         5.64         68.03         18.53         100.0         100.0           10069- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)         X         5.71         68.03         18.60         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         100.0           10074- CAB         IEEE 802.11g WiFi 2.4 GHz         X         5.28         67.59         17.77         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.23         67.40         17.76         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46         68.24         18.50         100.0         100.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
CAB         Mbps)         Y         5.64         68.30         18.53         100.0           10069- CAB         IEEE 802.11a/h WIFI 5 GHz (OFDM, 54         X         5.71         68.03         18.28         100.0           10069- CAB         IEEE 802.11a/h WIFI 5 GHz (OFDM, 54         X         5.71         68.03         18.74         100.0           10071- CAB         IEEE 802.11g WIFI 2.4 GHz         X         5.28         67.38         17.78         1.99         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.29         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.50         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46         68.24         18.74         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         <									
Z         5.56         68.03         18.28         100.0           10069- CAB         IEEE 802.11a/h WIFI 5 GHz (OFDM, 54         X         5.71         68.03         18.50         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.03         18.74         100.0         ± 9.6 %           CAB         Y         5.72         68.29         18.74         100.0         ± 9.6 %           10071-         IEEE 802.11g WIFI 2.4 GHz         X         5.28         67.38         17.77         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.50         17.97         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.24         18.50         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.51         18.74         10	10068- CAB	•					2.55		±9.6 %
10069- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)         X         5.71         68.03         18.50         2.67         100.0         ± 9.6 %           CAB         Mbps)         Y         5.72         68.29         18.74         100.0         ± 9.6 %           10071- (DSSS/OFDM, 9 Mbps)         Z         5.64         68.03         18.48         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.77         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0         ± 9.6 %           10072- (DSSS/OFDM, 12 WiFi 2.4 GHz         X         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.30         18.76         3.30         100.0         ± 9.6 %           CAB         (DSSS/OF									
CAB         Mbps)         Y         5.72         68.29         18.74         100.0           10071- CAB         IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 9 Mbps)         X         5.28         67.38         17.78         1.99         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.29         67.59         17.97         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.48         68.51         18.74         100.0         ± 9.6 %           CAB         (DSSS/									
Z         5.64         68.03         18.48         100.0           10071- (DSS/OFDM, 9 Mbps)         Y         5.28         67.38         17.78         1.99         100.0         ± 9.6 %           2         5.29         67.59         17.77         100.0         ± 9.6 %           2         5.23         67.40         17.76         100.0         ± 9.6 %           2         5.23         67.40         17.76         100.0         ± 9.6 %           2         5.23         67.40         17.76         100.0         ± 9.6 %           2         5.23         67.91         18.09         2.30         100.0         ± 9.6 %           2         5.28         67.91         18.07         100.0         ± 9.6 %           2         5.28         67.91         18.07         100.0         ± 9.6 %           2         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           2         5.40         68.51         18.74         100.0         ± 9.6 %           2         5.40         68.30         18.76         3.30         100.0         ± 9.6 %           2         5.44         68.31         18.74	10069- CAB						2.67		± 9.6 %
10071- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)         X         5.28         67.38         17.78         1.99         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0         100.0           CAB         (DSSS/OFDM, 12 Mbps)         Z         5.23         67.40         17.76         100.0         100.0           10072- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)         X         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.51         18.74         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.54         68.30         18.76         3.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.51         68.58         19.00         100.0         ±			-						
CAB         (DSSS/OFDM, 9 Mbps)         Y         5.29         67.59         17.97         100.0           10072-         IEEE 802.11g WiFi 2.4 GHz         Z         5.23         67.40         17.76         100.0           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.07         100.0         100.0           10073-         IEEE 802.11g WiFi 2.4 GHz         X         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.51         18.74         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0							4.00		100%
Z         5.23         67.40         17.76         100.0           10072- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)         X         5.33         67.91         18.09         2.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0           10073- CAB         IEEE 802.11g WiFi 2.4 GHz         X         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.51         18.74         100.0           10074- CAB         IEEE 802.11g WiFi 2.4 GHz         X         5.49         68.30         18.76         3.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.63         68.74         19.25         3.82         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.66							1.99		±9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
CAB         (DSSS/OFDM, 12 Mbps)         Y         5.34         68.14         18.30         100.0           10073-         IEEE 802.11g WiFi 2.4 GHz         X         5.28         67.91         18.07         100.0           10073-         IEEE 802.11g WiFi 2.4 GHz         X         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 18 Mbps)         Y         5.48         68.51         18.74         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 GHz         X         5.49         68.30         18.76         3.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.66         69.06         19.51         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 48 Mbps)         Y         5.66 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td><td></td><td>10.0%</td></td<>							0.00		10.0%
Z         5.28         67.91         18.07         100.0           10073- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)         X         5.46         68.24         18.51         2.83         100.0         ± 9.6 %           10074- CAB         V         5.48         68.51         18.74         100.0         ± 9.6 %           10074- CAB         V         5.48         68.51         18.74         100.0         ± 9.6 %           10074- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)         X         5.49         68.30         18.76         3.30         100.0         ± 9.6 %           10075- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         Y         5.51         68.58         19.00         100.0           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         X         5.66         69.06         19.51         90.0           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.64         68.56         19.38         4.15         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 54 Mbps)         Y         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 54 Mbps)				1			2.30		± 9.0 %
10073- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)       X       5.46       68.24       18.51       2.83       100.0       ± 9.6 %         10074- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)       Y       5.48       68.51       18.74       100.0         10074- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)       X       5.49       68.30       18.76       3.30       100.0       ± 9.6 %         10075- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)       Y       5.51       68.58       19.00       100.0         10075- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)       X       5.63       68.74       19.25       3.82       90.0       ± 9.6 %         10076- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)       X       5.64       68.56       19.38       4.15       90.0       ± 9.6 %         10076- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)       X       5.64       68.56       19.38       4.15       90.0       ± 9.6 %         10077- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)       Y       5.68       68.64       19.49       4.30       90.0       ± 9.6 %         CAB       (DSSS/OFDM, 54 Mbps)       Y       5.71       68.99				*					
Y       5.48       68.51       18.74       100.0         10074- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)       X       5.49       68.30       18.76       3.30       100.0       ± 9.6 %         10075- CAB       (DSSS/OFDM, 34 Mbps)       Y       5.51       68.58       19.00       100.0       ± 9.6 %         10075- CAB       (DSSS/OFDM, 36 Mbps)       Y       5.51       68.74       19.25       3.82       90.0       ± 9.6 %         10075- CAB       (DSSS/OFDM, 36 Mbps)       Y       5.66       69.06       19.51       90.0       ± 9.6 %         10076- CAB       (DSSS/OFDM, 48 Mbps)       Y       5.66       69.06       19.51       90.0       ± 9.6 %         10076- CAB       (DSSS/OFDM, 48 Mbps)       Y       5.68       68.89       19.38       4.15       90.0       ± 9.6 %         10076- CAB       (DSSS/OFDM, 48 Mbps)       Y       5.68       68.89       19.66       90.0       ± 9.6 %         10077- CAB       (DSSS/OFDM, 54 Mbps)       Y       5.68       68.64       19.49       4.30       90.0       ± 9.6 %         CAB       (DSSS/OFDM, 54 Mbps)       Y       5.71       68.99       19.77       90.0       ± 9.6 % <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.83</td> <td></td> <td>± 9.6 %</td>							2.83		± 9.6 %
Z         5.40         68.25         18.50         100.0           10074- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)         X         5.49         68.30         18.76         3.30         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           CAB         (DSSS/OFDM, 24 Mbps)         Y         5.51         68.58         19.00         100.0         ± 9.6 %           10075- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         X         5.63         68.74         19.25         3.82         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.66         69.06         19.51         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 36 Mbps)         Y         5.66         69.06         19.51         90.0         ± 9.6 %           10076- CAB         IEEE 802.11g WiFi 2.4 GHz         X         5.64         68.56         19.38         4.15         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 48 Mbps)         Y         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           CAB         (DSSS/OF									
10074- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)       X       5.49       68.30       18.76       3.30       100.0       ± 9.6 %         CAB       (DSSS/OFDM, 24 Mbps)       Y       5.51       68.58       19.00       100.0       100.0         Image: CAB       Image: CAB       Y       5.51       68.58       19.00       100.0       100.0         Image: CAB       Image: CAB       Y       5.61       68.31       18.74       100.0       100.0         10075- CAB       IEEE 802.11g WiFi 2.4 GHz       X       5.63       68.74       19.25       3.82       90.0       ± 9.6 %         10076- CAB       (DSSS/OFDM, 36 Mbps)       Y       5.66       69.06       19.51       90.0       100.0         10076- CAB       IEEE 802.11g WiFi 2.4 GHz       X       5.64       68.56       19.38       4.15       90.0       ± 9.6 %         CAB       (DSSS/OFDM, 48 Mbps)       Y       5.68       68.89       19.66       90.0       19.66       90.0       19.6 %         IO077- CAB       (DSSS/OFDM, 54 Mbps)       Y       5.68       68.64       19.49       4.30       90.0       ± 9.6 %         IO077- CAB       (DSSS/OFDM, 54 Mbps)       Y			Z	5.40	68.25				
Z         5.44         68.31         18.74         100.0           10075- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         X         5.63         68.74         19.25         3.82         90.0         ± 9.6 %           V         5.66         69.06         19.51         90.0         100.0           IO076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.64         68.56         19.38         4.15         90.0         ± 9.6 %           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.64         68.56         19.38         4.15         90.0         ± 9.6 %           10077- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)         Y         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           10077- CAB         (DSSS/OFDM, 54 Mbps)         Y         5.71         68.99         19.77         90.0         ± 9.6 %			X	5.49			3.30		± 9.6 %
10075- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)       X       5.63       68.74       19.25       3.82       90.0       ± 9.6 %         V       5.66       69.06       19.51       90.0       100.0         V       5.66       69.06       19.51       90.0       100.0         10076- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)       X       5.64       68.56       19.38       4.15       90.0       ± 9.6 %         10076- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)       Y       5.68       68.89       19.66       90.0       10.0         10077- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)       Y       5.68       68.64       19.49       4.30       90.0       ± 9.6 %         Y       5.71       68.99       19.77       90.0       ± 9.6 %									-l
CAB       (DSSS/OFDM, 36 Mbps)       Y       5.66       69.06       19.51       90.0         10076-       IEEE 802.11g WiFi 2.4 GHz       X       5.64       68.56       19.38       4.15       90.0         10076-       IEEE 802.11g WiFi 2.4 GHz       X       5.64       68.56       19.38       4.15       90.0         10077-       IEEE 802.11g WiFi 2.4 GHz       X       5.68       68.89       19.66       90.0         10077-       IEEE 802.11g WiFi 2.4 GHz       X       5.68       68.64       19.49       4.30       90.0         10077-       IEEE 802.11g WiFi 2.4 GHz       X       5.68       68.64       19.49       4.30       90.0       ± 9.6 %         CAB       (DSSS/OFDM, 54 Mbps)       Y       5.71       68.99       19.77       90.0       ± 9.6 %							<u> </u>		
Z         5.57         68.71         19.21         90.0           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.64         68.56         19.38         4.15         90.0         ± 9.6 %           V         5.68         68.89         19.66         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±         90.0         ±<							3.82		± 9.6 %
10076- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)       X       5.64       68.56       19.38       4.15       90.0       ± 9.6 %         Y       5.68       68.89       19.66       90.0       ±       ±       10070         IEEE 802.11g WiFi 2.4 GHz CAB       Z       5.60       68.57       19.36       90.0       ±       90.0         10077- CAB       IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)       X       5.68       68.64       19.49       4.30       90.0       ±       9.6 %         Y       5.71       68.99       19.77       90.0       ±       90.0       ±									
CAB         (DSSS/OFDM, 48 Mbps)         Y         5.68         68.89         19.66         90.0           Image: CAB         Z         5.60         68.57         19.36         90.0         10077-           IEEE 802.11g WiFi 2.4 GHz CAB         X         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           CAB         (DSSS/OFDM, 54 Mbps)         Y         5.71         68.99         19.77         90.0									1000
Z         5.60         68.57         19.36         90.0           10077- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)         X         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           Y         5.71         68.99         19.77         90.0							4.15		± 9.6 %
10077- CAB         IEEE 802.11g WiFi 2.4 GHz         X         5.68         68.64         19.49         4.30         90.0         ± 9.6 %           V         5.71         68.99         19.77         90.0         19.6%							1		ļ
CAB         (DSSS/OFDM, 54 Mbps)         Y         5.71         68.99         19.77         90.0							1.00		
							4.30		± 9.6 %
			Y Z	5.71 5.64	68.99 68.66	19.77	<u> </u>	90.0 90.0	

#### ES3DV3- SN:3213

10081- CAB	CDMA2000 (1xRTT, RC3)	X	0.88	65.55	12.70	0.00	150.0	± 9.6 %
		Y	1.01	67.94	14.05		150.0	
		Ż	0.82	64.98	12.07	· · · ·	150.0	·
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.05	63.91	8.77	4.77	80.0	± 9.6 %
		Y	2.06	64.02	8.81		80.0	<u> </u>
10000		Z	1.95	63.58	8.48		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.26	30.80	6.56	60.0	± 9.6 %
		Y	100.00	119.04	30.70		60.0	
10097-	UMTS-FDD (HSDPA)	Z	100.00	118.90	30.53		60.0	
CAB		X	1.83	67.01	15.38	0.00	150.0	± 9.6 %
		Y Z	1.91	68.15	16.11		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	$\frac{z}{x}$	1.80	66.92	15.21		150.0	ļ
CAB		Y	1.79	66.97	15.34	0.00	150.0	± 9.6 %
			1.88	68.14	16.10		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z	1.76	66.87	15.18		150.0	
DAC		Y	20.23	105.10	36.53	9.56	60.0	± 9.6 %
		z -	28.70	114.68	39.91		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	X	20.06 3.16	105.38	36.67		60.0	
CAC	MHz, QPSK)	Y		69.99	16.45	0.00	150.0	±9.6 %
			3.31	71.03	17.06		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	ZX	3.09	69.73	16.33		150.0	
CAC	MHz, 16-QAM)		3.32	67.51	15.87	0.00	150.0	± 9.6 %
		Y	3.38	68.00	16.23		150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	Z X	3.27 3.43	67.36 67.46	15.78 15.96	0.00	150.0 150.0	± 9.6 %
0,10		Y	0.47	07.00				<u> </u>
			3.47	67.89	16.28		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Z X	<u>3.37</u> 8.65	67.33 78.54	15.88 21.48	3.98	150.0 65.0	±9.6 %
		Y	8.85	79.12	21.77		65.0	
		Ż	8.48	78.45	21.46	· · · · · · · · · · · · · · · · · · ·	65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.46	76.91	21.40	3.98	65.0	±9.6 %
		Y	8.66	77.60	22.06		65.0	
<u> </u>		Z	8.34	76.89	21.66		65.0	· · · ·
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.58	74.70	20.99	3.98	65.0	± 9.6 %
<u> </u>		Y	7.79	75.45	21.40		65.0	
40400		Z	7.31	74.25	20.79		65.0	• "
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.79	69.24	16.28	0.00	150.0	± 9.6 %
		Y	2.91	70.28	16.91		150.0	
10100		Z	2.71	69.00	16.16		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.98	67.28	15.76	0.00	150.0	±9.6 %
		Y	3.03	67.83	16.15		150.0	
10110		Z	2.92	67.15	15.65		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.28	68.31	15.91	0.00	150.0	±9.6 %
		Ý	2.39	69.47	16.63		150.0	
40444		Z	2.21	68.09	15.75		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.66	67.75	15.94	0.00	150.0	± 9.6 %
		Y	2.72	68.40	16.37	·	150.0	
		Z						

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10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.11	67.26	15.82	0.00	150.0	± 9.6 %
		Y	3.15	67.75	16.17		150.0	
		Z	3.05	67.15	15.72		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.82	67.88	16.07	0.00	150.0	± 9.6 %
		Y	2.87	68.46	16.46		150.0	
		Z	2.76	67.81	15.94		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	Х	5.24	67.28	16.46	0.00	150.0	±9.6 %
		Y	5.25	67.46	16.63		150.0	
		Z	5.20	67.29	16.46		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.61	67.64	16.65	0.00	150.0	± 9.6 %
		Y	5.61	67.79	16.81		150.0	
		Z	5.52	67.52	16.58		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	Х	5.36	67.55	16.52	0.00	150.0	± 9.6 %
		Y	5.37	67.74	16.69		150.0	
		Z	5.32	67.53	16.51		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.22	67.23	16.45	0.00	150.0	± 9.6 %
		Y	5.23	67.39	16.61		150.0	
		Z	5.17	67.16	16.41		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.69	67.85	16.77	0.00	150.0	± 9.6 %
		Y	5.70	68.02	16.93		150.0	
		Z	5.63	67.79	16.73		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.34	67.49	16.51	0.00	150.0	± 9.6 %
••••		Y	5.35	67.67	16.67		150.0	
		Z	5.29	67.47	16.49		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.47	67.47	15.89	0.00	150.0	± 9.6 %
		Y	3.51	67.91	16.21		150.0	
		Z	3.41	67.34	15.80	<b>i</b>	150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.59	67.54	16.05	0.00	150.0	± 9.6 %
		Y	3.63	67.94	16.35		150.0	
		Z	3.53	67.43	15.97		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.05	68.16	15.60	0.00	150.0	± 9.6 %
		Y	2.17	69.48	16.39		150.0	
		Z	1.97	67.92	15.36		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.51	68.28	15.68	0.00	150.0	± 9.6 %
		Y	2.59	69.11	16.17		150.0	
		Z	2.43	68.15	15.43		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.35	66.54	14.37	0.00	150.0	± 9.6 %
		Y	2.42	67.28	14.84		150.0	
		Z	2.27	66.32	14.07		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.37	65.72	12.66	0.00	150.0	± 9.6 %
		Y	1.46	66.99	13.37		150.0	
		Z	1.25	64.89	11.82		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.11	71.69	15.06	0.00	150.0	± 9.6 %
		Y	3.87	74.93	16.48		150.0	
		Z	2.20	67.57	12.72		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.99	75.14	16.65	0.00	150.0	± 9.6 %
0,0		Y	5.26	79.21	18.27		150.0	
		Ż	2.59	69.69	13.85	-1	150.0	1

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10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.99	67.34	15.80	0.00	150.0	± 9.6 %
┝───		Y	3.04	67.88	16.19	<u> </u>	150.0	+
		Z	2.93	67.20	15.70	<u> </u>	150.0	
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.11	67.30	15.85	0.00	150.0	± 9.6 %
		Y	3.16	67.79	16.21		150.0	
40454		Z	3.05	67.19	15.76		150.0	
10151- CAC		X	9.14	80.78	22.44	3.98	65.0	± 9.6 %
		Y	9.49	81.66	22.85		65.0	
10152-		Z	9.14	81.08	22.55		65.0	1
CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.08	77.12	21.52	3.98	65.0	± 9.6 %
		Y	8.33	77.95	21.96		65.0	
10153-		Z	7.95	77.09	21.46		65.0	
CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.46	77.89	22.17	3.98	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	8.68	78.63	22.56		65.0	
10154-		Z	8.36	77.94	22.15		65.0	
CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.33	68.67	16.15	0.00	150.0	± 9.6 %
		Y	2.44	69.83	16.86		150.0	·
10155-		Z	2.25	68.43	15.98		150.0	
CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.66	67.76	15.95	0.00	150.0	±9.6%
		Y	2.72	68.41	16.38		150.0	
10156-	LTE EDD (DO ED) LA ERA( DD E ANI	Z	2.60	67.68	15.82		150.0	
CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.90	68.21	15.44	0.00	150.0	± 9.6 %
		Y	2.03	69.70	16.30		150.0	
10457		Z	1.81	67.89	15.12		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.18	67.00	14.41	0.00	150.0	± 9.6 %
		Ý	2.26	67.93	14.96		150.0	·
10158-		Z	2.09	66.73	14.04		150.0	
CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.82	67.92	16.11	0.00	150.0	± 9.6 %
······		Y	2.87	68.51	16.50		150.0	
40450		Z	2.76	67.86	15.98		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.28	67.39	14.67	0.00	150.0	± 9.6 %
		Y	2.36	68.28	15.19		150.0	
40400		Z	2.18	67.11	14.29		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.82	68.45	16.16	0.00	150.0	± 9.6 %
		Y	2.91	69.30	16.70		150.0	
10101		Z	2.76	68.35	16.07		150.0	<b></b>
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.01	67.20	15.78	0.00	150.0	± 9.6 %
		Y	3.05	67.71	16.14		150.0	
10160		Z	2.95	67.10	15.68		150.0	
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	3.11	67.31	15.88	0.00	150.0	±9.6 %
		Y	3.16	67.80	16.23		150.0	
10100		Ζ	3.06	67.24	15.78	_	150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	3.96	70.63	19.76	3.01	150.0	± 9.6 %
		Y	4.08	71.58	20.41		150.0	
10467		Z	3.69	69.63	19.19		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.16	74.36	20.54	3.01	150.0	± 9.6 %
		Y	5.47	75.00	04.44			
		z	4.54	75.92	21.41		150.0	

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10168-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	5.71	76.55	21.79	3.01	150.0	± 9.6 %
CAD	64-QAM)	<b> </b>					1.0.0	
		Y	6.04	78.08	22.60		150.0	
10100		Z	4.98	74.53	20.87		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.56	71.66	20.23	3.01	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	3.72	73.10	21.16		150.0	
		Z ]	3.12	69.36	19.09		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.50	79.49	23.11	3.01	150.0	± 9.6 %
		Y	6.14	82.25	24.43		150.0	
		Z	4.23	74.96	21.26		150.0	
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.39	74.63	20.21	3.01	150.0	± 9.6 %
		Y	4.87	77.16	21.52		150.0	
		Z	3.55	71.26	18.74		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	36.90	115.61	35.71	6.02	65.0	± 9.6 %
		Y	89.16	134.58	40.97		65.0	
		Z	21.04	105.02	32.65		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	54.93	117.26	34.23	6.02	65.0	± 9.6 %
		Y	100.00	128.92	37.35		65.0	
		Z	30.85	107.44	31.57		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	39.60	109.76	31.68	6.02	65.0	± 9.6 %
		Y	70.95	120.74	34.73		65.0	
		Z	23.48	101.22	29.25		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.51	71.32	19.98	3.01	150.0	±9.6 %
		Y	3.68	72.77	20.92		150.0	
		Z	3.08	69.09	18.87		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.51	79.52	23.12	3.01	150.0	± 9.6 %
0/10		Y	6.15	82.28	24.44		150.0	
		Z	4.23	74.98	21.27		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.54	71.49	20.08	3.01	150.0	± 9.6 %
		Y	3.71	72.93	21.01	1	150.0	
		Ż	3.11	69.22	18.95		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.43	79.21	22.98	3.01	150.0	± 9.6 %
0,10		Y	6.06	81.97	24.30		150.0	
		Z	4.19	74.78	21.16		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.90	76.90	21.51	3.01	150.0	± 9.6 %
		Y	5.47	79.59	22.84		150.0	
		Ż	3.86	73.02	19.88	T	150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	4.38	74.54	20.15	3.01	150.0	± 9.6 %
		Y	4.86	77.07	21.46	T	150.0	
		Z	3.54	71.20	18.69		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.54	71.47	20.07	3.01	150.0	± 9.6 %
<u> </u>		Y	3.70	72.91	21.00		150.0	
		Z	3.10	69.21	18.95		150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.42	79.19	22.97	3.01	150.0	± 9.6 %
		Y	6.05	81.94	24.29		150.0	
		Z	4.19	74.76	21.15		150.0	
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.37	74.51	20.14	3.01	150.0	± 9.6 %
	or so wy	Υ	4.85	77.04	21.45		150.0	

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10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	3.55	71.52	20.09	3.01	150.0	± 9.6 %
CAD	QPSK)	+		<u> </u>				- 0.0 /
		Y Z	<u>3.72</u> 3.11	72.96	21.02	<u> </u>	150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.45	79.27	<u>18.97</u> 23.00	3.01	150.0 150.0	± 9.6 %
		Y	6.09	82.03	24.33	<u> </u>	150.0	
_		z	4.20	74.82	24.33	·	150.0	+
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.39	74.59	20.17	3.01	150.0 150.0	± 9.6 %
		Y	4.88	77.13	21.49	<u> </u>	150.0	
10187-		Z	3.55	71.24	18.71	· · · · · · · · · · · · · · · · · · ·	150.0	1
CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.56	71.57	20.15	3.01	150.0	± 9.6 %
· · · · ·		Y	3.73	73.01	21.08		150.0	
10188-	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z	3.12	69.30	19.03		150.0	
CAD	16-QAM)	X	5.67	80.08	23.42	3.01	150.0	± 9.6 %
		Y	6.33	82.86	24.73		150.0	
10189-	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X	4.33	75.42	21.53		150.0	ļ
AAD	64-QAM)	Y	4.51	75.09	20.47	3.01	150.0	± 9.6 %
		Z	5.01 3.62	77.67	21.79	<u> </u>	150.0	ļ
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.64	66.65	18.97 16.17	0.00	150.0 150.0	± 9.6 %
		Y	4.65	66.84	16.05		450.0	
		z	4.59	66.64	16.35 16.13		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	x	4.82	67.00	16.30	0.00	150.0 150.0	± 9.6 %
		Y	4.83	67.19	16.48		150.0	<u> </u>
······		Z	4.76	66.96	16.26		150.0	·
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.87	67.02	16.31	0.00	150.0	± 9.6 %
		Y	4.87	67.22	16.49		150.0	·
10400		Ζ	4.81	67.00	16.28		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	х	4.65	66.74	16.20	0.00	150.0	± 9.6 %
<u> </u>		Y	4.66	66.93	16.38		150.0	
10197-		Z	4.59	66.71	16.15		150.0	
CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.84	67.02	16.31	0.00	150.0	± 9.6 %
		Y	4.85	67.22	16.49		150.0	
10198-	IEEE 802.11n (HT Mixed, 65 Mbps, 64-	Z X	<u>4.78</u> 4.87	<u>66.99</u> 67.04	16.27 16.32	0.00	150.0	
CAB	QAM)	Y	4.88				150.0	± 9.6 %
		z	4.81	67.24	16.50		150.0	
0219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.60	67.01 66.74	<u>16.29</u> 16.16	0.00	150.0 150.0	± 9.6 %
		Y	4.61	66.94	16.34		150.0	
		Z	4.54	66.71	16.11		150.0	
0220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	х	4.84	67.00	16.31	0.00	150.0	± 9.6 %
<u> </u>		Y	4.84	67.20	16.48		150.0	
0004		Ζ	4.77	66.96	16.26		150.0	· ·
0221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.88	66.97	16.31	0.00	150.0	±9.6 %
		Y	4.89	67.16	16.49		150.0	
0222		Z	4.82	66.95	16.28		150.0	
0222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	x	5.20	67.24	16.45	0.00	150.0	± 9.6 %
		Y	5.21	67.41	16.61		150.0	
		Z	5.15	67.17	16.40		150.0	

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10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.54	67.51	16.61	0.00	150.0	± 9.6 %
		Y	5.54	67.65	16.76		150.0	
		Z	5.46	67.41	16.55		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	×	5.24	67.33	16.42	0.00	150.0	± 9.6 %
		Y	5.25	67.50	16.58		150.0	
		Z	5.19	67.27	16.38		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.89	66.01	15.34	0.00	150.0	± 9.6 %
		Y	2.91	66.41	15.64		150.0	
		Z	2.83	65.96	15.20		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	×	60.00	119.05	34.79	6.02	65.0	± 9.6 %
		Y	100.00	129.10	37.47		65.0	
		Z	33.08	108.86	32.05		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	44.36	111.89	32.33	6.02	65.0	± 9.6 %
		Y	77.77	122.52	35.25		65.0	
		Z	27.85	104.26	30.19		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	40.71	118.07	36.50	6.02	65.0	± 9.6 %
		Y	92.59	135.95	41.44		65.0	
		Z	26.22	109.78	34.13		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	54.96	117.26	34.24	6.02	65.0	± 9.6 %
		Y	100.00	128.91	37.35		65.0	
		Z	30.93	107.47	31.58		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	41.37	110.53	31.89	6.02	65.0	± 9.6 %
		ΤY	71.92	120.98	34.79		65.0	
		Z	26.25	103.12	29.80		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	37.97	116.54	36.00	6.02	65.0	± 9.6 %
		Y	84.76	133.97	40.88		65.0	
		Z	24.71	108.49	33.69		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	54.99	117.28	34.24	6.02	65.0	± 9.6 %
		Y	100.00	128.92	37.35		65.0	
		Z	30.92	107.48	31.58		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	41.40	110.55	31.90	6.02	65.0	± 9.6 %
		Y	72.14	121.04	34.81		65.0	
		Z	26.24	103.13	29.80		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	35.49	114.97	35.47	6.02	65.0	± 9.6 %
		Y	77.34	131.82	40.23		65.0	
		Z	23.39	107.20	33.21		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	55.28	117.39	34.27	6.02	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	128.93	37.36		65.0	
		Z	31.03	107.56	31.61		65.0	1
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	41.91	110.74	31.95	6.02	65.0	± 9.6 %
		Y	73.33	121.30	34.87		65.0	
		Z	26.52	103.28	29.84		65.0	
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	38.41	116.80	36.08	6.02	65.0	± 9.6 %
		Y	86.80	134.49	41.01		65.0	
		Z	24.91	108.68	33.74	1	65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	55.05	117.31	34.25	6.02	65.0	± 9.6 %
0.10	10 50 mg	1 17	1 100.00	100.00		1	000	1
i		Y	100.00	128.93	37.35		65.0	1

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10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	41.42	110.58	31.91	6.02	65.0	± 9.6 %
		Y	72.33	121.11	34.83	<u> </u>	65.0	
		Z	26.22	103.13	29.80	<u> </u>	65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	38.25	116.72	36.05	6.02	65.0	± 9.6 %
		Y	86.28	134.37	40.98		65.0	·· · · · · · · · · · · · · · · · · · ·
		Z	24.82	108.62	33.73		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	12.92	88.42	28.30	6.98	65.0	±9.6 %
		Y	14.47	91.50	29.64	<u> </u>	65.0	+
		Ż	11.71	86.68	27.54		65.0	<u> </u>
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	12.30	87.28	27.78	6.98	65.0	± 9.6 %
		Y	13.91	90.55	29.21		65.0	1
10010		Z	10.78	84.84	26.74		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	9.57	83.58	27.27	6.98	65.0	± 9.6 %
		Y	10.70	86.76	28.80		65.0	
100.1		Z	8.63	81.57	26.33	· ······ ·	65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	9.97	81.73	21.53	3.98	65.0	± 9.6 %
		Y	10.43	82.64	21.91		65.0	1
1001-		Ζ	8.76	79.58	20.36		65.0	<u> </u>
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	9.75	81.12	21.26	3.98	65.0	± 9.6 %
		Y	10.17	81.97	21.61		65.0	† — — —
100 (0		Z	8.56	78.97	20.07		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	9.14	83.08	21.95	3.98	65.0	±9.6 %
		Y	9.72	84.22	22.38		65.0	
1001-		Ζ	8.89	82.67	21.56		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.53	77.68	20.47	3.98	65.0	± 9.6 %
		Y	7.73	78.28	20.74		65.0	<u>}</u>
		Z	7.33	77.37	20.13		65.0	<u> </u>
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	7.50	77.17	20.25	3.98	65.0	± 9.6 %
<u> </u>		Y	7.71	77.80	20.54		65.0	
		Ζ	7.27	76.81	19.89		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.17	85.08	23.35	3.98	65.0	± 9.6 %
		Y	10.94	86.52	23.90		65.0	
10070		Z	10.18	85.27	23.26		65.0	<u> </u>
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	_ X [	8.40	79.60	22.53	3.98	65.0	± 9.6 %
		Y	8.67	80.38	22.90		65.0	
0054		Ζ	8.32	79.67	22.46		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.96	77.51	21.40	3.98	65.0	±9.6%
		Y	8.23	78.35	21.83		65.0	
10050		Z	7.84	77.49	21.29		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	9.91	84.03	23.67	3.98	65.0	±9.6%
		Y	10.54	85.36	24.22		65.0	
0000		Z	9.99	84.47	23.78		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	7.87	76.54	21.30	3.98	65.0	±9.6 %
		Y	8.11	77.33	21.72		65.0	·
10054		Ζ	7.77	76.53	21.24		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.25	77.30	21.90	3.98	65.0	± 9.6 %
		Y	8.47	78.02	22.29			
		Ż	<u> </u>	10.02 1	22.23	1	65.0	

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CAC	QPSK)							
	1. I I I I I I I I I I I I I I I I I I I		0.40	04.00			05.0	
1		Y	9.18	81.32	22.95		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	Z X	8.82 8.67	80.67 79.06	22.60 19.69	3.98	65.0 65.0	± 9.6 %
		Y	9.00	79.76	19.98		65.0	
		z	7.35	76.40	18.22		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	x	8.39	78.18	19.27	3.98	65.0	± 9.6 %
		Y	8.67	78.82	19.53		65.0	
		Z	7.11	75.57	17.80		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.67	79.80	20.11	3.98	65.0	± 9.6 %
		Y	7.97	80.50	20.36		65.0	
		Z	7.13	78.64	19.35		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.87	78.36	21.19	3.98	65.0	± 9.6 %
		Y	8.11	79.04	21.50		65.0	
10000		Z	7.72	78.21	20.96	2.00	65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X Y	7.88	78.07	21.09 21.39	3.98	65.0	± 9.6 %
		Z	8.10 7.71	78.72 77.89	21.39 20.85		65.0 65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.63	83.94	20.85	3.98	65.0	± 9.6 %
		Y	10.30	85.33	23.81		65.0	
		z	9.64	84.17	23.22		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.39	79.56	22.49	3.98	65.0	± 9.6 %
0,10	10 sa ing	Y	8.66	80.34	22.86		65.0	
		Z	8.31	79.62	22.42		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.95	77.50	21.40	3.98	65.0	± 9.6 %
		Y	8.22	78.34	21.82		65.0	
		Z	7.83	77.47	21.29		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	9.83	83.88	23.59	3.98	65.0	± 9.6 %
		Y	10.46	85.22	24.15		65.0	
		Z	9.91	84.30	23.70		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.08	77.12	21.52	3.98	65.0	± 9.6 %
		Υ	8.33	77.96	21.96	·····	65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Z X	7.95 8.45	77.09 77.88	21.47 22.16	3.98	65.0 65.0	± 9.6 %
0/10		Y	8.68	78.62	22.55		65.0	
		Z	8.36	77.93	22.14		65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.12	80.75	22.43	3.98	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	9.47	81.62	22.84		65.0	
		Z	9.12	81.04	22.54		65.0	
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.54	76.63	21.68	3.98	65.0	±9.6 %
		Y	8.73	77.26	22.04	1	65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	Z X	8.44 8.47	76.63 76.21	21.67 21.58	3.98	65.0 65.0	± 9.6 %
CAC	MHz, 64-QAM)	1	0.04	70.00	04.04		05.0	
		Y	8.64	76.83	21.94		65.0	
40070		Z	8.37 8.62	76.22	21.56 21.50	3.98	65.0 65.0	± 9.6 %
10270-	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	^	0.02	10.00	21.00	0.00		- 5.0 /0
CAC		Y	8.81	78.56	21.80		65.0	

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10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.63	66.22	15.16	0.00	150.0	± 9.6 %
		Y	2.68	66.76	15.56	<u>+</u>	150.0	+
		Z	2.60	66.20	15.05	<u> </u>		
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.63	67.34	15.24	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	1.75	68.91	16.21		150.0	
		Z	1.59	67.10	15.04		150.0	·
10277- CAA	PHS (QPSK)	X	5.23	69.17	13.58	9.03	50.0	± 9.6 %
		Ý	5.23	69.14	13.54		50.0	· · · · ·
		Z	4.94	68.42	12.95		50.0	1
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	9.44	80.92	21.03	9.03	50.0	± 9.6 %
· · · · ·		Y	9.27	80.52	20.82		50.0	
40070		Z	8.80	79.60	20.21		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	9.60	81.11	21.12	9.03	50.0	± 9.6 %
		Y	9.45	80.75	20.93		50.0	
40000		Ζ	8.93	79.76	20.30		50.0	<b></b>
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.49	68.14	14.07	0.00	150.0	± 9.6 %
		Y	1.71	70.53	15.29		150.0	
10291-		Z	1.38	67.47	13.43		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	0.87	65.35	12.59	0.00	150.0	± 9.6 %
		Y	0.98	67.67	13.90		150.0	
10000		Z	0.81	64.81	11.96		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1.01	68.28	14.43	0.00	150.0	± 9.6 %
		Y	1.28	72.37	16.47		150.0	
40000		Z	0.94	67.61	13.77		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	1.31	72.09	16.62	0.00	150.0	± 9.6 %
		Y	1.86	78.07	19.28		150.0	
10295-		Z	1.24	71.48	16.00		150.0	
AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.68	86.43	25.21	9.03	50.0	± 9.6 %
		Y	12.34	87.51	25.61		50.0	
10297-		Z	12.30	87.31	25.27		50.0	
AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.80	69.32	16.34	0.00	150.0	±9.6 %
		Y	2.92	70.37	16.97		150.0	
10298-			2.72	69.08	16.22		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.65	67.43	14.29	0.00	150.0	±9.6 %
		Y	1.78	69.00	15.16		150.0	
10299-	ITE-EDD (SC EDMA EON DD O MIL	Z	1.54	66.87	13.72		150.0	
AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	3.71	73.80	16.79	0.00	150.0	±9.6 %
		Y	4.50	76.98	18.19		150.0	
10300-	TE EDD (SC EDMA CON DE CAN	Z	2.80	70.24	14.88		150.0	
AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.66	68.22	13.61	0.00	150.0	± 9.6 %
		Y	2.97	70.07	14.57		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	Z X	2.16 5.56	65.95 67.67	12.13 18.53	4.17	150.0 80.0	± 9.6 %
		Y	5.78	60 70	10.40		0.2.5	
		Z		68.72	19.18	. <u> </u>	80.0	
10302-	IEEE 802.16e WIMAX (29:18, 5ms,	X	5.51	67.68	18.44	4.00	80.0	
	10MHz, QPSK, PUSC, 3 CTRL symbols)		6.08	68.43	19.36	4.96	80.0	± 9.6 %
		Y	6.31	69.64	20.14		80.0	
		Z	6.00	68.40	19.26		80.0	

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Y         6,17         69,77         20,23         80.0           10304         IEEE 802,169 WIMAX (20:16, 5ms, AAA         X         5.57         67.76         18.57         4.17         80.0         ± 9.6 %           10304         IGMH-z, 64QAM, PUSC)         Y         5.77         68.85         19.27         80.0         1         9.6 %           10305         IEEE 602,166 WIMAX (31:15, 10ms, AAA         Y         7.842         24.99         6.02         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 15 symbols)         Y         9.80         85.05         27.90         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 18 symbols)         Y         6.78         73.45         22.69         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 18 symbols)         Y         6.63         74.74         22.75         50.0         ± 9.6 %           AAA         10MHz, 160AM, PUSC, 18 symbols)         Y         6.92         71.39         21.28         6.02         50.0         ± 9.6 %           AAA         10MHz, 160AM, PUSC, 18 symbols)         Y         7.04         74.34         22.30         60.0         ± 9.6 %           AAA         10MHz, 160AM, AWZ (29:18,	10303-	IEEE 802.16e WIMAX (31:15, 5ms,	X	5.91	68.44	19.38	4.96	80.0	± 9.6 %
Z         5.83         68.37         19.25         80.0           1004-1         IEEE 802.166 WiMAX (20:18, 5ms, X         5.57         67.76         18.57         4.17         80.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC)         Y         5.77         68.85         19.27         68.00         4.00.0           10030-         IEEE 602.166 WiMAX (31:15, 10ms, X         7.72         76.82         24.99         6.02         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 15 symbols)         Y         9.80         85.05         27.90         65.0         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 18 symbols)         Y         6.78         78.43         22.69         50.0         50.0         ± 9.6 %           7030-         IEEE 802.16e WiMAX (29:18, 10ms, X         6.73         74.34         22.91         50.0         ± 9.6 %           7030-         IEEE 802.16e WiMAX (29:18, 10ms, X         6.87         74.17         22.78         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         6.82         73.87         23.29         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 223, 18 symbols)         Y	AAA	10MHz, 64QAM, PUSC)			00 ==	00.07			
10304- 104Hz, 640AM, PUSC)         X         5.57         67.76         18.57         4.17         80.0         ± 9.6 %           AAA         10MHz, 640AM, PUSC)         Y         5.77         68.85         19.27         80.0         -           10305- 10305- 104Hz, 640AM, PUSC, 15 symbols)         Y         5.77         78.82         24.99         6.02         50.0         ± 9.6 %           10304- 10305- 10306- 10306- 10306- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10307- 10308- 10417, QPSK, PUSC, 18 symbols)         Y         6.78         77.45         22.69         50.0         ± 9.6 %           AAA         10MHz, 640AM, PUSC, 18 symbols)         Y         6.08         70.81         21.17         6.02         50.0         ± 9.6 %           AAA         10MHz, 6204K, PUSC, 18 symbols)         Y         6.78         77.434         22.21         50.0         -         -         50.0         -         -         -         -         22.6 %         6.74.17         22.32         6.02         50.0         ± 9.6 %           AAA         10MHz, 160MA, MC203.18 symbols)         Y         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 160M, AMC23.18 symb									
Y         5.77         68.85         19.27         9 80.0           10305         IEEE 802.166 WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)         X         7.72         78.82         24.99         6.02         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 15 symbols)         Y         9.80         85.05         27.90         56.0           10306-         IEEE 802.166 WIMAX (20:18, 10ms, AAA         X         7.68         78.78         24.73         56.0           10307-         IEEE 802.166 WIMAX (20:18, 10ms, AAA         X         6.09         70.06         20.96         50.0           10308-         IEEE 802.168 WIMAX (20:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)         Y         6.83         74.34         22.91         50.0           10308-         IEEE 802.468 WIMAX (20:18, 10ms, 10MHz, 10QAM, PUSC)         X         6.84         74.87         23.29         6.02         50.0           10309-         IEEE 802.468 WIMAX (29:18, 10ms, 10MHz, 10QAM, AMC 2x3, 18 symbols)         Y         7.04         74.84         22.92         50.0            10309-         IEEE 802.468 WIMAX (29:18, 10ms, 10MHz, 10QAM, AMC 2x3, 18 symbols)         Y         6.92         73.67         22.92         50.0          9.6 %							4.17		± 9.6 %
Z         5.49         67.73         18.47         80.0           10305- 10305- 10305- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10307- 10307- 1027         Y         9.80         85.05         27.90         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 16 symbols)         Y         6.19         70.81         21.17         6.02         50.0         ± 9.6 %           AAA         10MHz, 64QAM, PUSC, 18 symbols)         Y         6.78         73.45         22.86         50.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         6.93         74.34         22.91         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.93         74.34         23.20         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.94         74.94         23.20         6.00         ± 9.6 %           AAA         10MHz, 16QAM, AC (29.18, 10ms, AAA         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AC (23.18, 10ms, AAA         X         6.18         70.09         21.13         60.0         50	<u> </u>		Y	5 77	68 85	19.27		80.0	
10305-         IEEE 802.16e WIMAX (21:15, 10ms, 10MHz, 84QAM, PUSC, 15 symbols)         X         7.72         78.82         24.99         6.02         50.0         ± 9.6%           AAA         10MHz, 84QAM, PUSC, 15 symbols)         Y         9.80         85.05         27.90         56.0           10306-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 16 symbols)         X         6.19         70.81         21.17         6.02         50.0         ± 9.6 %           10307-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, GPSK, PUSC, 16 symbols)         X         6.23         71.39         21.26         6.02         50.0         ± 9.6 %           10308-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 18QAM, PUSC)         Y         6.84         74.47         23.29         6.00         -           10308-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 18QAM, AMC 2x3, 18 symbols)         Y         6.92         71.43         23.10         50.0         ± 9.6 %           AAA         10MHz, 18QAM, AMC 2x3, 18 symbols)         Y         6.92         73.67         22.32         50.0         ± 9.6 %           AAA         10MHz, 18QAM, AMC 2x3, 18 symbols)         Y         6.92         73.67         22.56         50.0         ± 9.6 %           AAA         10MHz, 1									
Y         9.80         85.05         27.90         50.0           C         7.68         77.87         24.73         50.0           10306-         IEEE 802.16e WiMAX (28:18, 10ms, 10MHz, 642AM, PUSC, 18 symbols)         Y         6.78         73.45         22.69         50.0         ± 9.6 %           10307-         IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)         Y         6.78         74.34         22.91         50.0         ± 9.6 %           10308-         IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, IGGAM, PUSC)         Y         6.83         74.34         22.91         50.0         ± 9.6 %           10308-         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         6.27         71.13         21.35         6.02         50.0         ± 9.6 %           AAA         10MHz, 16GAM, AMC 2x3, 18 symbols         X         6.29         71.13         21.35         6.02         50.0         ± 9.6 %           AAA         10MHz, 16GAM, AMC 2x3, 18 symbols         X         6.19         70.81         21.13         50.0         ± 9.6 %           AAA         10MHz, 16GAM, 100% RB, 15         X         3.15         68.64         16.01         0.00         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)							6.02		± 9.6 %
10306- AAA         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         6.19         70.81         21.17         6.02         50.0         ± 9.6 %           10307- 10307- 10307- 10306- 10306- 10306- 10306- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 10308- 104Hz, 160AM, PUSC)         Y         6.33         71.39         21.28         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         6.33         74.34         22.91         50.0         ± 9.6 %           AAA         10MHz, IGOAM, PUSC)         Y         7.04         74.87         23.29         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC (29:18, 10ms, AAA         X         6.84         74.87         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.92         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.92         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols) </td <td></td> <td></td> <td></td> <td>9.80</td> <td>85.05</td> <td>27.90</td> <td></td> <td>50.0</td> <td></td>				9.80	85.05	27.90		50.0	
AAA         10MHz, 64QAM, PUSC, 18 symbols)         Y         6.78         73.45         22.69         50.0           10307-         IEEE 802.16e WMAX (29:18, 10ms, AAA         X         6.23         71.39         21.26         6.02         50.0         ± 9.6 %           10307-         IEEE 802.16e WMAX (29:18, 10ms, AAA         X         6.23         71.39         21.26         6.02         50.0         ± 9.6 %           10308-         IEEE 802.16e WMAX (29:18, 10ms, AAA         X         6.84         74.47         23.29         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 23:18, 10ms, AAA         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 23:18 10ms, AAA         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           10310-         IEEE 802.16e WMAX (23:18 10ms, AAA         X         6.19         71.01         21.18         6.00         20.0         ± 9.6 %           10310-         IEEE 802.16e WMAX (23:18 19ms, 10MHz, QPSK, AMC 23.18 symbols)         Y									
Z         6.09         70.68         20.96         50.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         6.03         74.34         22.91         50.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         6.03         74.34         22.91         50.0         ± 9.6 %           10306-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         Z         6.66         74.17         22.78         6.00         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.04         74.83         23.10         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 29:18, 10ms, 160, X         6.29         71.13         21.38         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.92         50.0         103.0           10310-         IEEE 802.16e WIMAX (29.18, 10ms, A         6.18         70.98         21.13         6.02         50.0         103.0         104.2         50.0         105.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.76         50.0         105							6.02	5	± 9.6 %
10307-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)         X         6.23         71.39         21.28         6.02         50.0         ± 9.6 %           10308- 10308- 10308- 4AA         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)         Y         6.93         74.34         22.91         50.0           10308- 10308- 4AA         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         3.37         68.40									
AAA         10MHz, QPSK, PUSC, 18 symbols)         7         6.33         74.34         22.91         50.0           10308-         IEEE 802.16e WiMAX (29:18, 10ms, AAA         6.84         74.37         22.29         6.02         50.0         ± 9.6 %           AAA         10MHz, 160AM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 160AM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 160AM, AMC 2x3, 18 symbols)         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.92         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         3.28         69.57         16.56         150.0         ± 9.6 %           AAB <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Z         6.66         74.17         22.78         50.0           10308- AAA         10MHz, 16QAM, PUSC)         Y         7.04         74.97         23.29         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC (29.18, 10ms, AAA         X         6.27         74.83         23.10         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC (29.18, 10ms, AAA         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 22:18, 10ms, AX         K         6.19         71.13         21.18         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         5.82         73.76         12.18         60.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         5.82         73.55         22.58         60.0         ± 9.6 %           AAB         MHz							6.02		± 9.6 %
10308- 10MHz, 16QAM, PUSC)         X         6.84         74.87         23.29         6.02         50.0         ± 9.6 %           AAA 10MHz, 16QAM, PUSC)         Y         7.04         74.94         23.20         50.0         ± 9.6 %           10309- 10309- AAA         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         6.29         71.13         21.36         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         X         6.19         71.01         21.18         6.02         50.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         X         6.19         71.01         21.18         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         X         6.19         71.01         21.18         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         X         6.19         71.01         21.18         6.02         50.0         ± 9.6 %           AAA         10MHz, QPSK)         Y         8.82         73.78         22.75         50.0         10.0         150.0         ± 9.6 %           AAB         MHz, QPSK)         Y         3.28         69.67									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10200	1666 902 160 WilkAX (20:19 40-					6.00		1060/
Z         6.77         74.83         23.10         50.0           10309- AAA         10MHz, 16GAM, AMC 22:18, 10ms, 10MHz, 16GAM, AMC 223, 18 symbols)         Y         6.29         71.13         21.36         6.02         50.0 $\pm 9.6 \%$ AAA         10MHz, 16GAM, AMC 22:18, 10ms, AAA         Y         6.92         73.87         22.92         50.0         -           10310- AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.19         71.11         21.18         6.02         50.0 $\pm 9.6 \%$ 10310- AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.19         71.01         21.18         6.02         50.0         -           10311- AAB         MHz, QPSK         Y         6.62         73.76         22.75         50.0         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -							6.02		± 9.0 %
10309- AAA       IEEE 802.16e WiMAX (29:18, 10ms, AAA       X       6.29       71.13       21.36       6.02       50.0       ± 9.6 %         AAA       IOMHz, 16QAM, AMC 2x3, 18 symbols)       Y       6.92       73.87       22.92       50.0       ± 9.6 %         IO310- AAA       IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)       X       6.19       71.01       21.18       6.02       50.0       ± 9.6 %         AAA       IDEE 802.16e WiMAX (29:18, 10ms, AAA       X       6.19       71.01       21.18       6.02       50.0       ± 9.6 %         AAA       IDEE NDSC-FDMA, 100% RB, 15       X       3.15       68.64       16.01       0.00       150.0       ± 9.6 %         AAB       MHz, QPSK)       Y       3.28       69.57       16.56       150.0       ± 9.6 %         AAA       IDEN 1:3       Z       7.93       80.00       19.43       6.99       70.0       ± 9.6 %         AAA       IDEN 1:3       Z       7.91       80.08       19.40       70.0       ± 9.6 %         AAA       Z       7.91       80.08       19.40       70.0       ± 9.6 %         AAA       Z       7.91       80.08       19.40       70.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         6.92         73.87         22.92         50.0           10310-         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         6.18         70.98         21.13         50.0         19.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         19.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         19.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0         150.0         ±9.6 %           AAB         MHz, QPSK)         Y         3.28         69.57         16.56         150.0         ±9.6 %           AAB         MHz, QPSK)         Y         3.28         69.57         18.50         150.0         ±9.6 %           AAA         IDEN 1:3         X         7.93         80.00         19.43         6.99         70.0         ±9.6 %           AAA         IDEN 1:6         X         10.36         86.77         24.35         10.00         30.0         ±9.6 %           AAA         Y         1.057 <td>10300-</td> <td>1EEE 802 16e M/MAX /29:18 10ms</td> <td></td> <td></td> <td></td> <td></td> <td>6.02</td> <td></td> <td>+96%</td>	10300-	1EEE 802 16e M/MAX /29:18 10ms					6.02		+96%
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					1		0.02	:	1 0.0 78
10310- AAA         IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)         X         6.19         71.01         21.18         6.02         50.0         ± 9.6 %           IOMHz, QPSK, AMC 2x3, 18 symbols)         Y         6.82         73.78         22.75         50.0            IO311- AAA         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.15         68.64         16.01         0.00         150.0         ± 9.6 %           MHz, QPSK)         Y         3.28         69.57         16.56         150.0           9.6 %           AB         MHz, QPSK)         Y         3.28         69.57         16.56         150.0            9.6 %               9.6 %            9.6 %            9.6 %             9.6 %            9.6 %            9.6 %            9.6 %            9.6 %            9.6 %            9.6 %									
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$							6.02		± 9.6 %
Z         6.55         73.56         22.58         50.0           10311- AAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)         X         3.15         68.64         16.01         0.00         150.0         ± 9.6 %           AAB         MHz, QPSK)         Y         3.28         69.57         16.56         150.0         ± 9.6 %           I0313- AAA         iDEN 1:3         X         7.93         80.00         19.43         6.99         70.0         ± 9.6 %           I0314- I0314-         iDEN 1:6         Y         8.50         81.06         19.83         70.0           I0314- I0214-         IDEN 1:6         X         10.36         86.77         24.35         10.00         30.0         ± 9.6 %           AAA         Y         11.09         87.90         24.72         30.0         10.01         30.0         ± 9.6 %           AAA         Y         1.16         64.08         15.18         0.17         150.0         ± 9.6 %           AAB         Mps, 96pc duty cycle)         Y         1.16         64.08         15.18         0.17         150.0         ± 9.6 %           AAB         Mps, 96pc duty cycle)         Y         1.19         64.95         16.40	7001		Y	6.82	73.78	22.75		50.0	1
10311- AAB       LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)       X       3.15       68.64       16.01       0.00       150.0       ± 9.6 %         AAB       MHz, QPSK)       Z       3.07       68.40       15.89       150.0       100.0         10313- AAA       IDEN 1:3       X       7.93       80.00       19.43       6.99       70.0       ± 9.6 %         10314- AAA       IDEN 1:3       X       7.93       80.00       19.43       6.99       70.0       ± 9.6 %         10314- AAA       IDEN 1:6       X       10.36       86.77       24.35       10.00       30.0       ± 9.6 %         10314- AAA       IDEN 1:6       X       10.36       86.77       24.35       10.00       30.0       ± 9.6 %         AAA       Y       11.09       87.90       24.72       30.0       30.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       1.16       64.08       15.18       0.17       150.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       1.19       64.95       15.92       150.0       150.0       150.0       150.0       150.0       150.0       150.0       150.0       150.0       150.0									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			X				0.00		± 9.6 %
10313- AAA       iDEN 1:3       X       7.93       80.00       19.43       6.99       70.0       ± 9.6 %         AAA       Y       8.50       81.06       19.83       70.0         10314- AAA       Z       7.91       80.08       19.40       70.0         10314- AAA       iDEN 1:6       X       10.36       86.77       24.35       10.00       30.0       ± 9.6 %         AAA       Z       10.37       87.90       24.72       30.0       30.0       ± 9.6 %         AAA       Z       10.57       87.37       24.52       30.0       20.0       20.0         10315- AAB       IEEE 802.11b WiFi 2.4 GHz (DSSS, 1       X       1.16       64.08       15.18       0.17       150.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       1.19       64.95       15.92       150.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0       20.0				3.28	69.57				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		IDEN 1:3					6.99		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
AAA         Y         11.09         87.90         24.72         30.0           10315-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)         X         1.16         64.08         15.18         0.17         150.0         ± 9.6 %           10316-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)         Y         1.19         64.95         15.92         150.0         ± 9.6 %           10316-         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         Y         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10316-         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0         ± 9.6 %           10317-         IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAB         Y         4.75         67.05         16.58         150.0         ± 9.6 %           10317-         IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAB         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           AAB         Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0         ± 9.6 %           AAB         Mbps, 96pc duty cycle)         Y         4.74         66.8									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		iDEN 1:6					10.00		±9.6 %
10315- AAB         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)         X         1.16         64.08         15.18         0.17         150.0         ± 9.6 %           AAB         Mbps, 96pc duty cycle)         Y         1.19         64.95         15.92         150.0         -           10316- AAB         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10316- AAB         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         Y         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10400- AAC         99pc duty cycle)         Y         4.75         67.05         16.58         150.0         ± 9.6 %           10400- AAC         99pc duty cycle)         Y         4.83         67.07         16.30         0.00         150.0         ± 9			_						
Y         1.19         64.95         15.92         150.0           10316- AAB         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10316- AAB         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0         ± 9.6 %           10317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           10317- AAB         IEEE 802.11ac WiFi (20MHz, 64-QAM, AAC         Y         4.75         67.05         16.58         150.0         150.0           10400- AAC         IEEE 802.11ac WiFi (20MHz, 64-QAM, AAC         Y         4.84         67.29         16.50         150.0         150.0           10401- AAC         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         Y         5.51         67.29         16.49         0.00         150.0         ± 9.6 %							0.17		± 9.6 %
Z         1.15         63.96         15.05         150.0           10316- AAB         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           IO316- AAB         OFDM, 6 Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0         I           IO317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           AAB         Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0         I         150.0         ± 9.6 %           IO317- AAB         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.74         66.85         16.40         0.17         150.0         ± 9.6 %           IO400- AAC         99pc duty cycle)         Y         4.83         67.07         16.30         0.00         150.0         ± 9.6 %           IO400- AAC         99pc duty cycle)         Y         4.84         67.29         16.50         150.0         ± 9.6 %           IO401- AAC         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.51<	7010		1 Y	1.19	64.95	15.92		150.0	
10316- AAB       IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)       X       4.74       66.85       16.40       0.17       150.0       ± 9.6 %         AAB       OFDM, 6 Mbps, 96pc duty cycle)       Y       4.75       67.05       16.58       150.0         IO317- AAB       IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAB       X       4.74       66.85       16.40       0.17       150.0       ± 9.6 %         10317- AAB       IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)       X       4.74       66.85       16.40       0.17       150.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       4.75       67.05       16.58       150.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       4.75       67.05       16.58       150.0       ± 9.6 %         10400- AAC       IEEE 802.11ac WiFi (20MHz, 64-QAM, AAC       X       4.83       67.07       16.30       0.00       150.0       ± 9.6 %         10401- AAC       Y       4.84       67.29       16.50       150.0       ± 9.6 %         10401- AAC       P9pc duty cycle)       Y       5.51       67.49       16.49       0.00       150.0       ± 9.6 %					63.96			150.0	
Image: Mark and the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the second state of the sec			X	4.74	66.85		0.17	150.0	±9.6 %
10317- AAB       IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)       X       4.74       66.85       16.40       0.17       150.0       ± 9.6 %         AAB       Mbps, 96pc duty cycle)       Y       4.75       67.05       16.58       150.0       150.0         IEEE 802.11ac WiFi (20MHz, 64-QAM, AAC       Y       4.83       67.07       16.30       0.00       150.0       ± 9.6 %         AAC       99pc duty cycle)       Y       4.83       67.07       16.30       0.00       150.0       ± 9.6 %         AAC       99pc duty cycle)       Y       4.84       67.29       16.50       150.0       ± 9.6 %         IO400- AAC       IEEE 802.11ac WiFi (40MHz, 64-QAM, SOUTHZ, 64-QAM,       X       5.51       67.29       16.49       0.00       150.0       ± 9.6 %         10401- AAC       IEEE 802.11ac WiFi (40MHz, 64-QAM, SOUTHZ, 64-QAM,       X       5.51       67.29       16.49       0.00       150.0       ± 9.6 %         AAC       99pc duty cycle)       Y       5.53       67.49       16.67       150.0       ± 9.6 %							L		
AAB         Mbps, 96pc duty cycle)         Y         4.75         67.05         16.58         150.0           Image: Constraint of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s							ļ		
Z         4.69         66.84         16.36         150.0           10400- AAC         IEEE 802.11ac WIFi (20MHz, 64-QAM, 99pc duty cycle)         X         4.83         67.07         16.30         0.00         150.0         ± 9.6 %           AC         99pc duty cycle)         Y         4.84         67.29         16.50         150.0           Image: Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Sec							0.17		± 9.6 %
10400- AAC       IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)       X       4.83       67.07       16.30       0.00       150.0       ± 9.6 %         Y       4.84       67.29       16.50       150.0       ±       150.0       ±         Image: Constraint of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			<u> Y</u>				<u> </u>		ļ
AAC       99pc duty cycle)       Y       4.84       67.29       16.50       150.0         Image: Constraint of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	40.10-								+0.00/
Z         4.76         67.04         16.26         150.0           10401- AAC         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.51         67.29         16.49         0.00         150.0         ± 9.6 %           Y         5.53         67.49         16.67         150.0         ±							0.00	_	± 9.6 %
10401- AAC         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.51         67.29         16.49         0.00         150.0         ± 9.6 %           Y         5.53         67.49         16.67         150.0         ± 9.6 %									
AAC 99pc duty cycle) Y 5.53 67.49 16.67 150.0	40404						0.00		+060/
							0.00		1 9.0 %
			Z	5.53 5.49	67.49	16.67		150.0	

#### ES3DV3-- SN:3213

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.79	67.69	16.53	0.00	150.0	± 9.6 %
		Y	5.79	67.83	16.67	<u> </u>	150.0	
		Ż	5.72	67.60	16.48	<u> </u>	150.0	<u> </u>
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.49	68.14	14.07	0.00	115.0	± 9.6 %
		Y	1.71	70.53	15.29	-	115.0	
10101		Z	1.38	67.47	13.43		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.49	68.14	14.07	0.00	115.0	± 9.6 %
		Y	1.71	70.53	15.29		115.0	
10406-	CDM42000 D02 0000 0000 F #	Z	1.38	67.47	13.43		115.0	
AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	122.23	31.08	0.00	100.0	± 9.6 %
		Y	100.00	122.94	31.38		100.0	
10410-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z	21.98	102.39	26.35	<u>_</u>	100.0	
	QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.68	31.26	3.23	80.0	± 9.6 %
·		Y	100.00	122.54	31.65		80.0	
10415-	1555 002 11h WIELD & OUL (DODD	Z	100.00	121.97	31.19		80.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.03	62.73	14.35	0.00	150.0	± 9.6 %
		Y	1.04	63.46	15.05		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	Z	1.02	62.64	14.23		150.0	
AAA	OFDM, 6 Mbps, 99pc duty cycle)	X	4.64	66.69	16.23	0.00	150.0	± 9.6 %
		Y	4.65	66.89	16.41		150.0	
10417-		Z	4.59	66.68	16.20		150.0	
AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.64	66.69	16.23	0.00	150.0	±9.6 %
		Ŷ	4.65	66.89	16.41		150.0	······
10110		Z	4.59	66.68	16.20		150.0	· · · · · · · · · · · · · · · · · · ·
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.63	66.83	16.23	0.00	150.0	±9.6 %
		Y	4.64	67.04	16.42		150.0	
40440		<u>Z</u>	4.58	66.82	16.21		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.65	66.79	16.24	0.00	150.0	± 9.6 %
		Y	4.66	66.99	16.43		150.0	
10100		Z	4.60	66.78	16.21		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.78	66.81	16.27	0.00	150.0	± 9.6 %
<u> </u>		Y	4.78	67.00	16.45		150.0	
40400		Z	4.72	66.79	16.24		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	Х	4.96	67.16	16.40	0.00	150.0	±9.6 %
		Y	4.97	67.35	16.58		150.0	- <u> </u>
10101		Ζ	4.89	67.12	16.36	· "	150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.88	67.10	16.36	0.00	150.0	±9.6 %
		Y	4.88	67.30	16.54		150.0	
10425-		Z	4.81	67.07	16.33		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.49	67.52	16.59	0.00	150.0	± 9.6 %
		Y	5.50	67.70	16.76		150.0	
10100		Z	5.44	67.51	16.58		150.0	·······
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.49	67.54	16.59	0.00	150.0	±9.6 %
		Y	5.50	67.71	16.76		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.50	67.50	16.57	0.00	150.0	± 9.6 %
		Y	5.51	67.67	16.73		150.0	
		Z	5.45	67.48	16.56		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.25	70.00	17.85	0.00	150.0	± 9.6 %
		Y	4.23	70.09	17.93		150.0	
		Z	4.19	70.14	17.80		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.34	67.20	16.23	0.00	150.0	± 9.6 %
		Y	4.36	67.46	16.45		150.0	
		Z	4.27	67.18	16.16		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.64	67.12	16.31	0.00	150.0	± 9.6 %
		Y	4.65	67.34	16.50		150.0	
40400		Z	4.57	67.09	16.26		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.89	67.13	16.38	0.00	150.0	± 9.6 %
		Y	4.90	67.33	16.56		150.0	
10404		Z	4.82	67.10	16.34	0.00	150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.31	70.67	17.79	0.00	150.0	± 9.6 %
		Y	4.30	70.79	17.87		150.0	
40405		Z	4.25	70.82	17.71	0.00	150.0	100%
10435- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.51	31.18	3.23	80.0	± 9.6 %
		Y	100.00	122.37	31.57		80.0	
		Z	100.00	121.79	31.11		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.63	67.13	15.60	0.00	150.0	± 9.6 %
		Y	3.66	67.50	15.86		150.0	
		Z	3.54	67.07	15.44		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.17	66.96	16.08	0.00	150.0	± 9.6 %
		Y	4.19	67.23	16.30		150.0	
		Z	4.10	66.94	16.02		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.44	66.92	16.19	0.00	150.0	± 9.6 %
		Y	4.45	67.15	16.39		150.0	
		Z	4.38	66.90	16.14		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.63	66.87	16.23	0.00	150.0	± 9.6 %
		Y	4.64	67.08	16.41	ļ	150.0	
			4.58	66.85	16.19		150.0	1004
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.53	67.33	15.28	0.00	150.0	± 9.6 %
		Y	3.57	67.74	15.55		150.0	
		Z	3.43	67.21	15.05	0.00	150.0	100%
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.35	68.11	16.76	0.00	150.0	± 9.6 %
		Y	6.36	68.24	16.90		150.0	
		Z	6.31	68.06	16.74	-	150.0	1000
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.86	65.32	15.94	0.00	150.0	± 9.6 %
		Y	3.86	65.52	16.13	ļ	150.0	<u> </u>
101		Z	3.83	65.31	15.89	-	150.0	+0.0.0/
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.37	66.71	14.79	0.00	150.0	± 9.6 %
		Y	3.41	67.16	15.08	ļ	150.0	
		Z	3.26	66.61	14.51		150.0	1.0.0.01
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.52	65.23	15.77	0.00	150.0	± 9.6 %
	1	Y	4.60	65.75	16.11	<u> </u>	150.0	<u> </u>
		Z	4.38	65.07	15.54		150.0	1

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	0.89	66.92	15.35	0.00	150.0	± 9.6 %
		Y	1.01	69.93	17 40		450.0	ļ
		z	0.86	66.57	17.18 15.06	<u> </u>	150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.62	33.15	3.29	150.0 80.0	± 9.6 %
		Y	100.00	127.39	33.94		80.0	· · · · · · · · · · · · · · · · · · ·
		Z	100.00	125.16	32.74	<u> </u>	80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.62	25.96	3.23	80.0	± 9.6 %
		Y	100.00	111.65	26.39		80.0	
40400		Z	84.76	108.06	25.05		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.62	24.51	3.23	80.0	± 9.6 %
		Y	100.00	108.53	24.89		80.0	
10464-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz,	Z	14.33	86.37	18.99		80.0	
10464- AAA	QPSK, UL Subframe=2,3,4,7,8,9)		100.00	123.78	32.14	3.23	80.0	± 9.6 %
		Y	100.00	125.58	32.94		80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	Z	100.00	123.19	31.67		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.13	25.71	3.23	80.0	± 9.6 %
				111.18	26.15		80.0	
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	Z X	35.58 95.39	97.99	22.58		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	Y	100.00	106.65 108.07	24.18	3.23	80.0	± 9.6 %
		Z	9.21		24.67	······	80.0	
10467-	LTE-TDD (SC-FDMA, 1 RB, 5 MHz,	<u>X</u>	9.21	81.47	17.50		80.0	
AAB	QPSK, UL Subframe=2,3,4,7,8,9)	Y		123.99	32.23	3.23	80.0	± 9.6 %
			100.00	125.80	33.04	· ,	80.0	
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 100.00	123.41 110.29	31.77 25.79	3.23	80.0 80.0	± 9.6 %
	@ (M, OE Oubliante=2,0,4,7,0,9)		400.00	11101				
		Y	100.00	111.34	26.23		80.0	
10469- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Z X	<u>43.78</u> 99.99	<u>100.42</u> 107.17	23.20 24.29	3.23	80.0 80.0	± 9.6 %
		Y	100.00	108.09	24.67			
		z	9.38	81.68	17.56		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.02	32.24	3.23	80.0 80.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	100.00	125.83	33.05	<u> </u>	80.0	
		Z	100.00	123.44	31.77		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.24	25.76	3.23	80.0	±9.6 %
		Y	100.00	111.29	26.20		80.0	
40470		Z	43.76	100.38	23.18		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.12	24.26	3.23	80.0	± 9.6 %
		Y	100.00	108.04	24.64		80.0	
10473-		Z	9.36	81.64	17.53		80.0	
AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.99	32.23	3.23	80.0	±9.6 %
		Y	100.00	125.81	33.03		80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 100.00	123.41 110.25	31.76 25.76	3.23	80.0 80.0	± 9.6 %
		Y	100.00	111.30	26.20			
		Z	42.90	100.17	26.20 23.13		80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	99.25	107.05	23.13	3.23	80.0 80.0	± 9.6 %
		Y	100.00	108.06	24.65		000	
		Z	9.24	81.52	17.50		80.0	
			0.27	01.02	17.00		80.0	

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	110.09	25.68	3.23	80.0	± 9.6 %
IDE-TOD (SC-FDMA, 1 RB, 20 MHz, 64         X         95.82         106.64         24.15         32.33         80.0         ± 9.6 %           AAB         CAM, UL Subframe=2,3.4,7.8,9)         Y         100.00         108.60         24.62         80.0         ± 9.6 %           AAA         OPSK, UL Subframe=2,3.4,7.8,9)         Y         100.00         108.60         24.62         80.0         ± 9.6 %           AAA         OPSK, UL Subframe=2,3.4,7.8,9)         Y         25.94         104.65         29.40         80.0         ± 9.6 %           AAA         I6-GAM, UL Subframe=2,3.4,7.8,9)         Y         30.64         100.32         22.54         80.0         ± 9.6 %           AAA         I6-GAM, UL Subframe=2,3.4,7.8,9)         Y         30.64         100.32         22.83         30.0         ± 9.6 %           AAA         I6-GAM, UL Subframe=2,3.4,7.8,9)         Y         23.68         95.63         24.59         80.0         ± 9.6 %           AAA         ETE-TOD (SC-FDMA, 50% RB, 1 MHz, X         10.00         89.85         22.43         80.0         ± 9.6 %           AAA         64-GAM, UL Subframe=2,3.4,7.8,9)         Y         23.68         95.63         24.59         80.0         ± 9.6 %           AAA				100.00					·
AAB         QAM, UL Subframe=2,3,4,7,8,9)         Y         100.00         108.00         24.62         80.0           LTE-TDD (SC-FDMA, 50%, RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         15.99         96.17         26.79         3.23         80.0         ± 9.6 %           AAA         CPSK, UL Subframe=2,3,4,7,8,9)         Y         25.54         104.65         29.40         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         25.54         100.38         26.28         3.23         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         30.64         100.38         26.28         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         12.85         87.46         22.08         60.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.55         84.00         20.64         60.0         ± 9.6 %           AAA         CFE-TDD (SC-FDMA, 50%, RB, 3 MHz, X         5.04         76.30         18.55         60.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.28         13.1         80.0         ± 9.6 %      <			Z	37.23	98.47	22.68		80.0	
Inter-ToD (SC-FDMA, 50%, RB, 14 MHz, QPSK, UL, Subframe=2,3,4,7,8,9)         Z         9,13         81.36         17.44         60.0         20.0           Inter-ToD (SC-FDMA, 50%, RB, 14 MHz, QPSK, UL, Subframe=2,3,4,7,8,9)         Y         15.69         96.17         26.79         3.23         80.0         1           Inter-ToD (SC-FDMA, 50%, RB, 14 MHz, AAA         Y         19.48         93.48         24.25         3.23         80.0         1         9.64           Inter-ToD (SC-FDMA, 50%, RB, 14 MHz, AAA         Y         19.64         100.38         26.28         80.0         1         9.6.4         100.38         26.28         80.0         1         9.6.6         1         9.6.7         1         9.6.7         80.0         1         9.6.8         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         80.0         1         9.6.9         1         9.6.9         1         9.6.9         1         9.6.9         1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3.23</td> <td></td> <td>± 9.6 %</td>							3.23		± 9.6 %
$      10479- 17-100 (SC-FDMA, 50% RB, 1.4 MHz, X 15.89 96.17 26.79 3.23 80.0 \pm 9.6 \%       AAA OPSK, UL Subframe=2,3,4,7,8,9) Y 25.94 104.66 29.40 80.0 \pm 9.6 \%       Z 12.83 92.65 25.34 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 30.64 100.38 28.28 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 30.64 100.38 28.28 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 23.58 95.63 24.59 80.0 \pm 9.6 \%       AAA 0PSK, UL Subframe=2,3,4,7,8,9) Y 23.58 95.63 24.59 80.0 \pm 9.6 \%       AAA 0PSK, UL Subframe=2,3,4,7,8,9) Y 6.02 79.79 20.13 80.0 \pm 9.6 \%       AAA 0PSK, UL Subframe=2,3,4,7,8,9) Y 6.02 79.79 20.13 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 16-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 10.77 85.20 21.94 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 6.88 83.28 21.31 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 6.88 77.72 20.08 2.23 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 6.18 77.10 18.60 80.0 \pm 9.6 \%       AAA 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.81 73.64 18.21 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.81 73.64 18.21 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.82 72.56 18.83 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.82 72.56 18.83 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.82 72.56 18.83 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 5.68 77.52 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 5.68 77.52 80.0 \pm 9.6 \%       AAB 64-OAM, UL Subframe=2,3,4,7,8,9) Y 5.68 77.52 80.0 \pm 9.6$				100.00				80.0	
AAA         OPSK, UL, Subframe=2,3,4,7,8,9)         Y         25.94         104.65         29.40         80.0           10440         LTE-TDD (SC-FDMA, 50%, RB, 1.4 MHz, AAA         X         19.48         93.48         24.25         3.23         80.0         1           10440         LTE-TDD (SC-FDMA, 50%, RB, 1.4 MHz, AAA         X         19.48         93.48         24.25         3.23         80.0         1         9.6 %           10421         LTE-TDD (SC-FDMA, 50%, RB, 1.4 MHz, AAA         K         16.00         89.85         22.83         3.23         80.0         1         9.6 %           AAA         64-0AM, UL Subframe=2,3,4,7,8,9)         Y         10.55         84.00         20.84         80.0         1         80.0         1         9.6 %         0         0         1         9.6 %         0         1         9.6 %         0         0         1         9.6 %         0         0         1         9.6 %         0         0         1         9.6 %         0         1         0         0         1         9.6 %         0         0         1         0         0         0         1         0         0         0         0         0         0         0 <t< td=""><td></td><td></td><td></td><td>9.13</td><td></td><td></td><td></td><td></td><td></td></t<>				9.13					
Z         12.83         92.51         25.34         60.0           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         19.46         93.48         24.25         3.23         60.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         30.84         100.88         22.628         80.0         ± 9.6 %           10481-         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, X         10.00         69.85         22.63         3.23         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         23.56         95.63         24.59         80.0         ± 9.6 %           AAA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ± 9.6 %           AAA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.28         20.40         2.23         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,	10479- AAA						3.23		±9.6 %
10480.       LTE-TDD (SC-FDMA, 50% RB, 14 MHz, X       19.48       93.48       24.25       3.23       80.0       ± 9.6 %         AAA       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       30.64       100.38       22.28       80.0          10481-       LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, K       X       16.00       99.85       22.83       3.23       80.0       ± 9.6 %         AAA       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       23.58       95.63       24.59       80.0          10482-       LTE-TDD (SC-FDMA, 50% RB, 3 MHz, X       5.04       76.94       19.04       2.23       80.0       ± 9.6 %         AAA       QPSK, UL Subframe=2,3,4,7,8,9)       Y       6.02       79.79       20.13       80.0       ± 9.6 %         AAA       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       10.77       85.20       21.94       60.0          AAA       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       10.77       85.20       21.94       60.0           AAA       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       9.56       83.28       21.31       80.0           AAA       42-AM, UL Subframe=2,3,4,7,8,9)       Y       6.52								·	
Y         30.64         100.38         26.28         80.0           10481- AAA         LTE-TDD (SC-FDMA, 59% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)         Y         23.65         95.63         24.59         80.0           10482- LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         Y         23.65         95.63         24.59         80.0         ± 9.6 %           10482- LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         Y         6.02         79.79         20.13         80.0         ± 9.6 %           10482- LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.12         82.82         21.31         80.0         ± 9.6 %           AAA         40-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         ± 9.6 %           AAA         40-GAM, UL Subframe=2,3,4,7,8,9)         Y         6.18         77.12         20.06         2.23         80.0         ± 9.6 %           AAA         40-GAM, UL Subfram							3.23		± 9.6 %
Z         12.85         87.46         22.08         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         23.56         95.63         24.59         80.0         ±9.6 %           AAA         PSK, UL Subframe=2,3,4,7,8,9)         Y         23.56         95.63         24.59         80.0         ±9.6 %           AAA         QSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ±9.6 %           AAA         QSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ±9.6 %           AAA         QSK, UL Subframe=2,3,4,7,8,9)         Y         10.077         85.20         21.94         80.0         ±9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         80.89         20.40         2.23         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.60         ±2.3         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y </td <td>/</td> <td>10 Qrim, 02 Oubname=2,0,4,7,0,07</td> <td></td> <td>30.64</td> <td>100.38</td> <td>26.28</td> <td></td> <td>80.0</td> <td></td>	/	10 Qrim, 02 Oubname=2,0,4,7,0,07		30.64	100.38	26.28		80.0	
10481- AAA         LTE-TDD (SC-FDMA, 50% RB, 14 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)         Y         23.58         95.63         24.59         80.0           10482- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         23.58         95.63         24.59         80.0         ± 9.6 %           10482- AAA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ± 9.6 %           AAA         16-0AM, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0         ± 9.6 %           AAA         16-0AM, UL Subframe=2,3,4,7,8,9)         Y         10.07         85.20         21.94         80.0         ± 9.6 %           AAA         16-0AM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.68         83.28         21.31         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         6.63         77.10         18.60         80.0         ± 2.3         80.0         ± 9.6 %           AAA         GES-FDMA, 50% RB, 5 MHz, AAB         Y         6.13         77.10									
Z         10.55         84.00         20.64         80.0           10482- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe-2,3,4,7,8,9)         X         5.04         76.94         19.04         2.23         80.0         ± 9.6 %           10483- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         16.02         79.79         20.13         80.0         ± 9.6 %           10483- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         X         9.12         82.48         20.94         2.23         80.0         ± 9.6 %           10484- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         X         8.29         80.49         20.40         2.23         80.0         ± 9.6 %           10484- AAA         G4-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         ± 9.6 %           ABA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.58         21.18         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         4.51         72.42         17.68         2.23         80.0         ± 9.6 %							3.23		± 9.6 %
10482- QPSK, UL Subframe=2,3,4,7,8,9)         X         5.04         76.94         19.04         2.23         80.0         ± 9.6 %           AAA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0           10483- LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         X         9.12         82.40         20.94         2.23         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.56         83.28         21.31         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.50         21.18         80.0         50.0           10485-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.51         72.41         17.68         2.23         80.0         ± 9.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.81         73.61         18.21         80.0         ± 9.6 %				23.58	95.63	24.59		80.0	
AAA         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.02         79.79         20.13         80.0           10483-         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         8.12         82.48         20.94         2.23         80.0         ±9.6 %           AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.50         ±1.8         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         4.81         77.61         19.85         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         4.81         77.61         19.85         80.0         ±9.6 %           AAB         GC-FDMA, 50% RB,					84.00	20.64		80.0	
Z         4.78         76.30         18.55         80.0           10483- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         X         9.12         82.48         20.94         2.23         80.0 $\pm 9.6$ %           AAA         G-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0         -           10484- AAA         ETE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         K         8.29         80.89         20.40         2.23         80.0 $\pm 9.6$ %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.56         83.28         21.31         80.0         -         9.6 %           10485- LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         6.19         80.50         21.18         80.0         -         -         9.6 %           10486- LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         4.51         72.42         17.68         2.23         80.0 $\pm 9.6$ %           10486- LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         4.81         73.61         18.21         80.0         -         -         64.0A         -         80.0 $\pm 9.6$ %           10487- LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         4.81         73.61 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.23</td> <td></td> <td>± 9.6 %</td>							2.23		± 9.6 %
10483- AAA       LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA       X       9.12       62.48       20.94       2.23       80.0       ± 9.6 %         AAA       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       10.77       85.20       21.94       80.0       -         AAA       LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA       X       8.29       80.89       20.40       2.23       80.0       ± 9.6 %         AAA       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       9.58       83.28       21.31       80.0       ± 9.6 %         AAB       CTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB       X       5.28       77.72       20.08       2.23       80.0       ± 9.6 %         AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB       X       5.28       77.72       20.08       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       6.19       80.50       21.18       80.0       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.51       72.42       17.68       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.74       73.05       17.98       80.0       2.33       80.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAA         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         10.77         85.20         21.94         80.0           10484         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, AAA         X         8.29         80.89         20.40         2.23         80.0         ±9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         19.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         19.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.28         77.72         20.08         2.23         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.50         21.18         80.0         16.6 %           IO486-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AF, A,7,8,9)         X         4.51         72.42         17.68         2.23         80.0         ±9.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.81         73.61         18.21         80.0         16.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0 <t< td=""><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td>+</td><td></td></t<>			2					+	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							2.23		±9.6 %
10484- AAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)         X         8.29         80.89         20.40         2.23         80.0         ± 9.6 %           AAA         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         9.58         83.28         21.31         80.0         10485-           LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         5.28         77.72         20.08         2.23         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.50         21.18         80.0         19.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         6.19         80.50         21.18         80.0         19.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.51         77.61         19.85         80.0         19.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.81         73.61         18.21         80.0         19.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         19.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.14         80.0		-							
Y         9.58         83.28         21.31         80.0           10485- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         X         5.28         77.72         20.08         2.23         80.0         ±9.6 %           10485- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         6.19         80.00         21.18         80.0            10486- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         4.51         77.42         17.68         2.23         80.0         ±9.6 %           10486- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.51         72.42         17.68         2.23         80.0         ±9.6 %           10487- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.47         71.97         17.49         2.23         80.0         ±9.6 %           10487- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         4.47         71.97         17.49         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3.4,7.8.9)         Y         5.88         76.23         20.05         2.23         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3.4,7.8.9)         Y         5.88         78.28         20.95							2.23		± 9.6 %
Z         6.43         77.10         18.60         80.0           10485- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         X         5.28         77.72         20.08         2.23         80.0         ± 9.6 %           10486-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         Y         6.19         80.50         21.18         80.0         2         30.0         ± 9.6 %           AAB         ITE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.51         72.42         17.68         2.23         80.0         ± 9.6 %           IO486-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.51         72.13         17.34         80.0         -           10487-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, AAB         X         4.47         71.97         17.49         2.23         80.0         ± 9.6 %           10487-         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         QC-FDMA, 50% RB, 10 MHz, QC-FDMA, 50% RB, 10 MHz,         X         5.28         76.23         20.05         2.23         80.0         ± 9.6 %           10488-         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         QC-FDMA, 50% RB, 10 MHz, AAB         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %		04-QAM, OE Subiranie-2,0,4,7,0,87	V	9.58	83.28	21.31		80.0	
10485- AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.28       77.72       20.08       2.23       80.0       ± 9.6 %         10486- AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)       Y       6.19       80.50       21.18       80.0       ± 9.6 %         10486- AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)       X       4.51       72.42       17.68       2.23       80.0       ± 9.6 %         10487- AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.81       73.61       18.21       80.0       ± 9.6 %         AAB       G4-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.74       73.05       17.98       80.0       ± 9.6 %         AAB       GPSK, UL Subframe=2,3,4,7,8,9)       Y       4.74       73.05       17.98       80.0       ± 9.6 %         AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB       X       5.28       76.23       20.05       2.23       80.0       ± 9.6 %         AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB       X       4.61       71.60       18.35       2.23       80.0       ± 9.6 %         AAB       GPSK, UL Subframe=2,3,4,7,8,9)       Y       4.61       71.									
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2.3,4,7,8,9)					2.23		± 9.6 %
Z         5.13         77.51         19.85         80.0           10486- AAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, IG-QAM, UL Subframe=2,3,4,7,8,9)         X         4.51         72.42         17.68         2.23         80.0         ±9.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.81         73.61         18.21         80.0         ±9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         ±9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         ±9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.28         76.23         20.05         2.23         80.0         ±9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.88         78.28         20.95         80.0          ±9.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.82         72.56         18.83         80.0          ±9.6 %			İΥ	6.19	80.50	21.18		80.0	
10486- AAB       LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.51       72.42       17.68       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.81       73.61       18.21       80.0          10487- AAB       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.47       71.97       17.49       2.23       80.0       ± 9.6 %         10487- AAB       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.47       71.97       17.49       2.23       80.0       ± 9.6 %         10488- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.28       76.23       20.05       2.23       80.0       ± 9.6 %         AAB       1E-TDD (SC-FDMA, 50% RB, 10 MHz, AAB       X       5.28       78.28       20.95       80.0       10.489-         10489- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB       X       4.61       71.60       18.35       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.82       72.56       18.83       80.0       19.6 %         AAB       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.867       71.52       18.23       80.				5.13	77.51	19.85		80.0	
Z         4.36         72.13         17.34         80.0           10487- AAB         G4-QAM, UL Subframe=2,3,4,7,8,9)         X         4.47         71.97         17.49         2.23         80.0         ± 9.6 %           AAB         G4-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         ± 9.6 %           Indexse         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         5.28         76.23         20.05         2.23         80.0         ± 9.6 %           Indexse         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         5.28         76.23         20.05         2.23         80.0         ± 9.6 %           Indexse         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %           Indexse         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.82         72.56         18.83         80.0         10489-           Indexse         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.869         71.33         18.26         2.23         80.0         ± 9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.869         71.33         18.26         2.23 </td <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>17.68</td> <td>2.23</td> <td>80.0</td> <td>± 9.6 %</td>			X			17.68	2.23	80.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				4.81					
AAB         64-QAM, ÙL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0           10488- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         4.74         73.05         17.98         80.0         ±9.6 %           10488- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.88         78.28         20.95         80.0         ±9.6 %           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         5.88         78.28         20.95         80.0         ±9.6 %           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.61         71.60         18.35         2.23         80.0         ±9.6 %           10490- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.82         72.56         18.83         80.0         ±9.6 %           10490- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.87         72.22         18.72         80.0         ±9.6 %           10490- AAB         GPSK, UL Subframe=2,3,4,7,8,9)         Y         4.87         72.22         18.72         80.0         ±9.6 %           AAB         GPSK, UL Subframe=2,3,4,7,8,9)         Y         5.57				4.36					
Z         4.32         71.65         17.14         80.0           10488- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         X         5.28         76.23         20.05         2.23         80.0         ± 9.6 %           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         5.88         78.28         20.95         80.0         10489-           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %           10490- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         Y         4.82         72.56         18.83         80.0         ± 9.6 %           10490- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB         X         4.69         71.33         18.26         2.23         80.0         ± 9.6 %           10491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         Y         5.57         75.36         19.96         80.0         ± 9.6 %           10491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         Y         5.57         75.36							2.23		±9.6 %
10488- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.28       76.23       20.05       2.23       80.0       ± 9.6 %         10489- AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       5.88       78.28       20.95       80.0       10489-         10489- AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.61       71.60       18.35       2.23       80.0       ± 9.6 %         10489- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, AAB       X       4.61       71.60       18.35       2.23       80.0       ± 9.6 %         10490- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)       X       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         10490- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)       X       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         10491- AAB       QPSK, UL Subframe=2,3,4,7,8,9)       Y       5.57       75.36       19.96       80.0       ± 9.6 %         AAB       QPSK, UL Subframe=2,3,4,7,8,9)       Y       5.57       75.36       19.96       80.0       ± 9.6 %         AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB       X       4.87									
Y         5.88         78.28         20.95         80.0           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %           10489- AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.82         72.56         18.83         80.0         ± 9.6 %           10490- AAB         C         Z         4.51         71.52         18.23         80.0         ± 9.6 %           10490- AAB         G4-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.87         72.22         18.72         80.0         ± 9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.87         72.22         18.72         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.21         74.00         19.31         2.23         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.57         75.36         19.96         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.57         75.36         19.24         80.0         ± 9.6 %           AAB         16-QAM, UL Su							2.23		± 9.6 %
Z         5.13         76.06         19.94         80.0           10489- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)         X         4.61         71.60         18.35         2.23         80.0         ± 9.6 %           AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.82         72.56         18.83         80.0         1           IO490- AAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)         X         4.69         71.33         18.26         2.23         80.0         ± 9.6 %           AAB         64-QAM, UL Subframe=2,3,4,7,8,9)         Y         4.87         72.22         18.72         80.0         ± 9.6 %           IO491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         Y         5.21         74.00         19.31         2.23         80.0         ± 9.6 %           IO491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         X         5.21         74.00         19.31         2.23         80.0         ± 9.6 %           IO491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         X         5.21         74.00         19.31         2.23         80.0         ± 9.6 %           IO492- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB         X         4.8	7010		Y	5.88	78.28	20.95	1	80.0	
10489- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)       X       4.61       71.60       18.35       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.82       72.56       18.83       80.0       10         IO490- AAB       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         IO490- AAB       64-QAM, UL Subframe=2,3,4,7,8,9)       Y       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         IO491- AAB       C       V       4.87       72.22       18.72       80.0       ± 9.6 %         IO491- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.21       74.00       19.31       2.23       80.0       ± 9.6 %         IO491- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB       X       5.21       74.00       19.31       2.23       80.0       ± 9.6 %         IO492- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB       X       4.87       70.59       18.20       2.23       80.0       ± 9.6 %         IO492- AAB       IG-QAM, UL Subframe=2,3,4,7,8,9)       Y       5.02       71.33       18.60							1		
Y       4.82       72.56       18.83       80.0         10490- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)       X       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         10491- AAB       Y       4.87       72.22       18.72       80.0       ± 9.6 %         10491- AAB       Z       4.59       71.26       18.14       80.0       ± 9.6 %         10491- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.21       74.00       19.31       2.23       80.0       ± 9.6 %         AAB       QPSK, UL Subframe=2,3,4,7,8,9)       Y       5.57       75.36       19.96       80.0       ± 9.6 %         10492- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB       Y       5.57       75.36       19.96       80.0       ± 9.6 %         10492- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AAB       X       4.87       70.59       18.20       2.23       80.0       ± 9.6 %         AAB       16-QAM, UL Subframe=2,3,4,7,8,9)       Y       5.02       71.33       18.60       80.0       ± 9.6 %							2.23		± 9.6 %
Image: constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constrant of the constraint of the constraint of the constraint of the c			Y	4.82	72.56	18.83		80.0	
10490- AAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)       X       4.69       71.33       18.26       2.23       80.0       ± 9.6 %         Image: Constraint of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the								80.0	
Z         4.59         71.26         18.14         80.0           10491- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         X         5.21         74.00         19.31         2.23         80.0         ± 9.6 %           Image: Constraint of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the			X	4.69	71.33	18.26	2.23		± 9.6 %
10491- AAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       X       5.21       74.00       19.31       2.23       80.0       ± 9.6 %         Image: Constraint of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the s							<u> </u>	- +	ļ
AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         5.57         75.36         19.96         80.0           Image: Constraint of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of the system of							<u> </u>		
Z         5.08         73.85         19.24         80.0           10492- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)         X         4.87         70.59         18.20         2.23         80.0         ± 9.6 %           V         5.02         71.33         18.60         80.0         10.0							2.23		± 9.6 %
10492- AAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)         X         4.87         70.59         18.20         2.23         80.0         ± 9.6 %           X         5.02         71.33         18.60         80.0         10.00			Y						
AAB         16-QAM, UL Subframe=2,3,4,7,8,9)         Y         5.02         71.33         18.60         80.0							-		1
							2.23		± 9.6 %
			Y Z	<u>5.02</u> 4.77	71.33	18.60	1	80.0 80.0	1

10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	4.93	70.41	18.14	2.23	80.0	± 9.6 %
AAB	64-QAM, UL Subframe=2,3,4,7,8,9)	Y	5.07	71.11		2.20	 	1 9.0 %
		Z	4.83	71.11	18.53	i	80.0	
10494-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	X	5.74	75.68	18.06	0.00	80.0	
AAB	QPSK, UL Subframe=2,3,4,7,8,9)				19.79	2.23	80.0	± 9.6 %
		Y	6.23	77.26	20.51		80.0	
10495-		Z	5.57	75.46	19.70		80.0	
AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.94	71.08	18.40	2.23	80.0	± 9.6 %
		Y	5.11	71.86	18.83		80.0	
10496-		Z	4.84	70.96	18.32		80.0	
AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.99	70.71	18.29	2.23	80.0	± 9.6 %
<u> </u>		Y	5.14	71.42	18.69		80.0	
40407		Z	4.89	70.61	18.21		80.0	
10497- LTE-T AAA MHz,	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.95	73.39	16.94	2.23	80.0	± 9.6 %
		Y	4.59	75.63	17.82		80.0	· · · · · · · · · · · · · · · · · · ·
10/00		Z	3.56	72.03	16.04		80.0	1
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	x	2.99	67.14	13.42	2.23	80.0	± 9.6 %
<u>_</u>		Y	3.17	68.04	13.81		80.0	I
10/05		Ζ	2.58	65.48	12.27		80.0	† <u> </u>
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.90	66.50	13.01	2.23	80.0	± 9.6 %
		Y	3.06	67.30	13.36		80.0	
		Z	2.49	64.82	11.82	·	80.0	<u></u>
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	5.14	76.64	19.91	2.23	80.0	±9.6 %
		Y	5.86	79.02	20.91		80.0	
		Z	5.00	76.51	19.75		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.55	72.03	17.90	2.23	80.0	± 9.6 %
		Y	4.80	73.10	18.41		80.0	
		Z	4.43	71.87	17.67		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	71.80	17.77	2.23	80.0	± 9.6 %
		Y	4.83	72.81	18.25		80.0	
		Z	4.47	71.64	17.53		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.22	76.03	19.96	2.23	80.0	± 9.6 %
		Y	5.81	78.08	20.86		80.0	
40501		Ζ	5.07	75.86	19.85		80.0	
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	71.52	18.30	2.23	80.0	±9.6 %
		Y	4.80	72.48	18.79		80.0	
40505		Z	4.49	71.43	18.18		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.66	71.24	18.21	2.23	80.0	±9.6 %
		Y	4.85	72.13	18.67		80.0	
10500		Z	4.56	71.17	18.09		80.0	
10506- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.69	75.54	19.72	2.23	80.0	± 9.6 %
		Ŷ	6.18	77.12	20.44		80.0	
40507		Z	5.52	<u>75</u> .31	19.63		80.0	
4AB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	х	4.93	71.03	18.37	2.23	80.0	± 9.6 %
		Y	5.09	71.81	18.80		80.0	

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.98	70.65	18.25	2.23	80.0	± 9.6 %
		Y	5.12	71.36	18.65		80.0	
		Z	4.87	70.54	18.17		80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.75	73.61	18.99	2.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	6.04	74.62	19.49		80.0	
		Z	5.61	73.42	18.92		80.0	
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.37	70.52	18.25	2.23	80.0	± 9.6 %
		Y	5.50	71.12	18.60		80.0	
		Z	5.26	70.38	18.18		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.39	70.20	18.16	2.23	80.0	± 9.6 %
		Y	5.51	70.76	18.50		80.0	
		Z	5.29	70.08	18.10		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.17	75.45	19.55	2.23	80.0	± 9.6 %
		Y	6.61	76.77	20.16		80.0	
		Z	5.99	75.18	19.45	<b>•</b> • •	80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.29	70.93	18.40	2.23	80.0	± 9.6 %
		Y	5.44	71.61	18.78		80.0	
		Z	5.18	70.76	18.31		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.26	70.42	18.25	2.23	80.0	± 9.6 %
		Y	5.39	71.03	18.61		80.0	
		Z	5.16	70.27	18.17		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	62.88	14.39	0.00	150.0	±9.6 %
		Y	1.01	63.69	15.14		150.0	
		Z	0.98	62.78	14.25	0.00	150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.57	67.90	15.77	0.00	150.0	± 9.6 %
		Y	0.79	74.76	19.51		150.0	
40547	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z X	0.54	67.33	15.34	0.00	150.0	+06%
10517- AAA	Mbps, 99pc duty cycle)	Y	0.83	64.48 66.11	14.80 16.05	0.00	150.0 150.0	± 9.6 %
			0.88	64.26	14.59		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.64	66.76	16.21	0.00	150.0	± 9.6 %
		Y	4.64	66.97	16.39		150.0	
		Z	4.58	66.75	16.17		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.84	67.04	16.35	0.00	150.0	± 9.6 %
		Y	4.85	67.24	16.53		150.0	
		Z	4.77	67.00	16.30		150.0	100%
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.69	67.00	16.26	0.00	150.0	± 9.6 %
		Y	4.70	67.20	16.45		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.62 4.62	66.95 66.99	16.22 16.24	0.00	150.0 150.0	± 9.6 %
		Y	4.63	67.20	16.43		150.0	
		Z	4.55	66.94	16.20		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.67	67.03	16.31	0.00	150.0	± 9.6 %
		Y	4.69	67.25	16.50		150.0	
		Z	4.61	67.03	16.28		150.0	

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.55	66.89	16.15	0.00	150.0	± 9.6 %
		Y	4.56	67.11	16.34	<u> </u>	150.0	<u> </u>
		Z	4.49	66.88	16.12		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.62	66.97	16.28	0.00	150.0	± 9.6 %
		Y	4.63	67.19	16.48		150.0	
		Z	4.56	66.95	16.25		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.59	65.99	15.86	0.00	150.0	± 9.6 %
		Y	4.60	66.20	16.05		150.0	
10526-		Z	4.54	65.98	15.83		150.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.77	66.38	16.01	0.00	150.0	± 9.6 %
		Y	4.79	66.60	16.20		150.0	
10527-		Z	4.71	66.35	15.98		150.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.69	66.34	15.95	0.00	150.0	± 9.6 %
		Y	4.71	66.56	16.15		150.0	
10500		Z	4.63	66.30	15.91		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.71	66.36	15.99	0.00	150.0	± 9.6 %
		Ý	4.72	66.58	16.18		150.0	
40500		Z	4.65	66.32	15.95		150.0	<u> </u>
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	Х	4.71	66.36	15.99	0.00	150.0	± 9.6 %
		Y	4.72	66.58	16.18		150.0	
40504		Z	4.65	66.32	15.95		150.0	·
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duly cycle)	X	4.71	66.48	16.01	0.00	150.0	± 9.6 %
		Y	4.73	66.71	16.20		150.0	
		Z	4.64	66.43	15.96		150.0	<u> </u>
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.56	66.33	15.94	0.00	150.0	± 9.6 %
<u> </u>		Y	4.58	66.56	16.14		150.0	
		Z	4.50	66.27	15.89		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.72	66.39	15.97	0.00	150.0	± 9.6 %
		Y	4.73	66.61	16.16		150.0	
		Z	4.65	66.36	15.93		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.24	66.54	16.07	0.00	150.0	± 9.6 %
		Y	5.25	66.71	16.24		150.0	
1000		Z	5.19	66.49	16.04	<u> </u>	150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.31	66.70	16.14	0.00	150.0	± 9.6 %
		Y	5.33	66.88	16.31		150.0	
10500		Z	5.26	66.68	16.13		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.18	66.65	16.10	0.00	150.0	±9.6%
		Y	5.19	66.84	16.27		150.0	
0507		Z	5.12	66.60	16.07		150.0	· · · · · ·
10537- \AA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.24	66.63	16.10	0.00	150.0	± 9.6 %
· · ·		Y	5.25	66.81	16.26	-	150.0	
		Z	5.19	66.58	16.06		150.0	
10538- \AA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	Х	5.35	66.69	16.17	0.00	150.0	±9.6 %
		Y	5.36	66.87	16.33		150.0	
		Z	5.28	66.62	16.12		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.26	66.66	16.17	0.00	150.0	± 9.6 %
		Y	5.27	66.85	16.34		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.23	66.53	16.10	0.00	150.0	± 9.6 %
		Y	5.24	66.71	16.26		150.0	
		Z	5.18	66.49	16.06		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.39	66.62	16.16	0.00	150.0	±9.6 %
		Y	5.40	66.79	16.32		150.0	
		Z	5.34	66.57	16.12		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.48	66.66	16.19	0.00	150.0	± 9.6 %
		Y	5.49	66.83	16.36		150.0	
		Z	5.42	66.63	16.18		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.54	66.65	16.07	0.00	150.0	±9.6 %
		Y	5.55	66.80	16.22		150.0	
		Z	5.50	66.61	16.04		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.76	67.11	16.24	0.00	150.0	±9.6 %
		Y	5.77	67.28	16.40		150.0	
10010		Z	5.71	67.07	16.23		150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.63	66.91	16.16	0.00	150.0	± 9.6 %
		Y	5.64	67.07	16.32		150.0	
		Z	5.57	66.84	16.12		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.72	67.00	16.20	0.00	150.0	±9.6 %
		Y	5.72	67.16	16.35		150.0	
		Z	5.65	66.88	16.14		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.07	68.22	16.78	0.00	150.0	± 9.6 %
		Y	6.08	68.42	16.96		150.0	
		Z	5.98	68.06	16.70		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.65	66.89	16.16	0.00	150.0	± 9.6 %
		Y	5.66	67.05	16.31		150.0	
		Z	5.60	66.86	16.14		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.65	66.93	16.14	0.00	150.0	± 9.6 %
		Y	5.66	67.09	16.29		150.0	
		Z	5.60	66.87	16.11		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.56	66.71	16.04	0.00	150.0	± 9.6 %
		Y	5.57	66.86	16.19		150.0	
		Z	5.51	66.66	16.01		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.65	66.77	16.10	0.00	150.0	± 9.6 %
		Y	5.66	66.92	16.25		150.0	ļ
		Z	5.60	66.70	16.07	<u> </u>	150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.95	67.04	16.18	0.00	150.0	±9.6 %
		Y	5.96	67.19	16.31		150.0	
		Z	5.91	66.99	16.15		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.09	67.37	16.32	0.00	150.0	± 9.6 %
		Y	6.11	67.53	16.46	l	150.0	Į
		Z	6.05	67.32	16.29		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.11	67.40	16.33	0.00	150.0	± 9.6 %
		Y	6.12	67.56	16.47	ļ	150.0	
		Z	6.07	67.36	16.30		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.08	67.33	16.31	0.00	150.0	± 9.6 %
		Y	6.09	67.48	16.45		150.0	
		Z	6.03	67.26	16.27		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.14	67.52	16.42	0.00	150.0	± 9.6 %
		Y	6.15	67.67	16.56	<u> </u>	150.0	+
		Z	6.09	67.43	16.37		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.13	67.34	16.37	0.00	150.0	± 9.6 %
		Y	6.14	67.49	16.51		150.0	
		Z	6.07	67.26	16.33		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.05	67.31	16.39	0.00	150.0	± 9.6 %
<u></u>		Y	6.06	67.47	16.54		150.0	1
		Z	6.00	67.24	16.36		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.21	67.80	16.64	0.00	150.0	± 9.6 %
<u> </u>		Y	6.22	67.97	16.79		150.0	
1000		Z	6.14	67.67	16.57		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.60	68.52	16.95	0.00	150.0	± 9.6 %
		Y	6.61	68.70	17.11		150.0	
40507		Z	6.44	68.18	16.78		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.98	66.92	16.42	0.46	150.0	± 9.6 %
<u> </u>		Y	4.99	67.12	16.60		150.0	
10505		Z	4.93	66.90	16.38		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.22	67.37	16.73	0.46	150.0	± 9.6 %
		Y	5.23	67.55	16.90		150.0	
10500		Z	5.16	67.34	16.69		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.06	67.23	16.56	0.46	150.0	± 9.6 %
		Y	5.06	67.43	16.74		150.0	
40500		Z	4.99	67.19	16.51		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.08	67.57	16.87	0.46	150.0	± 9.6 %
		Y	5.08	67.74	17.03		150.0	
40500		Z	5.01	67.53	16.84		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.98	67.03	16.35	0.46	150.0	± 9.6 %
		Y	4.99	67.26	16.56		150.0	
		Z	4.91	67.01	16.31		150.0	· · · · ·
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.02	67.62	16.91	0.46	150.0	± 9.6 %
		Y	5.03	67.78	17.06		150.0	
40570		Z	4.97	67.61	16.89		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.07	67.49	16.86	0.46	150.0	± 9.6 %
		Y	5.07	67.68	17.03		150.0	· · · ·
10574		Z	5.00	67.48	16.83		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.33	65.38	15.85	0.46	130.0	± 9.6 %
		<u>Y</u>	1.37	66.42	16.66		130.0	
10570		Z	1.31	65.23	15.71		130.0	
10572- AAA	IEEE 802.11b WIFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.35	65.94	16.19	0.46	130.0	± 9.6 %
		Y	1.40	67.08	17.03		130.0	
10573-		Z	1.33	65.79	16.04		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.45	84.59	22.30	0.46	130.0	±9.6 %
		Y	10.53	109.30	30.18		130.0	
10574-		Z	2.23	83.07	21.66		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	×	1.51	71.42	18.78	0.46	130.0	±9.6 %
		Y	1.69	74.14	20.31		130.0	
	1	Z	1.47	71.09	18.56		130.0	

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.80	66.79	16.52	0.46	130.0	± 9.6 %
	OFDM, 6 Mbps, 90pc duty cycle)		4.00	00.00	10.70		100.0	
		Y	4.80	66.99	16.70		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.74	66.78	16.48	0.40	130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)	X	4.82	66.93	16.57	0.46	130.0	± 9.6 %
		Y	4.83	67.13	16.75		130.0	
		Z	4.77	66.93	16.54		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	5.04	67.25	16.75	0.46	130.0	± 9.6 %
		Y	5.04	67.43	16.92		130.0	
		Z	4.97	67.22	16.71		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.93	67.39	16.83	0.46	130.0	±9.6 %
		Y	4.93	67.57	17.00		130.0	
		Z	4.87	67.36	16.79		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.71	66.78	16.21	0.46	130.0	±9.6 %
		Y	4.73	67.02	16.43		130.0	
		Z	4.65	66.73	16.16		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.76	66.79	16.23	0.46	130.0	± 9.6 %
		Y	4.77	67.05	16.45		130.0	
		Z	4.69	66.76	16.18		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.83	67.44	16.78	0.46	130.0	±9.6 %
~~~		Y	4.84	67.63	16.95		130.0	
		z	4.77	67.41	16.74		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.66	66.56	16.03	0.46	130.0	±9.6 %
		Y	4.68	66.83	16.26		130.0	
		Z	4.59	66.51	15.97		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.80	66.79	16.52	0.46	130.0	±9.6 %
		Y	4.80	66.99	16.70		130.0	
•		z	4.74	66.78	16.48		130.0	
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.82	66.93	16.57	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)		1.00	07.40	40.75		400.0	
		Y	4.83	67.13	16.75		130.0	
10505		Z	4.77	66.93	16.54		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.04	67.25	16.75	0.46	130.0	± 9.6 %
		Y	5.04	67.43	16.92		130.0	
		Z	4.97	67.22	16.71		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.93	67.39	16.83	0.46	130.0	±9.6 %
		Y	4.93	67.57	17.00		130.0	
		Z	4.87	67.36	16.79		130.0	1
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.71	66.78	16.21	0.46	130.0	±9.6 %
		Y	4.73	67.02	16.43	1	130.0	
		Z	4.65	66.73	16.16		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.76	66.79	16.23	0.46	130.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	4.77	67.05	16.45		130.0	
		Z	4.69	66.76	16.18		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.83	67.44	16.78	0.46	130.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	4.84	67.63	16.95	1	130.0	1
		Z	4.77	67.41	16.74		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.66	66.56	16.03	0.46	130.0	± 9.6 %
AAA		+	1.00	00.00	10.00	1	1	
		Y	4.68	66.83	16.26		130.0	

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.94	66.84	16.61	0.46	130.0	± 9.6 %
		Y	4.95	67.02	16.78	<u> </u>	130.0	1
		Z	4.89	66.83	16.58	<u> </u>	130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.11	67.18	16.74	0.46	130.0	± 9.6 %
		Y	5.11	67.36	16.91		130.0	
		Z	5.05	67.16	16.71		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.04	67.12	16.64	0.46	130.0	± 9.6 %
		Y	5.04	67.31	16.81		130.0	
10594-		Z	4.97	67.08	16.60		130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.09	67.26	16.77	0.46	130.0	± 9.6 %
		Y	5.09	67.44	16.95		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	Z	5.02	67.24	16.74		130.0	
	MCS4, 90pc duty cycle)	X	5.06	67.23	16.68	0.46	130.0	± 9.6 %
·		Y	5.07	67.42	16.86		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,	Z	4.99	67.20	16.64		130.0	ļ
10596- AAA	MCS5, 90pc duty cycle)	X	5.00	67.23	16.68	0.46	130.0	± 9.6 %
		Y 7	5.01	67.44	16.87		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	ZX	4.93	67.20	16.65		130.0	
AAA	MCS6, 90pc duty cycle)		4.95	67.15	16.58	0.46	130.0	± 9.6 %
		Y	4.96	67.36	16.77	_	130.0	
10598-	IEEE 802.11n (HT Mixed, 20MHz,	Z	4.88	67.11	16.54		130.0	
AAA	MCS7, 90pc duty cycle)	X	4.92	67.37	16.82	0.46	130.0	±9.6 %
		Y	4.93	67.55	16.99		130.0	
10500		Z	4.86	67.32	16.78		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.62	67.44	16.83	0.46	130.0	± 9.6 %
		Y	5.62	67.59	16.99		130.0	
10000		Z	5.57	67.41	16.81		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.83	68.08	17.13	0.46	130.0	± 9.6 %
		Y	5.83	68,26	17.31		130.0	
40004		Z	5.75	67.98	17.08		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.67	67.70	16.95	0.46	130.0	± 9.6 %
		Y	5.68	67.87	17.12		130.0	· · · · · · · · · · · · · · · · · · ·
40000		Z	5.61	67.65	<u>1</u> 6.92		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.76	67.70	16.88	0.46	130.0	± 9.6 %
		Y	5.77	67.88	17.05		130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	Z	5.71	67.69	16.87		130.0	
AAA	MCS4, 90pc duty cycle)	X	5.83	67.96	17.13	0.46	130.0	±9.6 %
		Y	5.84	68.14	17.30		130.0	
10604-		Z	5.78	67.93	17.11		130.0	
AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.62	67.40	16.84	0.46	130.0	±9.6 %
		Y	5.63	67.56	17.00		130.0	
10605-		Z	5.57	67.37	16.81		130.0	1
AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.75	67.79	17.04	0.46	130.0	± 9.6 %
<u> </u>		Y	5.76	67.98	17.22		130.0	
10600		Z	5.71	67.80	17.04		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.50	67.17	16.59	0.46	130.0	± 9.6 %
		Y	5.51	67.36	16.78		130.0	
		Z	5.45	67.15	16.57		130.0	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.77	66.11	16.20	0.46	130.0	± 9.6 %
		Y	4.78	66.31	16.38		130.0	
		Z	4.72	66.10	16.17		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.97	66.53	16.37	0.46	130.0	±9.6 %
		Y	4.98	66.73	16.55		130.0	
		Z	4.91	66.51	16.34		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.86	66.39	16.22	0.46	130.0	± 9.6 %
		Y	4.87	66.61	16.41		130.0	
		Z	4.80	66.37	16.19		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.91	66.54	16.37	0.46	130.0	± 9.6 %
		Y	4.92	66.75	16.55		130.0	
		Z	4.85	66.52	16.34		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.83	66.37	16.24	0.46	130.0	± 9.6 %
		Y	4.84	66.58	16.42		130.0	
		Z	4.77	66.34	16.20		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.85	66.53	16.28	0.46	130.0	± 9.6 %
		Y	4.86	66.77	16.48		130.0	
		Z	4.78	66.50	16.25		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.86	66.45	16.19	0.46	130.0	± 9.6 %
		Y	4.87	66.68	16.39		130.0	
		Z	4.79	66.40	16.14		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.79	66.59	16.39	0.46	130.0	± 9.6 %
		Y	4.80	66.80	16.57		130.0	
		Z	4.72	66.55	16.34		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.84	66.22	16.03	0.46	130.0	± 9.6 %
		Y	4.85	66.46	16.24		130.0	
		Z	4.77	66.19	15.99		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.43	66.66	16.42	0.46	130.0	± 9.6 %
		Y	5.44	66.83	16.58		130.0	
		Z	5.38	66.62	16.39		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.49	66.80	16.46	0.46	130.0	± 9.6 %
		Y	5.50	66.99	16.63		130.0	
		Z	5.45	66.83	16.47		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.38	66.84	16.49	0.46	130.0	± 9.6 %
		Y	5.39	67.01	16.65		130.0	
		Z	5.33	66.80	16.47		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.41	66.69	16.36	0.46	130.0	± 9.6 %
		Y	5.42	66.88	16.53		130.0	
		Z	5.36	66.66	16.34		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.51	66.76	16.45	0.46	130.0	± 9.6 %
		Y	5.52	66.94	16.61		130.0	
		Z	5.45	66.69	16.40		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.49	66.80	16.57	0.46	130.0	± 9.6 %
		Y	5.49	66.95	16.72		130.0	
		Z	5.43	66.76	16.55		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.50	66.97	16.65	0.46	130.0	± 9.6 %
		Y	5.51	67.14	16.81		130.0	
		Z	5.46	66.96	16.64	1	130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.38	66.52	16.31	0.46	130.0	± 9.6 %
		Y	5.39	66.70	16.48	<u>├───</u> ─────	120.0	
·		Z	5.33	66.49	16.48	·	130.0	· · · · ·
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.58	66.73	16.48	0.46	130.0 130.0	± 9.6 %
		Y	5.59	66.90	16.64	·	130.0	
		Z	5.52	66.69	16.46		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.03	67.94	17.14	0.46	130.0	± 9.6 %
		Y	6.04	68.15	17.32	<u> </u>	130.0	<u> -</u>
		Z	5.94	67.84	17.08	[	130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.70	66.70	16.37	0.46	130.0	± 9.6 %
		Y	5.71	66.85	16.51		130.0	
		Z	5.66	66.67	16.35		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.98	67.34	16.65	0.46	130.0	± 9.6 %
		Y	5.99	67.51	16.80		130.0	-
		Z	5.93	67.32	16.64		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.76	66.88	16.35	0.46	130.0	± 9.6 %
		Y	5.78	67.04	16.51		130.0	
10000		Z	5.72	66.82	16.32		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.85	66.94	16.38	0.46	130.0	± 9.6 %
		Y	5.86	67.11	16.54		130.0	
40000		Z	5.81	66.93	16.37		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.47	68.96	17.39	0.46	130.0	± 9.6 %
		Y	6.50	69.20	17.59		130.0	
10001		Z	6.37	68.78	17.30		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.25	68.39	17.28	0.46	130.0	± 9.6 %
		Ý	6.25	68.53	17.42		130.0	
		Z	6.15	68.22	17.20		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.93	67.33	16.77	0.46	130.0	± 9.6 %
		Y	5.93	67.47	16.90		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.89	67.32	16.77		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.83	67.02	16.45	0.46	130.0	± 9.6 %
<u>_</u> <u>_</u>		Y	5.83	67.17	16.59		130.0	
		Z	5.76	66.93	16.40		130.0	·
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.80	67.01	16.50	0.46	130.0	±9.6 %
·		Y	5.81	67.15	16.64		130.0	
40005		Z	5.75	66.94	16.47		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.71	66.44	15.97	0.46	130.0	±9.6 %
		Ý	5.72	66.63	16.15		130.0	··
40000		Z	5.64	66.35	15.92		130.0	······································
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.12	67.11	16.48	0.46	130.0	± 9.6 %
		Y	6.13	67.25	16.62		130.0	
10007		Z	6.09	67.07	16.46		130.0	`
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.30	67.52	16.67	0.46	130.0	±9.6 %
		Y	6.31	67.68	16.81		130.0	
10620		Z	6.26	67.49	16.65		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.30	67.50	16.63	0.46	130.0	± 9.6 %
<u> </u>		Ŷ	6.31	67.65	16.78		130.0	· · · · · ·
		Z	6.26	67.46	16.61			

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.28	67.46	16.65	0.46	130.0	± 9.6 %
		Y	6.28	67.59	16.79		130.0	
		Z	6.23	67.38	16.62		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.30	67.54	16.64	0.46	130.0	± 9.6 %
		Y	6.31	67.70	16.79		130.0	
		Z	6.24	67.43	16.59		130.0	
10641- AAA	IEEE 1602.11ac WIFI (160MHz, MCS5, 90pc duly cycle)	X	6.31	67.32	16.55	0.46	130.0	± 9.6 %
		Y	6.32	67.48	16.70		130.0	
		Z	6.28	67.31	16.54		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.36	67.59	16.84	0.46	130.0	± 9.6 %
		Y	6.36	67.71	16.97		130.0	
		Z	6.31	67.52	16.81	1	130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.20	67.31	16.61	0.46	130.0	± 9.6 %
		Y	6.21	67.47	16.77		130.0	
		Z	6.16	67.26	16.58		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.42	67.97	16.97	0.46	130.0	±9.6 %
		Ŷ	6.43	68.15	17.13		130.0	
		Z	6.34	67.82	16.88		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.93	69.02	17.44	0.46	130.0	± 9.6 %
		Y	6.97	69.27	17.65		130.0	
		Z	6.82	68.81	17.34		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	47.20	124.94	41.34	9.30	60.0	± 9.6 %
		Y	100.00	143.87	46.72		60.0	
		Z	42.87	123.31	40.85		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	47.80	126.16	41.84	9.30	60.0	± 9.6 %
		Y	100.00	144.94	47.17	[	60.0	
		Z	42.80	124.20	41.27	[	60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.75	63.57	11.13	0.00	150.0	± 9.6 %
		Y	0.80	64.99	12.02	1	150.0	
		Z	0.70	63.11	10.54		150.0	

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

#### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





С

S Schweizerischer Kalibrierdienst

- Service suisse d'étalonnage
- Servizio svizzero di taratura
- Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client	PC Test	
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Certificate No: ES	3-3318 Feb	17
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13-01-2017

	<b>RATION C</b>		
<ul> <li>Is a second construction of the second construction</li> </ul>	医马马斯氏 医马达氏试验检白白 医结核的 化乙基	and the second second second second second second second second second second second second second second second	and a second second second second second second second second second second second second second second second

ES3DV3 - SN:3318

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

February 10, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature	
Calibrated by:	Claudio Leubler	Laboratory Technician		
			YES	전철관관학
Approved by:	Kalja Pokovic	Technical Manager	PORC	
			10.000	
			Issued: February 13, 2017	7
This calibration certificat	e shall not be reproduced except in full	without written approval of the lab	oratory.	

#### Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst

C Service suisse d'étalonnage

Accreditation No.: SCS 0108

- S Servizio svizzero di taratura
- Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:	
TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., 9 = 0 is normal to probe axis
Connector Angle	information used in DARY system to align proba songer V to the robot apardinate system

#### Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx, y, z are only intermediate values, i.e., the uncertainties of NORMx, y, z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe ES3DV3

## SN:3318

Manufactured: Calibrated:

January 10, 2012 February 10, 2017

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.11	0.89	1.24	± 10.1 %
DCP (mV) <sup>B</sup>	104.2	104.2	103.5	

#### **Modulation Calibration Parameters**

UID	Communication System Name		Α	В	С	D	VR	Unc <sup>E</sup>
			dB	dB√μV		dB	m∨	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	207.9	±3.3 %
		Y	0.0	0.0	1.0		188.2	
		Z	0.0	0.0	1.0	1	201.5	

Note: For details on UID parameters see Appendix.

#### **Sensor Model Parameters**

	C1	C2	α	T1	T2	Т3	T4	T5	Т6
	fF	fF	V⁻¹	ms.V⁻²	ms.V⁻¹	ms	V-2	V <sup>-1</sup>	
Х	63.42	453.7	35.34	29.18	2.667	5.1	0.885	0.445	1.01
Y	50.41	352.5	33.95	25.81	1.921	5.062	1.77	0.176	1.007
Z	62.08	445.4	35.38	29.73	3.23	5.1	0.803	0.494	1.012

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.73	6.73	6.73	0.43	1.53	± 12.0 %
835	41.5	0.90	6.47	6.47	6.47	0.57	1.36	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.74	1.19	± 12.0 %
1900	40.0	1.40	5.31	5.31	5.31	0.60	1.33	± 12.0 %
2300	39.5	1.67	4.95	4.95	4.95	0.60	1.42	± 12.0 %
2450	39.2	1.80	4.74	4.74	4.74	0.71	1.28	± 12.0 %
2600	39.0	1.96	4.53	4.53	4.53	0.75	1.35	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

The ConvF uncertainty for indicated target tissue parameters. <sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

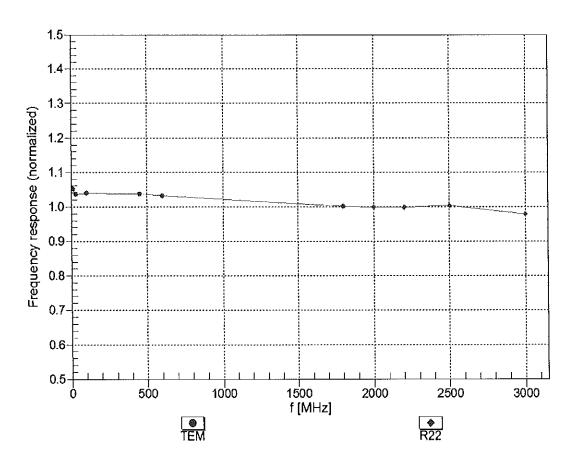
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.50	6.50	6.50	0.62	1.33	± 12.0 %
835	55.2	0.97	6.37	6.37	6.37	0.66	1.31	± 12.0 %
1750	53.4	1.49	5.12	5.12	5.12	0.42	1.72	± 12.0 %
1900	53.3	1.52	4.96	4.96	4.96	0.67	1.38	± 12.0 %
2300	52.9	1.81	4.70	4.70	4.70	0.77	1.22	± 12.0 %
2450	52.7	1.95	4.55	4.55	4.55	0.75	1.17	± 12.0 %
2600	52.5	2.16	4.34	4.34	4.34	0.80	1.05	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

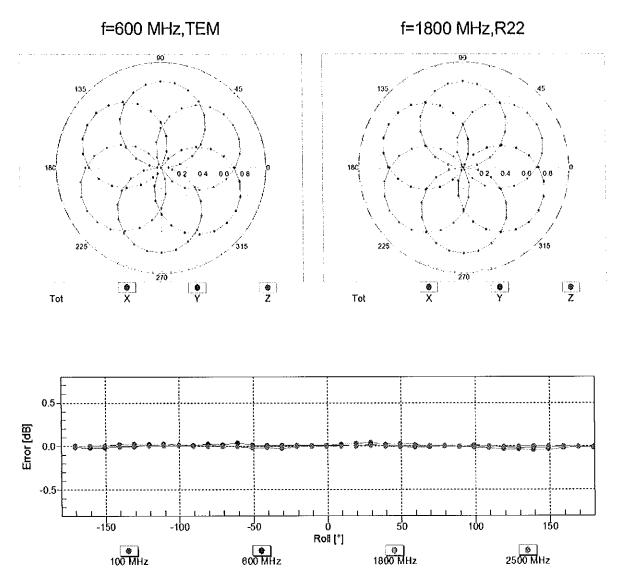
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



### Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

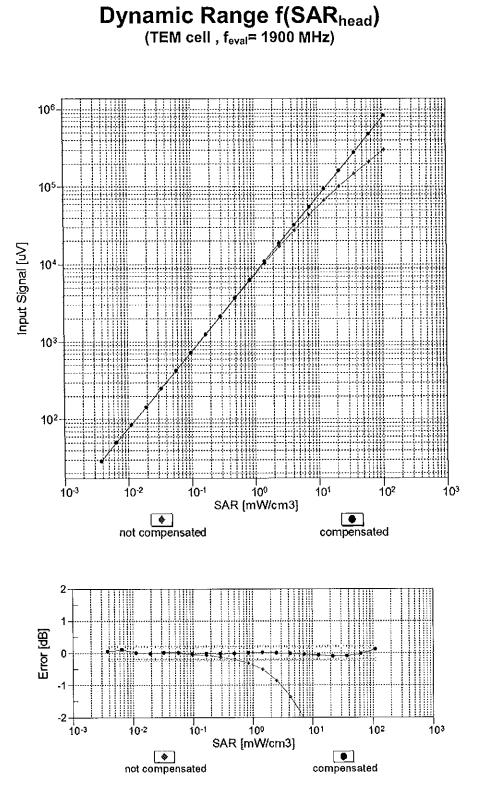
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

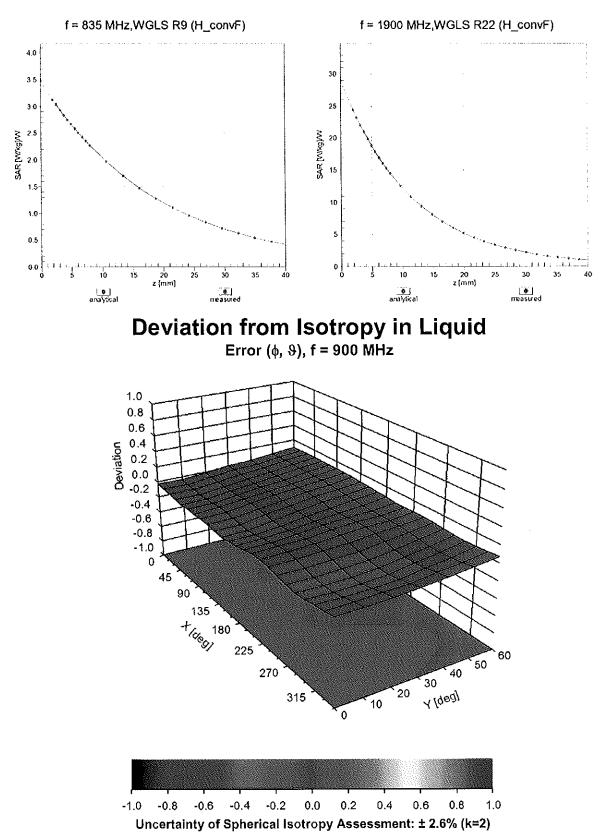
February 10, 2017



#### Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Certificate No: ES3-3318\_Feb17

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**Conversion Factor Assessment** 

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	79.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

#### **Appendix: Modulation Calibration Parameters**

0         CW         X         0.00         0.00         1.00         0.00         207.9         ± 3.3 %           1         X         0.00         1.00         1.00         201.5         1.000         201.5         1.000         20.62         10.00         25.0         ± 9.6 %           CAA         Y         10.65         83.39         20.62         10.00         25.0         ± 9.6 %           CAA         Y         1.46         61.26         20.29         25.0         ± 9.6 %           CAB         Y         1.14         69.56         16.19         25.0         ± 9.6 %           CAB         Y         1.14         69.56         16.84         150.0         ± 9.6 %           CAB         Z         1.10         67.80         16.84         0.41         150.0         ± 9.6 %           CAB         Z         1.33         65.69         16.25         150.0         ± 9.6 %           CAB         OPDM, 6 Mpps)         Y         5.21         67.34         17.37         150.0         ± 9.6 %           CAB         OPDM, 6 Mpps)         Y         6.521         67.34         17.37         150.0         ± 9.6 %	UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
Z         0.00         1.00         201.5           CAA         Y         10.65         83.39         20.62         10.00         25.0         ± 9.6 %           CAA         Y         8.27         77.95         11.10         25.0         ± 9.6 %           CAB         Y         1.26         70.62         17.25         0.00         150.0         ± 9.6 %           CAB         Y         1.14         60.56         16.54         15.49         150.0         ± 9.6 %           CAB         Mbps)         Z         1.10         67.80         15.49         150.0         ± 9.6 %           CAB         Mbps)         Y         1.31         65.69         16.25         150.0         ± 9.6 %           CAB         OFDM, 6 Mps)         Y         5.21         67.34         17.37         150.0         ± 9.6 %           10013-         IEEE 802.11g WiF12.4 GHz (DSSS-         X         5.21         67.34         17.37         150.0         ± 9.6 %           CAB         OFDM, 6 Msps)         X         30.30         102.62         28.60         9.39         50.0         ± 9.6 %           DAC         Y         85.74         117.41         31.25 </td <td>0</td> <td>CW</td> <td>Х</td> <td></td> <td></td> <td></td> <td>0.00</td> <td></td> <td>± 3.3 %</td>	0	CW	Х				0.00		± 3.3 %
10010- CAA         SAR Validation (Square, 100ms, 10ms)         X         10.65         83.39         20.82         10.00         25.0         ± 9.6 %           CAA         Z         9.41         81.16         9         25.0         ± 9.6 %           10011-         UMTS-FDD (WCDMA)         X         1.26         70.62         17.26         0.00         150.0         ± 9.6 %           CAB         Y         1.14         60.56         16.54         150.0         ± 9.6 %           10012-         IEEE 802.11b WIFI 2.4 GHz (DSSS, 1         X         1.36         66.00         16.84         0.41         150.0         ± 9.6 %           CAB         Y         1.31         65.69         16.25         150.0         ± 9.6 %           I0013-         IEEE 802.11g WIFI 2.4 GHz (DSSS-         X         6.21         67.33         17.37         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.03         67.33         17.37         150.0         ± 9.6 %           DAC         SSM-FDD (TDMA, GMSK, TN 0)         X         25.91         9.30         50.0         ± 9.6 %           DAC         SSM-FDD (TDMA, GMSK, TN 0-1)         X         80.30         102.4         <									
CAA         Y         B.27         79.56         18.19         Z60         Z60           ID011-         Z         9.41         81.26         20.29         26.0         150.0         ±9.6%           CAB         Y         1.14         69.56         16.54         150.0         ±9.6%           CAB         Y         1.14         69.56         16.54         150.0         ±9.6%           I0012-         IEEE 802.11b WIF12.4 GHz (DSSS, 1         X         1.33         65.69         16.25         150.0         ±9.6%           CAB         Mbps)         Y         1.31         65.69         16.25         150.0         ±9.6%           CAB         OFDM, 6 Mpps)         Y         5.21         67.34         17.59         1.46         150.0         ±9.6%           CAB         OFDM, 6 Mpps)         Y         5.33         67.33         17.37         150.0         ±9.6%           DAC         Z         5.21         67.34         17.41         31.25         50.0         ±9.6%           DAC         Y         85.74         117.41         31.25         50.0         ±9.6%           DAC         Y         50.57         10.04         29	10010	CAR Validation (Cause 400ms 40ms)					40.00		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	CAA	SAR validation (Square, Tooms, Toms)		10.65	83.39	20.62	10.00	25.0	±9.6%
10011.         UMTS-FDD (WCDMA)         X         1.26         70.62         17.25         0.00         150.0         ± 9.6 %           CAB         Y         1.14         69.66         16.54         150.0           10012-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.36         66.00         16.64         0.41         150.0         ± 9.6 %           CAB         Y         1.31         65.69         16.25         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.03         67.34         17.37         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.03         67.34         17.47         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.37         117.41         31.25         50.0         ± 9.6 %           DAC         Z         16.72         92.33         25.42         50.0         ± 9.6 %           DAC         Y         55.57         110.04         2.942         50.0         ± 9.6 %           DAC         Y         55.57         100.04         2.942         50.0         ± 9.6 %           DAC         Y         55.57         100.									
CAB         Y         1.14         69.56         16.54         160.0           10012- CAB         IEEE 802.11b WIFI 2.4 GHz (DSSS, 1         X         1.36         66.00         16.64         0.41         150.0         ± 9.6 %           CAB         Mpps)         Y         1.31         65.99         16.25         150.0         ± 9.6 %           CAB         Y         1.33         65.14         15.54         150.0         ± 9.6 %           10013-         IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 6 Mpps)         Y         5.03         67.33         17.37         150.0           10021-         GSM-FDD (TDMA, GMSK)         X         30.30         102.62         28.60         9.39         50.0         ± 9.6 %           DAC         Y         85.74         117.41         31.25         50.0         ± 9.6 %           DAC         Y         85.74         117.41         31.25         50.0         ± 9.6 %           DAC         Z         15.58         90.96         27.42         50.0         ± 9.6 %           DAC         Z         15.58         90.96         25.42         50.0         ± 9.6 %           DAC         Y         100.00         116.42 <t< td=""><td>40044</td><td></td><td></td><td></td><td></td><td></td><td>0.00</td><td></td><td></td></t<>	40044						0.00		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
10012.         IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps)         X         1.36         66.00         16.64         0.41         150.0         ± 9.6 %           10013- CAB         IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 6 Mbps)         Y         1.31         65.69         16.25         160.0           10013- CAB         IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 6 Mbps)         Y         5.01         67.33         17.37         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.03         67.33         17.37         150.0         ± 9.6 %           CAB         OFDM, 6 Mbps)         Y         5.03         67.33         17.37         150.0         ± 9.6 %           DAC         Z         5.21         67.28         17.47         150.0         ± 9.6 %           DAC         Y         85.74         117.41         31.25         50.0         ± 9.6 %           DAC         Y         63.57         110.04         29.42         50.0         ± 9.6 %           DAC         Y         53.57         110.04         29.42         50.0         ± 9.6 %           DAC         Y         100.00         116.42         29.08         60.0         ± 9.6 %           DAC <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Y         1.31         65.69         18.25         150.0           10013- CAB         IEEE 802.11g WIF1 2.4 GHz (DSSS- OFDM, 6 Mpps)         X         5.21         67.34         17.59         1.46         150.0         ± 9.6 %           CAB         Y         5.03         67.33         17.37         150.0         ± 9.6 %           CAB         Y         5.03         67.33         17.47         150.0         ± 9.6 %           DO21- DAC         GSM-FDD (TDMA, GMSK)         X         30.30         10262         28.60         9.39         50.0         ± 9.6 %           DAC         Y         85.74         117.41         31.25         50.0         10023-           DAC         Z         16.72         92.33         25.82         50.0         10024-           DAC         Y         53.57         110.04         29.42         50.0         10024-           DAC         Y         100.00         116.42         29.08         60.0         12.6 %           DAC         Y         100.00         116.42         29.08         60.0         12.67         50.0           DAC         Y         14.02         19.37         37.05         50.0         10.00 </td <td>10012- CAB</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.41</td> <td></td> <td>± 9.6 %</td>	10012- CAB						0.41		± 9.6 %
10013- OCAB         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)         X         5.21         67.34         17.59         1.46         150.0         ± 9.6 %           CAB         V         6.03         67.33         17.37         150.0          ± 9.6 %           I0021- DAC         GSM-FDD (TDMA, GMSK)         X         30.30         102.62         28.60         9.39         50.0         ± 9.6 %           I0023- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.92         99.89         27.85         9.57         50.0         ± 9.6 %           I0023- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ± 9.6 %           I0024- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         118.72         31.24         6.56         60.0         ± 9.6 %           I0024- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         118.47         30.44         65.0         0.0           I0025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           I0026- DAC         Y         14.00         118.47			Y	1.31	65.69	16.25		150.0	
CAB         OFDM, 6 Mbps)         Y         5.03         67.33         17.37         150.0           10021-         GSM-FDD (TDMA, GMSK)         X         30.30         102.62         28.60         9.39         50.0         ± 9.6 %           DAC         Y         85.74         117.41         31.52         50.0         ± 9.6 %           10023-         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ± 9.6 %           DAC         Y         53.57         110.04         29.42         50.0         ± 9.6 %           DAC         Y         15.58         90.96         25.42         50.0         ± 9.6 %           DAC         Y         100.00         116.42         29.08         60.0         ± 9.6 %           DAC         Y         100.00         116.42         29.08         60.0         ± 9.6 %           DAC         Y         140.71         30.44         60.0         ± 9.6 %           DAC         Y         144.02         98.31         37.05         50.0         ± 9.6 %           DAC         Y         14.02         98.31         37.05         60.0         ± 9.6 %					65.14	15.84		150.0	
Z         5.21         67.28         17.47         150.0           10021- DAC         GSM-FDD (TDMA, GMSK)         X         30.30         102.62         28.60         9.39         50.0         ±9.6 %           10023- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ±9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ±9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0.1)         X         100.00         119.72         31.24         6.56         60.0         ±9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0.1)         X         100.00         118.72         31.24         6.56         60.0         ±9.6 %           10025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ±9.6 %           10026- DAC         Y         14.02         98.31         37.05         50.0         ±9.6 %           10026- DAC         Y         14.02         98.31         37.14         9.56         60.0         ±9.6 %           10026- DAC	10013- CAB						1.46		± 9.6 %
10021- DAC         GSM-FDD (TDMA, GMSK)         X         30.30         102.62         28.60         9.39         50.0         ± 9.6 %           022- DAC         Z         16.72         92.33         25.82         50.0          50.0         ± 9.6 %           023- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ± 9.6 %           042         Y         53.57         110.04         29.42         50.0         ± 9.6 %           0424         GPRS-FDD (TDMA, GMSK, TN 0.1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0.1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           04024         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           DAC         Y         14.02         98.31         37.05         50.0         ± 9.6 %           DAC         Y         14.02         98.31         37.05         50.0         ± 9.6 %           DAC         Y         1									
Y         85.74         117.41         31.25         50.0           2         16.72         92.33         25.82         50.0           DAC         Y         53.57         110.04         29.42         50.0           DAC         Y         53.57         110.04         29.42         50.0           10024-         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           10024-         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         116.42         29.08         60.0         ± 9.6 %           DAC         Y         100.00         116.42         29.08         60.0         ± 9.6 %           DAC         Y         100.00         116.42         29.08         60.0         ± 9.6 %           DAC         Y         140.02         96.31         37.05         50.0         ± 9.6 %           DAC         Z         20.65         107.68         41.04         50.0         ± 9.6 %           DAC         Z         17.09         100.87         34.58         60.0         ± 9.6 %           DAC         Y         17.09         100.87         34.58	10021-	GSM-FDD (TDMA, GMSK)					9.39		±9.6 %
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0/10		Y	85.74	117.41	31.25		50.0	
10023- DAC         GPRS-FDD (TDMA, GMSK, TN 0)         X         25.90         99.89         27.85         9.57         50.0         ± 9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           10025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           10025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1)         X         22.74         107.18         37.14         9.56         60.0         ± 9.6 %           10026- DAC         EDGE-FDD (TDMA, 6MSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           0AC         GPRS-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           DAC		· · · · · · · · · · · · · · · · · · ·							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X		99.89	27.85	9.57		±9.6 %
10024- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1)         X         100.00         119.72         31.24         6.56         60.0         ± 9.6 %           0025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           10025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1)         X         22.74         107.18         37.14         9.56         60.0         ± 9.6 %           10027- DAC         EDGE-FDD (TDMA, 6MSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           10027- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2.3)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           10028- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2.3)         X         100.00         119.42         29.31         3.55         100.0         ± 9.6 %									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		GPRS-FDD (TDMA, GMSK, TN 0-1)					6.56		±9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	DAG		Y	100.00	116.42	29.08		60.0	
10025- DAC         EDGE-FDD (TDMA, 8PSK, TN 0)         X         21.22         110.03         42.06         12.57         50.0         ± 9.6 %           0AC         Y         14.02         98.31         37.05         50.0         50.0           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1)         X         22.74         107.18         37.14         9.56         60.0         ± 9.6 %           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1)         X         22.74         107.18         37.14         9.56         60.0         ± 9.6 %           10027- DAC         GPRS-FDD (TDMA, 6MSK, TN 0-1)         X         22.74         100.87         34.58         60.0         10.0         100.87         34.58         60.0         10.0         100.27         GPRS-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           0402         GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)         X         100.00         115.45         27.78         80.0         100.0         110.00         100.0         100.0         100.0         100.0         100.0         110.00         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0									
Z         20.65         107.68         41.04         50.0           10026- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1)         X         22.74         107.18         37.14         9.56         60.0         ± 9.6 %           0027- DAC         Y         17.09         100.87         34.58         60.0         100.0           10027- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           10028- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)         X         100.00         115.45         27.78         80.0           10028- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)         X         100.00         119.42         29.31         3.55         100.0         ± 9.6 %           10029- DAC         EDGE-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         115.85         27.21         100.0         100.0           10029- DAC         Z         103.00         119.09         29.37         100.0         ± 9.6 %           10029- DAC         Z         13.70         94.63         31.63         80.0         ± 9.6 %           10030- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH1)         X         100.00         118.80		EDGE-FDD (TDMA, 8PSK, TN 0)	X	21.22	110.03		12.57		± 9.6 %
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	. ·					<b>.</b>			
DAC         Y         17.09         100.87         34.58         60.0           10027- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           DAC         Y         100.00         115.45         27.78         80.0         ± 9.6 %           DAC         Y         100.00         115.45         27.78         80.0         ± 9.6 %           DAC         Y         100.00         115.45         27.78         80.0         ± 9.6 %           DAC         Y         100.00         119.07         30.22         80.0         ± 9.6 %           DAC         Y         100.00         115.85         27.21         100.0         ± 9.6 %           DAC         Y         100.00         115.85         27.21         100.0         ± 9.6 %           DAC         Y         100.00         115.85         27.21         100.0         ± 9.6 %           DAC         Y         100.00         115.85         30.38         80.0         ± 9.6 %           DAC         Y         11.33         91.85         30.38         80.0         ± 9.6 %           DAC         Y<	40000						0.50		10.0.04
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		EDGE-FDD (TDMA, 8PSK, TN 0-1)					9.56		±9.6%
10027- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2)         X         100.00         118.87         29.89         4.80         80.0         ± 9.6 %           MAC         Y         100.00         115.45         27.78         80.0         100.00         119.07         30.22         80.0         100.00         119.07         30.22         80.0         100.00         119.07         30.22         80.0         100.0         119.07         30.22         80.0         100.0         19.6 %         100.0         119.07         30.22         80.0         100.0         19.6 %         100.0         119.07         30.22         80.0         100.0         19.6 %         100.0         119.07         30.22         80.0         100.0         19.6 %         100.0         119.07         30.22         80.0         100.0         119.09         29.37         100.0         100.0         100.0         100.0         100.0         100.0         119.09         29.37         100.0         100.0         100.0         100.0         118.05         30.38         80.0         19.6 %         100.0         100.0         118.33         91.85         30.38         80.0         100.0         100.0         118.36         30.01         5.30         70.0									
Image: constraint of the second system of the sec		GPRS-FDD (TDMA, GMSK, TN 0-1-2)					4.80		± 9.6 %
Z         100.00         119.07         30.22         80.0           10028- DAC         GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)         X         100.00         119.42         29.31         3.55         100.0         ± 9.6 %           DAC         Y         100.00         115.85         27.21         100.0         ± 9.6 %           DAC         Z         100.00         115.85         27.21         100.0         ± 9.6 %           10029- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1-2)         X         14.97         97.57         32.79         7.80         80.0         ± 9.6 %           DAC         Y         11.33         91.85         30.38         80.0         ± 9.6 %           IO030- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH1)         X         100.00         118.36         30.01         5.30         70.0         ± 9.6 %           I0031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         114.74         27.76         70.0           I0031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         121.98         28.84         1.88         100.0         ± 9.6 %			Y	100.00	115.45	27.78		80.0	
DAC         Y         100.00         115.85         27.21         100.0           10029- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1-2)         X         14.97         97.57         32.79         7.80         80.0         ± 9.6 %           10030- DAC         Y         11.33         91.85         30.38         80.0         ± 9.6 %           10030- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH1)         X         100.00         118.36         30.01         5.30         70.0         ± 9.6 %           10031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         114.74         27.76         70.0           Y         100.00         114.74         27.76         70.0         ± 9.6 %           Y         100.00         118.80         30.46         70.0         ± 9.6 %           Y         100.00 <td></td> <td></td> <td>Z</td> <td></td> <td>119.07</td> <td>30.22</td> <td></td> <td>80.0</td> <td></td>			Z		119.07	30.22		80.0	
Z         100.00         119.09         29.37         100.0           10029- DAC         EDGE-FDD (TDMA, 8PSK, TN 0-1-2)         X         14.97         97.57         32.79         7.80         80.0         ± 9.6 %           AC         Y         11.33         91.85         30.38         80.0         ±         96 %           I0030- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH1)         X         100.00         118.36         30.01         5.30         70.0         ±         9.6 %           I0031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         114.74         27.76         70.0           I0031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         121.98         28.84         1.88         100.0         ± 9.6 %		GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)			E		3.55		± 9.6 %
10029- DAC       EDGE-FDD (TDMA, 8PSK, TN 0-1-2)       X       14.97       97.57       32.79       7.80       80.0       ± 9.6 %         AC       Y       11.33       91.85       30.38       80.0       ±       10020-         Image: DAC       Y       11.33       91.85       30.38       80.0       ±       96 %         Image: DAC       Y       11.33       91.85       30.38       80.0       ±       96 %         Image: DAC       Z       13.70       94.63       31.63       80.0       100.00       118.36       30.01       5.30       70.0       ± 9.6 %         Image: DAC       Y       100.00       114.74       27.76       70.0       100.00       118.80       30.46       70.0       100.00       118.80       30.46       70.0       100.00       121.98       28.84       1.88       100.00       ± 9.6 %         Image: DAC       Y       100.00       121.98       28.84       1.88       100.00       ± 9.6 %         Image: DAC       Y       100.00       117.00       26.24       100.00       100.0							<b> </b>		
DAC       Y       11.33       91.85       30.38       80.0         10030- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH1)       X       100.00       118.36       30.01       5.30       70.0       ± 9.6 %         10031- CAA       Y       100.00       114.74       27.76       70.0       ± 9.6 %         10031- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH3)       X       100.00       118.80       30.46       70.0         10031- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH3)       X       100.00       121.98       28.84       1.88       100.0       ± 9.6 %         10031- CAA       Y       100.00       121.98       28.84       1.00.0       ± 9.6 %	40000						7 00		+0.00
Z         13.70         94.63         31.63         80.0           10030- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH1)         X         100.00         118.36         30.01         5.30         70.0         ± 9.6 %           CAA         Y         100.00         114.74         27.76         70.0         ±         9.6 %           10031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         118.80         30.46         70.0           10031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         121.98         28.84         1.88         100.0         ± 9.6 %           V         100.00         117.00         26.24         100.0         ±         9.6 %		EUGE-FDD (1DMA, 8PSK, 1N 0-1-2)	ļ		1		1.80		19.0%
10030- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH1)       X       100.00       118.36       30.01       5.30       70.0       ± 9.6 %         Y       100.00       114.74       27.76       70.0       ±       100.00       114.74       27.76       70.0       ±       9.6 %         10031- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH3)       X       100.00       121.98       28.84       1.88       100.0       ±       9.6 %         10031- CAA       IEEE 802.15.1 Bluetooth (GFSK, DH3)       X       100.00       121.98       28.84       1.88       100.0       ±       9.6 %									
Y         100.00         114.74         27.76         70.0           Z         100.00         118.80         30.46         70.0           10031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         121.98         28.84         1.88         100.0         ± 9.6 %		IEEE 802.15.1 Bluetooth (GFSK, DH1)				1	5.30		± 9.6 %
Z         100.00         118.80         30.46         70.0           10031- CAA         IEEE 802.15.1 Bluetooth (GFSK, DH3)         X         100.00         121.98         28.84         1.88         100.0         ± 9.6 %           V         100.00         117.00         26.24         100.00         100.0			Y	100.00	114.74	27.76		70.0	
CAA         Y         100.00         117.00         26.24         100.0			Z	100.00	118.80	30.46			
		IEEE 802.15.1 Bluetooth (GFSK, DH3)					1.88		± 9.6 %
		-							1

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10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	128.67	30.50	1.17	100.0	± 9.6 %
		Y	100.00	122.90	27.66	<u> </u>	100.0	
		z	100.00	124.38	28.87		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	24.23	102.94	29.00	5.30	70.0	± 9.6 %
		Y	23.03	100.70	27.25	†	70.0	1
		Z	13.78	92.43	25.72		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	11.07	94.32	25.04	1.88	100.0	± 9.6 %
		Y	10.51	92.09	23.22		100.0	
		Z	6.22	84.45	21.59		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	5.82	86.43	22.33	1.17	100.0	± 9.6 %
		Y	5.46	84.67	20.69		100.0	
40000		Z	3.82	79.09	19.43		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	30.87	107.24	30.28	5.30	70.0	± 9.6 %
		<u>Y</u>	31.94	106.09	28.82		70.0	
10037-		Z	15.75	94.83	26.54		70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	10.70	93.84	24.85	1.88	100.0	± 9.6 %
		Y	9.44	90.62	22.74		100.0	
40000		Ζ	6.06	84.12	21.44		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	6.09	87.40	22.75	1.17	100.0	± 9.6 %
		Y	5.73	85.66	21.12		100.0	
10039-		Z	3.92	79.69	19.73		100.0	
CAB	CDMA2000 (1xRTT, RC1)	х	2.51	76.10	18.44	0.00	150.0	± 9.6 %
- ·		Y	2.58	77.34	18.13		150.0	
40040		Z	1.93	71.68	16.25		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	×	100.00	118.55	30.95	7.78	50.0	± 9.6 %
		Y	100.00	115.26	28.77		50.0	
10011		Z		101.01	26.83		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.01	122.84	6.61	0.00	150.0	± 9.6 %
		Y	0.00	101.52	0.76		150.0	
		Ζ	0.01	121.65	1.51		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	12.97	86.24	25.23	13.80	25.0	± 9.6 %
<u> </u>		Y	16.21	90.42	25.53		25.0	
40040		Ζ	11.00	82.40	24.22		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	16.11	91.33	25.58	10.79	40.0	± 9.6 %
		Y	21.17	95.34	25.70		40.0	
10050		Z	12.51	86.41	24.27		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	14.93	90.68	26.04	9.03	50.0	± 9.6 %
		Y	15.30	90.91	25.15		50.0	
40050		Z	12.28	86.39	24.64		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	10.77	90.92	29.72	6.55	100.0	± 9.6 %
		Y	8.37	86.08	27.58		100.0	
40050		Ζ	10.19	88.91	28.83		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	х	1.56	68.48	17.84	0.61	110.0	±9.6 %
		Y	1.47	67.87	17.29		110.0	
40000		Z	1.52	67.28	16.88		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	133.74	34.89	1.30	110.0	± 9.6 %
		Y	100.00	132.17	33.87		110.0	
		Z	100.00	130.92	33.73		110.0	

10061- CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps)	X	16.46	105.21	30.01	2.04	110.0	± 9.6 %
		Y	11.67	99.37	27.84		110.0	
		Z	8.39	92.33	25.80		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	Х	4.94	67.14	16.89	0.49	100.0	± 9.6 %
		Y	4.78	67.19	16.74		100.0	
		Z	4.92	67.01	16.73		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.98	67.31	17.04	0.72	100.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.81	67.33	16.86		100.0	
		Z	4.96	67.18	16.88		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.32	67.65	17.30	0.86	100.0	± 9.6 %
·		Y	5.11	67.60	17.09		100.0	
40005		Z	5.31	67.54	17.16		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.22	67.69	17.47	1.21	100.0	± 9.6 %
		Y	5.01	67.59	17.23		100.0	
10000		Z	5.22	67.59	17.34		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.28	67.82	17.71	1.46	100.0	± 9.6 %
		Y	5.05	67.68	17.43		100.0	
40007		Z	5.28	67.74	17.58		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.59	67.95	18.15	2.04	100.0	± 9.6 %
		Y	5.36	67.86	17.87		100.0	
		Z	5.61	67.93	18.06		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	5.74	68.35	18.54	2.55	100.0	± 9.6 %
		Y	5.47	68.07	18.17		100.0	
		Z	5.77	68.35	18.47		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	Х	5.82	68.26	18.71	2.67	100.0	± 9.6 %
		Y	5.55	68.05	18.34		100.0	
		Z	5.85	68.30	18.66		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	Х	5.35	67.58	17.97	1.99	100.0	± 9.6 %
		Y	5.16	67.52	17.72		100.0	
		Z	5.37	67.56	17.88		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.42	68.17	18.31	2.30	100.0	± 9.6 %
		Y	5.20	68.01	18.01		100.0	
		Z	5.45	68.15	18.22		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.56	68.52	18.74	2.83	100.0	± 9.6 %
		Y	5.32	68.31	18.39		100.0	
		Z	5.60	68.54	18.67	[	100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.59	68.60	19.01	3.30	100.0	±9.6 %
		Y	5.35	68.34	18.61		100.0	1
10055		Z	5.65	68.66	18.95		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.76	69.14	19.54	3.82	90.0	± 9.6 %
		Y	5.46	68.68	19.02		90.0	
		Z	5.83	69.24	19.50		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.75	68.91	19.64	4.15	90.0	±9.6 %
		Y	5.48	68.50	19.14		90.0	
		Z	5.84	69.05	19.63		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.79	69.00	19.75	4.30	90.0	± 9.6 %
		Y	5.52	68.61	19.25		90.0	
		Z	5.89	69.15	19.74		90.0	

10081-	CDMA2000 (1xRTT, RC3)	X	1.18	70.18	15.67	0.00	150.0	± 9.6 %
CAB		<u> </u>						
<u></u>		Y	1.02	69.06	14.35		150.0	ļ
10082-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	Z X	0.97 2.27	66.70 64.65	13.60 9.36	4.77	150.0 80.0	± 9.6 %
CAB	DQPSK, Fullrate)	<u> </u>						
		Y	1.70	62.49	7.53		80.0	
10090-	GPRS-FDD (TDMA, GMSK, TN 0-4)	Z	2.45 100.00	65.05	9.86	0.50	80.0	
DAC				119.81	31.30	6.56	60.0	± 9.6 %
		Y Z	100.00 65.88	116.49	29.13	· · ·	60.0	
10097-	UMTS-FDD (HSDPA)	X	1.98	114.04 68.72	30.31 16.60	0.00	60.0 150.0	± 9.6 %
CAB						0.00		I 9.0 %
		Y Z	<u>    1.94    </u> 1.87	68.99 67.43	16.45 15.70		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	X	1.94	68.72	16.59	0.00	150.0 150.0	1069/
CAB		Y	1.94		16.42	0.00		± 9.6 %
		Z	1.83	68.95 67.41			150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	22.60	106.99		9.56	150.0 60.0	± 9.6 %
DAC						9.00		19.0 %
		Y	17.07	100.80	34.55		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	Z	19.45 3.50	102.29 71.91	35.39 17.47	0.00	60.0	1000
CAC	MHz, QPSK)					0.00	150.0	± 9.6 %
		Y	3.32	71.58	17.29		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	Z X	3.29	70.63	16.73	0.00	150.0	
CAC	MHz, 16-QAM)		3.47	68.41	16.46	0.00	150.0	± 9.6 %
		Y	3.33	68.22	16.28		150.0	
10102-		Z	3.39	67.84	16.04		150.0	
CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.56	68.27	16.50	0.00	150.0	± 9.6 %
		Y	3.43	68.17	16.36		150.0	
10103-		Z	3.49	67.75	16.11		150.0	
CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.90	78.76	21.58	3.98	65.0	±9.6 %
		Y	8.47	78.68	21.35		65.0	
10101	1 TC TOD (00 CDM4, 4000) DD 60	Z	8.34	77.15	20.86		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.80	77.42	21.93	3.98	65.0	±9.6 %
		Y	8.21	76.81	21.41		65.0	
10105		Z	8.69	76.77	21.58		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.68	74.71	21.04	3.98	65.0	± 9.6 %
		Y	7.62	75.33	21.07		65.0	
10108-		Z	7.87	74.75	20.97		65.0	
CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.09	71.08	17.31	0.00	150.0	±9.6 %
		Y	2.90	70.80	17.14		150.0	
10100		Z	2.90	69.83	16.56		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	×	3.14	68.25	16.42	0.00	150.0	±9.6 %
		Y	2.99	68.15	16.24		150.0	
10140		Z	3.05	67.61	15.95		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.54	70.21	17.07	0.00	150.0	± 9.6 %
		Y	2.36	69.95	16.81		150.0	·
10111		Z	2.39	68.91	16.24		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.84	68.87	16.76	0.00	150.0	± 9.6 %
		Y	2.74	69.25	16.71	······································	150.0	<u> </u>
		Z	2.73	68.00	16.14		150.0	1

10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.25	68.12	16.42	0.00	150.0	± 9.6 %
		Y	3.11	68.10	16.28		150.0	
		Z	3.17	67.53	15.98		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.99	68.87	16.82	0.00	150.0	± 9.6 %
		Y	2.90	69.34	16.82		150.0	
		Z	2.88	68.07	16.24		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.29	67.49	16.64	0.00	150.0	± 9.6 %
		Y	5.18	67.60	16.59		150.0	
		Z	5.26	67.32	16.47		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.67	67.81	16.80	0.00	150.0	± 9.6 %
		Y	5.49	67.77	16.68		150.0	
		Z	5.63	67.65	16.65		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.43	67.78	16.70	0.00	150.0	± 9.6 %
		Y	5.29	67.82	16.63		150.0	
		Z	5.39	67.60	16.54		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.30	67.53	16.68	0.00	150.0	±9.6 %
		Y	5.15	67.48	16.55		150.0	
		Z	5.27	67.35	16.51		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.73	67.95	16.88	0.00	150.0	± 9.6 %
		Y	5.58	67.98	16.80		150.0	
		Z	5.71	67.82	16.74		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	Х	5.40	67.74	16.70	0.00	150.0	± 9.6 %
		Y	5.26	67.75	16.61		150.0	
		Z	5.37	67.56	16.53		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.61	68.27	16.43	0.00	150.0	±9.6 %
		Y	3.47	68.16	16.27		150.0	
		Z	3.54	67.76	16.04		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.73	68.28	16.55	0.00	150.0	±9.6 %
		Y	3.59	68.25	16.43		150.0	
		Z	3.65	67.79	16.17		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.33	70.29	16.97	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.16	70.21	16.65		150.0	
		Z	2.16	68.78	16.01		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.74	69.72	16.76	0.00	150.0	± 9.6 %
		Y	2.67	70.41	16.67		150.0	
		Z	2.59	68.55	15.97		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.56	67.80	15.39	0.00	150.0	± 9.6 %
		Y	2.37	67.67	14.84		150.0	
		Z	2.45	66.93	14.76		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	×	1.73	69.15	15.06	0.00	150.0	± 9.6 %
		Y	1.44	67.55	13.30		150.0	
		Z	1.51	66.84	13.63		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.00	75.69	17.38	0.00	150.0	± 9.6 %
		Y	2.68	70.09	13.45		150.0	
		Z	3.36	72.93	16.09		150.0	
10147-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	5.35	79.98	19.20	0.00	150.0	± 9.6 %
	MHz, 64-QAM)							
CAD	MHz, 64-QAM)	Y	3.76	74.33	15.35		150.0	

10140	LTE FOD (00 FOMA FOR OD AN AND			T	<b>—</b>			
10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.15	68.30	16.47	0.00	150.0	± 9.6 %
010			0.00	00.00	40.00			
		Y Z	3.00	68.22	16.29		150.0	· · · · · · · · · · · · · · · · · · ·
10150-	1.TE-FDD (SC-FDMA, 50% RB, 20 MHz,	X	3.06	67.66	15.99	0.00	150.0	
CAC	64-QAM)		3.26	68.16	16.46	0.00	150.0	± 9.6 %
		Y	3.12	68.16	16.32		150.0	
		Z	3.18	67.57	16.02		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.51	81.17	22.64	3.98	65.0	± 9.6 %
		Y	9.26	81.54	22.52		65.0	
		Z	9.00	79.66	21.96		65.0	
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.48	77.76	21.88	3.98	65.0	± 9.6 %
		Y	7.81	76.97	21.19		65.0	
		Z	8.33	76.97	21.46		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.81	78.38	22.46	3.98	65.0	± 9.6 %
		Y	8.28	78.00	21.97		65.0	
		z	8.64	77.56	22.02		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.61	70.67	17.35	0.00	150.0	± 9.6 %
		Y	2.43	70.50	17.14		150.0	
		Ż	2.44	69.28	16.48		150.0	
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.84	68.87	16.77	0.00	150.0	± 9.6 %
·		Y	2.74	69.26	16.73		150.0	
		Z	2.73	68.00	16.15		150.0	l
10156-	LTE-FDD (SC-FDMA, 50% RB, 5 MHz,	X	2.21	70.73	17.05	0.00	150.0	± 9.6 %
CAD	QPSK)					0.00		19.0 %
		Y Z	2.04	70.63	16.63		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.02 2.42	68.93 68.64	15.94 15.67	0.00	150.0 150.0	± 9.6 %
UND		Y	0.05	00.50	45.00			
			2.25	68.58	15.08	<u> </u>	150.0	
10158-	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	Z	2.28	67.47	14.87	0.00	150.0	
CAD	64-QAM)	X	2.99	68.92	16.86	0.00	150.0	±9.6 %
·		Y	2.90	69.42	16.87		150.0	
40450		Z	2.89	68.11	16.28		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.54	69.05	15.93	0.00	150.0	± 9.6 %
		Y	2.38	69.17	15.42		150.0	
		Z	2.38	67.83	15.11		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.02	69.72	16.97	0.00	150.0	± 9.6 %
		Y	2.87	69.64	16.82		150.0	
		Z	2.89	68.80	16.35		150.0	
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.15	68.06	16.41	0.00	150.0	± 9.6 %
		Y	3.02	68.13	16.28		150.0	
		Ζ	3.07	67.45	15.95		150.0	
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.25	68.09	16.46	0.00	150.0	± 9.6 %
		Y	3.13	68.25	16.37		150.0	
·		Z	3.18	67.52	16.02		150.0	· · · · ·
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.03	70.84	19.96	3.01	150.0	±9.6 %
		Y	3.83	71.14	19.84	· · · · ·	150.0	· · · · · · · · · · · · · · · · · · ·
		Z	4.01	70.55	19.74	·	150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.25	74.55	20.76	3.01	150.0	± 9.6 %
CAD		. E					1	
		Y	5.14	75.60	20.85		150.0	

10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.75	76.52	21.89	3.01	150.0	± 9.6 %
		Y	6.00	78.90	22.58		150.0	<u> </u>
· .		Z	5.63	75.85	21.52		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.71	72.74	20.84	3.01	150.0	± 9.6 %
		Y	3.37	72.07	20.29		150.0	
		Z	3.67	72.12	20.45		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.90	81.03	23.83	3.01	150.0	± 9.6 %
		Y	6.20	83.55	24.55		150.0	
		Z	5.54	79.34	23.04		150.0	· · · · · · · · · · · · · · · · · · ·
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	4.69	76.04	20.92	3.01	150.0	± 9.6 %
		Y	4.32	75.87	20.46		150.0	
		Z	4.54	75.03	20.42		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	39.66	116.21	35.79	6.02	65.0	± 9.6 %
		Y	26.05	109.12	33.27		65.0	
		Z	30.93	110.22	33.96		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	52.84	115.80	33.80	6.02	65.0	± 9.6 %
		Y	100.00	126.65	35.61		65.0	
		Z	32.54	106.36	31.18		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	36.42	107.54	31.02	6.02	65.0	± 9.6 %
		Y	52.24	113.81	31.84		65.0	
		Z	25.50	100.70	29.05		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	3.66	72.37	20.58	3.01	150.0	± 9.6 %
		Y	3.31	71.62	19.97		150.0	
		Z	3.62	71.80	20.21		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.91	81.06	23.84	3.01	150.0	± 9.6 %
		Y	6.22	83.59	24.56		150.0	
		Z	5.55	79.36	23.05		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	3.70	72.55	20.68	3.01	150.0	± 9.6 %
		Y	3.35	71.84	20.10		150.0	
		Z	3.65	71.95	20.31		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	Х	5.81	80.70	23.67	3.01	150.0	± 9.6 %
		Y	6.07	83.11	24.35		150.0	
		Z	5.47	79.07	22.91		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.24	78.36	22.22	3.01	150.0	± 9.6 %
		Y	5.11	79.33	22.28		150.0	
		Z	5.00	77.05	21.59		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	Х	4.67	75.92	20.85	3.01	150.0	±9.6 %
	1	Y	4.29	75.73	20.38		150.0	
		Ζ	4.52	74.94	20.36		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.69	72.54	20.68	3.01	150.0	± 9.6 %
		Y	3.34	71.81	20.09		150.0	
		Z	3.65	71.94	20.30		150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.80	80.67	23.66	3.01	150.0	± 9.6 %
		Y	6.06	83.07	24.33		150.0	
		Z	5.46	79.04	22.90		150.0	
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.66	75.89	20.84	3.01	150.0	±9.6 %
		Y	4.28	75.70	20.36		150.0	
		Z	4.51	74.92	20.35		150.0	

10184.         LTE-FD0 (SC-FDMA, 1 RB, 3 MHz, CAD         X         3.70         72.58         20.70         3.01         150.0         ± 9.6 %           CAD         CSK         Y         3.35         71.87         20.12         150.0         ± 9.6 %           10185.         LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- CAD         X         5.83         80.75         23.70         3.01         150.0         ± 9.6 %           0.4M         Y         6.11         83.20         24.39         150.0         ± 9.6 %           0.AM         Y         6.11         75.98         20.48         3.01         150.0         ± 9.6 %           0.AM         Y         4.31         75.80         20.41         150.0         ± 9.6 %           0.AM         Y         4.31         75.80         20.31         150.0         ± 9.6 %           0.AM         Y         4.34         74.39         20.31         150.0         ± 9.6 %           0.AM         Y         4.81         72.03         20.37         150.0         ± 9.6 %           0.AM         TEF-FDD (SC-FDMA, 1 RB, 1.4 MHz, X         5.69         79.85         23.31         150.0         ± 9.6 %           0.AD         16-QAM <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Z         3.66         71.96         20.32         150.0           CAD         GAM         Y         6.11         83.20         23.70         3.01         150.0         ± 9.6 %           CAD         Z         5.49         79.12         22.33         150.0         ± 9.6 %           CAD         Z         5.49         79.12         22.33         150.0         ± 9.6 %           AAD         CAM         Y         4.60         75.99         20.88         3.01         150.0         ± 9.6 %           AAD         CAM         Y         4.31         75.50         20.41         150.0         ± 9.6 %           CAD         CPSR)         Y         4.36         74.93         20.33         150.0         ± 9.6 %           CAD         CPSR)         Y         5.36         79.85         25.01         150.0         ± 9.6 %           CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X         4.62         76.62         21.19         3.01         150.0         ± 9.6 %           CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X         4.22         76.62         21.19         3.01         150.0         ± 9.6 %           CAD         LEE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X<	10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.70	72.58	20.70	3.01	150.0	± 9.6 %
Z         3.66         71.96         20.32         150.0           CAD         GAM         Y         6.11         83.20         23.70         3.01         150.0         ± 9.6 %           CAD         Z         5.49         79.12         22.33         150.0         ± 9.6 %           CAD         Z         5.49         79.12         22.33         150.0         ± 9.6 %           AAD         CAM         Y         4.60         75.99         20.88         3.01         150.0         ± 9.6 %           AAD         CAM         Y         4.31         75.50         20.41         150.0         ± 9.6 %           CAD         CPSR)         Y         4.36         74.93         20.33         150.0         ± 9.6 %           CAD         CPSR)         Y         5.36         79.85         25.01         150.0         ± 9.6 %           CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X         4.62         76.62         21.19         3.01         150.0         ± 9.6 %           CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X         4.22         76.62         21.19         3.01         150.0         ± 9.6 %           CAD         LEE-FDD (SC-FDMA, 1 RB, 1.4 MHz, X<			Y	3.35	71.87	20.12	1	150.0	
10185.         LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- CAM         X         5.83         80.75         23.70         3.01         150.0         ± 9.6 %           CAD         CAM         Y         6.11         83.20         24.39         150.0           10186         LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- X         X         4.69         75.88         20.88         3.01         150.0         ± 9.6 %           AAD         CAM         Y         4.31         75.80         20.41         150.0         ± 9.6 %           CAD         OPS()         Y         4.31         77.80         20.41         150.0         ± 9.6 %           CAD         OPS()         Y         3.36         71.93         20.19         150.0         ± 9.6 %           CAD         OPS()         Y         3.67         72.63         20.31         150.0         ± 9.6 %           CAD         OPS()         Y         4.51         84.65         26.01         150.0         ± 9.6 %           CAD         GAM)         Y         4.67         76.63         20.81         150.0         ± 9.6 %           CAD         64-GAM)         Y         4.67         76.63         20.84         150.0         10									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							3.01		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	6.11	83.20	24.39		150.0	
$      \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$									
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			4 .4				3.01		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			TY I	4.31	75.80	20.41		150.0	
10187.         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         X         3.71         72.62         20.75         3.01         150.0         ± 9.6 %           10188.         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, AD         X         3.67         72.03         20.37         150.0         ± 9.6 %           10188.         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, AD         X         6.08         61.63         24.13         3.01         150.0         ± 9.6 %           10189.         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, AAD         X         4.82         76.52         21.19         3.01         150.0         ± 9.6 %           AD         EEEE 802.11n (HT Greenfield, 6.5 Mbps, CAB         X         4.47         76.53         20.81         150.0         ± 9.6 %           10193.         IEEE 802.11n (HT Greenfield, 6.5 Mbps, CAB         X         4.76         67.22         16.35         10.00         ± 9.6 %           CAB         BPSK)         Y         4.58         67.10         16.36         150.0         ± 9.6 %           CAB         BPSK         Y         4.56         67.30         16.55         0.00         150.0         ± 9.6 %           CAB         BPSK         Y         4.92         67.31         16.46         150.0							·		
CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, I-GAM)         X         6.06         81.63         24.13         3.01         150.0         ± 9.6 %           CAD         I-GAM)         Y         6.51         84.55         25.01         150.0         ± 9.6 %           10189- AAD         CACAM)         Y         6.51         84.55         25.01         150.0         ± 9.6 %           10189- CAB         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, AAD         X         4.82         76.52         21.19         3.01         150.0         ± 9.6 %           10193- CAB         BPSK)         Y         4.47         76.53         20.81         160.0         ± 9.6 %           10193- CAB         IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)         X         4.72         66.91         16.43         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.58         67.02         16.55         0.00         150.0         ± 9.6 %           CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, CAB         Y         4.96         67.30         16.55         0.00         150.0         ± 9.6 %           CAB         GE-2011n (HT Mixed, 6.5 Mbps, CAB         Y         4.80         67.31         16.46							3.01		± 9.6 %
CAD         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, I-GAM)         X         6.06         81.63         24.13         3.01         150.0         ± 9.6 %           CAD         I-GAM)         Y         6.51         84.55         25.01         150.0         ± 9.6 %           10189- AAD         CACAM)         Y         6.51         84.55         25.01         150.0         ± 9.6 %           10189- CAB         LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, AAD         X         4.82         76.52         21.19         3.01         150.0         ± 9.6 %           10193- CAB         BPSK)         Y         4.47         76.53         20.81         160.0         ± 9.6 %           10193- CAB         IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)         X         4.72         66.91         16.43         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.58         67.02         16.55         0.00         150.0         ± 9.6 %           CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, CAB         Y         4.96         67.30         16.55         0.00         150.0         ± 9.6 %           CAB         GE-2011n (HT Mixed, 6.5 Mbps, CAB         Y         4.80         67.31         16.46			Y	3.36	71.93	20.19		150.0	
10188- CAD       LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-GAM)       Y       6.51       84.53       24.13       3.01       150.0       ± 9.6 %         10189- CAD       LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-OAM)       Y       4.87       76.52       21.19       3.01       150.0       ± 9.6 %         10189- CAB       EEEE 802.11n (HT Greenfield, 6.5 Mbps, CAB       Y       4.47       76.53       20.81       150.0       ± 9.6 %         10193- CAB       IEEE 802.11n (HT Greenfield, 6.5 Mbps, CAB       Y       4.58       67.02       16.33       150.0       ± 9.6 %         10194- CAB       IEEE 802.11n (HT Greenfield, 39 Mbps, CAB       Z       4.68       66.73       16.24       150.0       ± 9.6 %         10195- CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, 64-OAM)       Y       4.76       67.35       16.45       150.0       ± 9.6 %         10195- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB       Y       4.76       67.37       16.46       150.0       ± 9.6 %         10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB       X       4.92       67.11       16.35       160.0       150.0       ± 9.6 %         10197- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, 16- CAB       Y       4.93       67.31       16.46									
Z         5.69         79.85         23.31         160.0           AAD         Gt-QAM, 1 RB, 1.4 MHz, X         4.82         76.52         21.19         3.01         150.0         ± 9.6 %           AAD         Y         4.47         76.53         20.81         150.0         ± 9.6 %           CAB         BPSK         Z         4.65         75.46         20.66         150.0           10193-         IEEE 802.11n (HT Greenfield, 6.5 Mbps, X         4.72         66.91         16.43         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.58         67.02         16.33         150.0         ± 9.6 %           10194-         IEEE 802.11n (HT Greenfield, 39 Mbps, X         4.92         67.39         16.55         0.00         150.0         ± 9.6 %           CAB         66.21n (HT Greenfield, 65 Mbps, X         4.96         67.30         16.55         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.80         67.37         16.46         150.0         ± 9.6 %           CAB         G4.20AM)         Y         4.90         67.37         16.46         150.0         ± 9.6 %           CAB         BPS							3.01		± 9.6 %
Z         5.69         79.85         23.31         160.0           AAD         Gt-QAM, 1 RB, 1.4 MHz, X         4.82         76.52         21.19         3.01         150.0         ± 9.6 %           AAD         Y         4.47         76.53         20.81         150.0         ± 9.6 %           CAB         BPSK         Z         4.65         75.46         20.66         150.0           10193-         IEEE 802.11n (HT Greenfield, 6.5 Mbps, X         4.72         66.91         16.43         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.58         67.02         16.33         150.0         ± 9.6 %           10194-         IEEE 802.11n (HT Greenfield, 39 Mbps, X         4.92         67.39         16.55         0.00         150.0         ± 9.6 %           CAB         66.21n (HT Greenfield, 65 Mbps, X         4.96         67.30         16.55         0.00         150.0         ± 9.6 %           CAB         BPSK)         Y         4.80         67.37         16.46         150.0         ± 9.6 %           CAB         G4.20AM)         Y         4.90         67.37         16.46         150.0         ± 9.6 %           CAB         BPS			Y	6.51	84.55	25.01		150.0	
10189- AAD       LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)       Y       4.482       76.52       21.19       3.01       150.0       ± 9.6 %         AAD       Y       4.47       76.53       20.81       150.0       150.0         10193- CAB       IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)       X       4.72       66.91       16.43       0.00       150.0       ± 9.6 %         CAB       IEEE 802.11n (HT Greenfield, 39 Mbps, CAB       X       4.92       67.29       16.55       0.00       150.0       ± 9.6 %         CAB       I6-QAM)       Y       4.76       67.35       16.45       150.0       ± 9.6 %         CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, CAB       X       4.92       67.30       16.55       0.00       150.0       ± 9.6 %         CAB       64-QAM)       Y       4.80       67.37       16.46       160.0       160.0       ± 9.6 %         CAB       64-QAM)       Y       4.80       67.31       16.46       150.0       ± 9.6 %         CAB       64-QAM       Y       4.80       67.31       16.46       150.0       ± 9.6 %         CAB       GA-QAM       Y       4.90       67.31       16.46       150.0									
Y         4.47         76.53         20.81         160.0           10193- CAB         IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)         X         4.72         66.91         16.43         0.00         150.0 $\pm 9.6 \%$ 10194- CAB         EEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)         Y         4.58         67.02         16.33         150.0 $\pm 9.6 \%$ 10194- CAB         IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)         Y         4.76         67.35         16.45         150.0 $\pm 9.6 \%$ 10195- CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)         Y         4.76         67.30         16.55         0.00         150.0 $\pm 9.6 \%$ 10195- CAB         EEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)         Y         4.96         67.37         16.46         150.0 $\pm 9.6 \%$ 10196- CAB         EEE 802.11n (HT Mixed, 6.5 Mbps, CAB         Y         4.90         67.31         16.46         150.0 $\pm 9.6 \%$ 10197- CAB         IEEE 802.11n (HT Mixed, 65 Mbps, 16- QAM)         Y         4.93         67.31         16.46         150.0 $\pm 9.6 \%$ 10198- CAB         QAM)         Y         4.93         67.31         16.36 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>3.01</td><td></td><td>± 9.6 %</td></td<>							3.01		± 9.6 %
Image: CAB         Z         4.65         75.46         20.66         150.0           10193- CAB         BPSK)         Y         4.72         66.91         16.43         0.00         150.0 $\pm 9.6 \%$ 10194- IO194- ICAB         V         4.58         67.02         16.33         150.0 $\pm 9.6 \%$ 10194- ICAB         IEEE 802.11n (HT Greenfield, 39 Mbps, I6-QAM)         Y         4.76         67.35         16.45         150.0 $\pm 9.6 \%$ 10195- CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, G4-QAM)         Y         4.76         67.35         16.45         150.0 $\pm 9.6 \%$ 10195- CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, G4-QAM)         Y         4.76         67.37         16.46         160.0 $\pm 9.6 \%$ 10196- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, G4-QAM)         Y         4.80         67.31         16.65         0.00         150.0 $\pm 9.6 \%$ 10196- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, G4-QAM)         Y         4.59         67.09         16.35         150.0 $\pm 9.6 \%$ 10197- CAB         GAL         9.6 $\%$ 9.6 $\%$ 9.6 $\%$ 16.37         16.66         0.00         15			Y	4.47	76.53	20.81		150.0	
10193- CAB       IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)       X       4.72       66.91       16.43       0.00       150.0       ± 9.6 %         IO194- CAB       Y       4.58       67.02       16.33       150.0       160.0       150.0       19.6 %         CAB       IEEE 802.11n (HT Greenfield, 39 Mbps, CAB       Y       4.58       67.29       16.55       0.00       150.0       ± 9.6 %         CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, CAB       Y       4.76       67.35       16.45       150.0       16.50       150.0       16.50       16.50       16.50       150.0       16.50									
Y         4.58         67.02         16.33         150.0           10194- CAB         IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)         Y         4.68         66.73         16.24         150.0         ± 9.6 %           0195- CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, CAB         Y         4.76         67.35         16.55         0.00         150.0         ± 9.6 %           10195- CAB         IEEE 802.11n (HT Greenfield, 65 Mbps, CAB         Y         4.86         67.10         16.35         0.00         150.0         ± 9.6 %           10196- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB         Y         4.80         67.37         16.46         150.0           10196- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB         Y         4.80         67.31         16.35         150.0         ± 9.6 %           10197- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB         Y         4.59         67.31         16.56         0.00         150.0         ± 9.6 %           10197- CAB         IEEE 802.11n (HT Mixed, 65 Mbps, 16- QAM)         Y         4.93         67.31         16.46         150.0         150.0         ± 9.6 %           CAB         QAM)         Y         4.90         67.32         16.56         0.00							0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			TY I	4.58	67.02	16.33		150.0	
10194- CAB       IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)       X       4.92       67.29       16.55       0.00       150.0       ± 9.6 %         10195- CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)       Y       4.76       67.35       16.45       150.0       ± 9.6 %         10195- CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)       Y       4.80       67.37       16.46       150.0       ± 9.6 %         10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB       X       4.92       67.11       16.37       150.0       ± 9.6 %         10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, CAB       X       4.74       67.09       16.35       150.0       ± 9.6 %         10197- CAB       IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)       Y       4.59       67.31       16.56       0.00       150.0       ± 9.6 %         10197- CAB       IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)       X       4.93       67.31       16.56       0.00       150.0       ± 9.6 %         10198- CAB       IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)       X       4.96       67.32       16.56       0.00       150.0       ± 9.6 %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, PSK)       X       4.96       67.31							· · · · ·		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
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10195- CAB       IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)       X       4.96       67.30       16.55       0.00       150.0       ± 9.6 %         10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       Y       4.80       67.37       16.46       150.0       ± 9.6 %         10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       X       4.74       67.02       16.47       0.00       150.0       ± 9.6 %         10197- CAB       IEEE 802.11n (HT Mixed, 39 Mbps, 16- CAB       Z       4.70       66.83       16.28       150.0       ± 9.6 %         10197- CAB       IEEE 802.11n (HT Mixed, 39 Mbps, 16- CAB       Z       4.93       67.31       16.56       0.00       150.0       ± 9.6 %         10198- CAB       IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)       Y       4.96       67.32       16.56       0.00       150.0       ± 9.6 %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, CAB       X       4.89       67.04       16.47       150.0       ± 9.6 %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, CAB       X       4.98       67.31       16.38       150.0       ± 9.6 %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, 64- QAM)       Y       4.54       67.11       16.			7						
Y         4.80         67.37         16.46         150.0           I0196- CAB         IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)         X         4.74         67.02         16.47         0.00         150.0         ± 9.6 %           V         4.59         67.09         16.35         150.0         ± 9.6 %           V         4.59         67.09         16.35         150.0         ± 9.6 %           I0197- CAB         IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)         X         4.93         67.31         16.56         0.00         150.0         ± 9.6 %           V         4.77         67.37         16.46         150.0         10197-           IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)         X         4.90         67.12         16.37         150.0         ± 9.6 %           V         4.77         67.39         16.46         150.0         ± 9.6 %           CAB         QAM)         Y         4.80         67.32         16.56         0.00         150.0         ± 9.6 %           CAB         QAM)         Y         4.80         67.33         16.47         150.0         ± 9.6 %           CAB         BPSK)         Y         4.69         67.04         16.47							0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				4.80	67.37	16.46		150.0	
10196- CAB       IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       X       4.74       67.02       16.47       0.00       150.0 $\pm 9.6$ %         10197- CAB       IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)       Y       4.59       67.09       16.35       150.0         10197- CAB       IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)       X       4.93       67.31       16.66       0.00       150.0 $\pm 9.6$ %         10198- CAB       IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)       Y       4.77       67.37       16.46       150.0 $\pm 9.6$ %         10198- CAB       IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)       Z       4.90       67.32       16.56       0.00       150.0 $\pm 9.6$ %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, CAB       X       4.96       67.39       16.47       150.0 $\pm 9.6$ %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, CAB       X       4.69       67.04       16.44       0.00       150.0 $\pm 9.6$ %         10219- CAB       IEEE 802.11n (HT Mixed, 7.2 Mbps, CAB       Y       4.54       67.11       16.31       150.0 $\pm 9.6$ %         10220- CAB       IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)       Y       4.54       67.31       16.55		· · · · · · · · · · · · · · · · · · ·							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		±9.6%
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				4 59	67.09	16 35		150.0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.77	67.37	16.46		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z		67.12			1 - 4 -	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.80	67.39	16.47		150.0	<u></u>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		±9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.54	67.11	16.31	· · · · ·	150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							·		
Z         4.90         67.11         16.37         150.0           10221- CAB         IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)         X         4.97         67.25         16.55         0.00         150.0         ± 9.6 %           V         4.81         67.32         16.45         150.0         ± 9.6 %           Z         4.93         67.06         16.37         150.0         ± 9.6 %           I0222- CAB         IEEE 802.11n (HT Mixed, 15 Mbps, CAB         X         5.28         67.55         16.68         0.00         150.0         ± 9.6 %           CAB         PSK)         Y         5.13         67.49         16.55         150.0	10220- CAB		+				0.00		±9.6 %
Z         4.90         67.11         16.37         150.0           10221- CAB         IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)         X         4.97         67.25         16.55         0.00         150.0         ± 9.6 %           V         4.81         67.32         16.45         150.0         ± 9.6 %           Z         4.93         67.06         16.37         150.0         ± 9.6 %           I0222- CAB         IEEE 802.11n (HT Mixed, 15 Mbps, CAB         X         5.28         67.55         16.68         0.00         150.0         ± 9.6 %           CAB         PSK)         Y         5.13         67.49         16.55         150.0				4.77	67.34	16.45		150.0	· · · · · · · · · · · · · · · · · · ·
10221- CAB       IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)       X       4.97       67.25       16.55       0.00       150.0       ± 9.6 %         Y       4.81       67.32       16.45       150.0       ± 9.6 %         Z       4.93       67.06       16.37       150.0         10222- CAB       IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)       X       5.28       67.55       16.68       0.00       150.0       ± 9.6 %         Y       5.13       67.49       16.55       150.0       ± 9.6 %			Z						····
Y         4.81         67.32         16.45         150.0           IO222- CAB         IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)         X         5.28         67.55         16.68         0.00         150.0         ± 9.6 %           Y         5.13         67.49         16.55         150.0         ± 9.6 %					····		0.00		± 9.6 %
Z         4.93         67.06         16.37         150.0           10222- CAB         IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)         X         5.28         67.55         16.68         0.00         150.0         ± 9.6 %           V         5.13         67.49         16.55         150.0         ± 9.6 %			TY 1	4.81	67.32	16.45		150.0	
10222- CAB         IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)         X         5.28         67.55         16.68         0.00         150.0         ± 9.6 %           Y         5.13         67.49         16.55         150.0         ±         150.0         ±         9.6 %									
Y 5.13 67.49 16.55 150.0							0.00	1	± 9.6 %
				5 1 3	67.40	16 55		160.0	
	•								

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.67	67.92	16.89	0.00	150.0	± 9.6 %
		Y	5.43	67.67	16.66		150.0	
		Z	5.63	67.75	16.72		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.33	67.64	16.65	0.00	150.0	± 9.6 %
		Y	5.17	67.60	16.53		150.0	
		Z	5.29	67.46	16.47		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.99	66.62	15.92	0.00	150.0	± 9.6 %
		Y	2.87	66.77	15.69		150.0	
40000		Z	2.94	66.17	15.53		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	56.85	117.30	34.28	6.02	65.0	± 9.6 %
		Y	100.00	126.89	35.76		65.0	
10227-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z	34.18	107.38	31.54		65.0	
CAA	64-QAM)	X	39.67	109.19	31.57	6.02	65.0	± 9.6 %
		Y	88.35	122.59	34.09		65.0	
10228-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z	26.95	101.76	29.43	0.02	65.0	
10228- CAA	QPSK)	X	48.41	120.61	37.08	6.02	65.0	± 9.6 %
		Y	45.84	120.16	36.35		65.0	
10229-	TE TOD (SC EDMA 4 DB 2 MUL- 46	Z	31.93	111.39	34.43	0.00	65.0	
CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	52.77	115.76	33.79	6.02	65.0	± 9.6 %
		Y	100.00	126.65	35.62		65.0	
10000		Z	32.55	106.35	31.18		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	37.48	108.07	31.19	6.02	65.0	± 9.6 %
		Y	75.87	119.84	33.34		65.0	
40004		Z	25.90	100.97	29.14		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	45.44	119.21	36.63	6.02	65.0	± 9.6 %
		Y	41.18	117.91	35.67		65.0	
40000		Z	30.52	110.38	34.07		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	52.80	115.78	33.80	6.02	65.0	± 9.6 %
		Y .	100.00	126.66	35.62		65.0	l
40000		Z	32.54	106.35	31.18		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	37.54	108.11	31.20	6.02	65.0	± 9.6 %
		Y	75.89	119.86	33.34		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Z X	25.92 42.47	100.99 117.63	29.14 36.10	6.02	65.0 65.0	± 9.6 %
51.0		Y	37.31	115.74	34.97	ļ	65.0	
		Z	29.08	109.25	33.65		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	53.08	115.89	33.83	6.02	65.0	± 9.6 %
		Y	100.00	126.67	35.62		65.0	
	-	z	32.64	106.42	31.20		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	37.96	108.28	31.24	6.02	65.0	± 9.6 %
		Y	77.12	120.09	33.39		65.0	
		Z	26.14	101.12	29.18		65.0	
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	46.10	119.52	36.72	6.02	65.0	± 9.6 %
		Y	41.64	118.15	35.73		65.0	
		Z	30.82	110.60	34.14		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	52.89	115.82	33.81	6.02	65.0	± 9.6 %
		Y	100.00	126.66	35.62		65.0	1
		Z	32.55	106.37	31.18	1	65.0	1

10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	37.59	108.15	31.21	6.02	65.0	± 9.6 %
		Y	75.87	119.87	33.34		65.0	ł
		Z	25.93	101.02	29.15		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	45.90	119.44	36.69	6.02	65.0	± 9.6 %
		Y	41.47	118.08	35.71		65.0	
		Z	30.71	110.54	34.12		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	13.10	88.25	28.31	6.98	65.0	± 9.6 %
		Y	12.64	88.66	27.87		65.0	
		Z	13.02	87.59	27.99		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	11.52	85.34	27.10	6.98	65.0	± 9.6 %
		Y	10.36	84.46	26.20		65.0	
		Z	12.32	86.33	27.43		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.39	82.67	26.96	6.98	65.0	± 9.6 %
		Y	7.89	80.01	25.32		65.0	· · ·
		Z	10.15	83.98	27.43		65.0	1
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	10.37	82.39	22.15	3.98	65.0	±9.6 %
		Y	9.21	80.31	20.18		65.0	
		Z	9.60	80.54	21.38		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.20	81.86	21.90	3.98	65.0	± 9.6 %
		Y	8.91	79.56	19.85		65.0	
		Z	9.50	80.13	21.18		65.0	1
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.29	85.01	23.02	3.98	65.0	± 9.6 %
		Y	9.28	83.44	21.56		65.0	
		Z	8.83	81.79	21.72		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.11	78.82	21.25	3.98	65.0	±9.6 %
		Y	7.33	77.58	19.99		65.0	· · · ·
		Z	7.71	77.37	20.55		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.09	78.31	21.04	3.98	65.0	± 9.6 %
		Y	7.21	76.86	19.68		65.0	1
		Z	7.75	77.03	20.41		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.01	86.29	24.03	3.98	65.0	±9.6 %
		Y	10.81	86.39	23.39		65.0	
		Z	9.54	83.16	22.78		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	8.83	80.24	22.94	3.98	65.0	± 9.6 %
		Y	8.38	80.07	22.43		65.0	
		Z	8.48	78.94	22.29		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.37	78.15	21.84	3.98	65.0	± 9.6 %
		Y	7.73	77.46	21.06		65.0	
		Z	8.17	77.24	21.36		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.43	84.63	24.00	3.98	65.0	± 9.6 %
		Y	10.38	85.34	23.87		65.0	
1007-		Z	9.48	82.30	23.02		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	8.24	77.12	21.67	3.98	65.0	± 9.6 %
		Y	7.62	76.41	20.97		65.0	
	· ······	Z	8.12	76.42	21.28		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.59	77.78	22.22	3.98	65.0	±9.6 %
		Y	8.06	77.36	21.67	·	65.0	

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10255- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.19	80.79	22.74	3.98	65.0	± 9.6 %
		Y	8.89	81.04	22.54		65.0	1
		Z	8.75	79.38	22.09		65.0	1
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.46	80.54	20.72	3.98	65.0	± 9.6 %
		Y	7.26	76.12	17.61		65.0	
		Z	8.73	78.73	19.97		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	9.23	79.78	20.35	3.98	65.0	± 9.6 %
		Y	6.96	75.17	17.14		65.0	
		Ż	8.59	78.13	19.66		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	x	9.10	82.63	21.62	3.98	65.0	±9.6 %
		Ŷ	7.16	78.79	19.11		65.0	
		Z	7.85	79.60	20.38		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.39	79.27	21.82	3.98	65.0	± 9.6 %
		Y	7.73	78.47	20.85		65.0	
		Z	8.02	77.92	21.16	t	65.0	1
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.39	78.99	21.73	3.98	65.0	± 9.6 %
		Y	7.70	78.11	20.72		65.0	
		Z	8.05	77.71	21.09		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	x	10.34	84.95	23.83	3.98	65.0	± 9.6 %
		Y	10.04	85.03	23.28		65.0	
		Z	9.23	82.32	22.74		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.82	80.21	22.91	3.98	65.0	± 9.6 %
		Y	8.36	80.01	22.38		65.0	
		Z	8.47	78.91	22.26		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	x	8.36	78.15	21.85	3.98	65.0	± 9.6 %
		Y	7.72	77.44	21.06		65.0	
		Z	8.17	77.23	21.37		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.37	84.50	23.93	3.98	65.0	± 9.6 %
		Y	10.27	85.13	23.77		65.0	
		Ż	9.43	82.19	22.96		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	x	8.48	77.76	21.88	3.98	65.0	± 9.6 %
		Y	7.81	76.97	21.20	1	65.0	
		Z	8.32	76.97	21.47	1	65.0	1
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.81	78.38	22.45	3.98	65.0	± 9.6 %
		Y	8.27	77.98	21.97		65.0	
		Z	8.64	77.56	22.02		65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.50	81.14	22.63	3.98	65.0	± 9.6 %
		Y	9.25	81.50	22.50		65.0	
		Z	8.99	79.63	21.95		65.0	
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.86	77.06	21.92	3.98	65.0	±9.6 %
		Y	8.31	76.56	21.43		65.0	
		Z	8.78	76.48	21.59		65.0	
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	Х	8.77	76.63	21.82	3.98	65.0	± 9.6 %
		Y	8.23	76.12	21.32		65.0	
		Z	8.71	76.12	21.52		65.0	
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.91	78.30	21.65	3.98	65.0	± 9.6 %
		Y	8.57	78.39	21.47		65.0	

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10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.73	66.93	15.81	0.00	150.0	± 9.6 %
		Y	2.66	67.19	15.64		150.0	<u> </u>
		Z	2.67	66.38	15.35		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.85	69.82	16.81	0.00	150.0	± 9.6 %
		Y	1.73	69.48	16.43		150.0	
		Z	1.70	68.07	15.69		150.0	
10277- CAA	PHS (QPSK)	X	5.86	70.53	14.71	9.03	50.0	± 9.6 %
		Y	4.40	66.90	11.75		50.0	
		Ζ	6.19	70.94	15.24		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.27	82.27	21.99	9.03	50.0	± 9.6 %
		Y	7.88	77.57	18.90		50.0	
10070		Z	9.35	79.97	21.25		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	10.47	82.49	22.08	9.03	50.0	± 9.6 %
		Y	8.00	77.73	18.99		50.0	
10290-	CDMA2000 PC4 SOFE Full Date	Z	9.52	80.18	21.35		50.0	
AAB	CDMA2000, RC1, SO55, Full Rate	X	2.00	72.56	16.71	0.00	150.0	± 9.6 %
		Y	1.81	72.10	15.72	ļ	150.0	
10291-	CDM42000 DC2 COSS 5-11 D-4-	Z	1.64	69.27	14.92		150.0	
AAB	CDMA2000, RC3, SO55, Full Rate	X	1.15	69.82	15.49	0.00	150.0	±9.6%
		Y	0.99	68.71	14.17		150.0	
40000		Z	0.95	66.46	13.46		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1.59	75.79	18.53	0.00	150.0	±9.6 %
		Y	1.63	76.74	18.06		150.0	
		Z	1.13	69.78	15.46		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	2.45	82.81	21.72	0.00	150.0	± 9.6 %
		Y	4.29	91.48	23.73		150.0	
		Z	1.46	73.68	17.64		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.26	85.50	25.18	9.03	50.0	± 9.6 %
		Y	11.00	85.02	23.98		50.0	
		Z	10.64	83.52	24.39		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.10	71.18	17.38	0.00	150.0	±9.6 %
		Y	2.91	70.92	17.21		150.0	
		Z	2.91	69.91	16.61		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.01	70.53	16.33	0.00	150.0	± 9.6 %
		Y	1.80	70.02	15.42		150.0	
		Z	1.78	68.34	15.01		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.29	76.33	18.36	0.00	150.0	±9.6 %
		Y	3.82	74.61	16.37		150.0	
4000		Z	3.76	74.04	17.28		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.03	70.18	15.03	0.00	150.0	±9.6 %
		Y	2.35	67.31	12.44		150.0	
1000		Z	2.84	69.06	14.39		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.75	68.04	18.85	4.17	80.0	±9.6 %
		Y	5.34	67.59	18.38		80.0	
		Z	6.02	68.99	19.26		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	Х	6.35	69.28	19.97	4.96	80.0	± 9.6 %
		Y	5.77	67.89	18.92		80.0	· · · · · · · · · · · · · · · · · · ·
		Z	6.57	69.95	20.23		80.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	6.22	69.45	20.09	4.96	80.0	±9.6 %
		Y	5.58	67.78	18.88		80.0	
· ····		z	6.47	70.23	20.40		80.0	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.82	68.59	19.17	4.17	80.0	± 9.6 %
		Y	5.30	67.36	18.23		80.0	
		Z	6.00	69.14	19.36		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.58	77.08	24.20	6.02	50.0	± 9.6 %
		Y	6.71	75.99	23.36		50.0	
		Z	8.94	80.39	25.44		50.0	
10306- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	6.74	72.69	22.39	6.02	50.0	± 9.6 %
		Y	6.02	71.61	21.57		50.0	
10207		Z	7.38	74.60	23.18		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.88	73.57	22.61	6.02	50.0	± 9.6 %
		Y	6.12	72.48	21.82		50.0	
10209		Z	7.63	75.68	23.46		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.95	74.06	22.85	6.02	50.0	± 9.6 %
		Y	6.19	73.01	22.10		50.0	
10309-	IEEE 802.16e WIMAX (29:18, 10ms,	Z	7.77	76.32	23.75	0.00	50.0	1000
AAA	10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.88	73.08	22.59	6.02	50.0	±9.6 %
		Y	5.75	69.67	20.38		50.0	
10010		Z	7.54	75.02	23.39		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.76	72.98	22.43	6.02	50.0	± 9.6 %
		Y	6.05	71.97	21.66		50.0	
10011		Z	7.45	74.97	23.24		50.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.46	70.38	16.96	0.00	150.0	±9.6 %
	-	Y	3.29	70.15	16.82		150.0	
40040		Z	3.26	69.20	16.26		150.0	
10313- AAA	IDEN 1:3	X	8.57	80.77	19.81	6.99	70.0	± 9.6 %
		Y	7.42	78.97	18.59		70.0	
40044		Z	7.51	78.37	19.04	(0.00	70.0	
10314- AAA	iDEN 1:6	X	11.07	87.09	24.45	10.00	30.0	± 9.6 %
		Y	12.16	89.30	24.68		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	Z X	8.76 1.21	82.33 65.47	22.85 16.38	0.17	30.0 150.0	± 9.6 %
		Y	1.17	65.32	16.10		150.0	
		Z	1.18	64.56	15.52		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.82	67.11	16.64	0.17	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.66	67.15	16.49		150.0	
		Z	4.80	66.95	16.46	1	150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.82	67.11	16.64	0.17	150.0	± 9.6 %
		Y	4.66	67.15	16.49		150.0	
		Z	4.80	66.95	16.46		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.93	67.37	16.55	0.00	150.0	±9.6 %
		Y	4.75	67.39	16.43		150.0	
		Z	4.90	67.18	16.37		150.0	
10401- AAC	IEEE 802.11ac WIFI (40MHz, 64-QAM, 99pc duty cycle)	X	5.56	67.43	16.63	0.00	150.0	± 9.6 %
		Y	5.44	67.54	16.57		150.0	
		Z	5.53	67.31	16.49	i	150.0	

Y         5.70         67.79         16.60         150.0           10403- AAB         CDMA2000 (1xEV-DO, Rev. 0)         X         2.00         72.68         16.71         0.00         115.0         2.9.6           10404- AAB         CDMA2000 (1xEV-DO, Rev. A)         X         2.00         72.68         16.71         0.00         115.0         2.9.6           10404- AAB         CDMA2000 (1xEV-DO, Rev. A)         X         2.00         72.68         16.71         0.00         115.0           10406- CDMA2000, RC3, SO32, SCH0, Fuil         X         1.84         69.27         14.92         1115.0           10406- Rate         Y         1.84         69.27         14.92         115.0           10406- CDMA2000, RC3, SO32, SCH0, Fuil         X         100.00         127.12         32.45         0.00         100.0           10410- UTE-TDD (SC-FDMA, 1 RB, 10 MHz, AAB         Y         100.00         117.44         31.29         32.0         80.0         2         100.00         121.44         31.28         80.0         2         60.0         150.0         2         60.0         160.0         150.0         150.0         150.0         2         60.0         160.0         160.0         150.0         150.0	10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.86	67.95	16.72	0.00	150.0	± 9.6 %
10403. AAB         CDMA2000 (1xEV-DO, Rev. 0)         X         2.00         72.56         16.71         0.00         115.0         ± 9.6           10403. AAB         Y         1.81         72.10         15.72         115.0         ± 9.6           10404. AAB         CDMA2000 (1xEV-DO, Rev. A)         X         2.00         72.56         16.71         0.00         115.0         ± 9.6           AAB         CDMA2000, RC3, SO32, SCH0, Full         X         1.81         72.10         15.72         32.45         0.00         115.0         ± 9.6           AAB         Rate         Y         1.81         72.11         32.25         0.00         100.0         ± 9.6           AAB         Rate         Y         100.00         124.11         32.05         100.0         ± 9.6           AAB         OPSK, UL Subframe-23.47.8,8)         Y         100.00         124.11         32.05         0.0         ± 9.6           AAA         Mps, 9ap. duty cycle)         Y         100.00         124.14         29.02         80.0         ± 9.6           10415         IEEE 802.116 WiFi 2.4 GHz (DSSS, 1         X         1.05         63.34         15.45         0.00         150.0         ± 9.6 <tr< td=""><td></td><td></td><td>+ ~</td><td>E 70</td><td>67.00</td><td>40.50</td><td></td><td>450 -</td><td></td></tr<>			+ ~	E 70	67.00	40.50		450 -	
10403.         CDMA2000 (1xEV-DO, Rev. 0)         X         2.00         72.56         16.71         0.00         115.0         ± 9.6           AAB         Y         1.81         72.10         16.72         116.0         116.0           10404         CDMA2000 (1xEV-DO, Rev. A)         X         2.00         72.56         16.71         0.00         115.0         ± 9.6           AAB         Y         1.81         72.10         16.72         115.0         ± 9.6           AAB         Y         1.84         72.10         16.72         115.0         ± 9.6           10406         CDMA2000, RC3, SO32, SCH0, Full         X         100.00         121.21         32.45         0.00         100.0           AAB         Y         100.00         121.42         31.29         3.23         80.0         ± 9.6           10410-         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X         100.00         121.42         31.29         3.23         80.0         ± 9.6           AAB         IEEE 802.119 WIF12.4 GHz (DSSS, 1         X         1.05         63.83         15.26         150.0         ± 9.6           AAA         Mbps, 9p.2 duty cycle)         Y         4.58         67.06         16.39									
AAB         Fill         Los         Fill         F	10403.								
10404. AAB         CDMA2000 (1xEV-D0, Rov. A)         X         2.00         72.56         16.71         0.00         115.0         ± 9.8           10404. AAB         CDMA2000, RC3, SO32, SCH0, Full         X         1.84         69.27         14.92         115.0         ± 9.6           CDMA2000, RC3, SO32, SCH0, Full         X         100.00         125.12         32.43         0.00         100.0         ± 9.6           AAB         Rate         Y         100.00         124.11         32.05         100.0         ± 9.6           10410         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, AB         X         100.00         118.14         29.02         80.0         ± 9.6           10415         IEEE 802.11b WiF12.4 GHz (DSSS, 1         X         100.00         118.14         29.02         80.0         ± 9.6           AAA         Mps, 99pc duty cycle)         Y         1.03         63.84         15.26         150.0         ± 9.6           AAA         Mps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mps, 99pc		CDIWA2000 (TXEV-DO, Rev. 0)					0.00		± 9.6 %
10404. AAB         CDMA2000 (1xEV-D0, Rev. A)         X         2.00         72.56         16.71         0.00         115.0         ± 9.8           AAB         Y         1.81         72.10         15.72         116.0         116.0           COMA2000, RC3, 8032, SCH0, Full         X         100.00         125.12         32.45         0.00         100.0         ± 9.6           AAB         Rate         Y         100.00         125.12         32.45         0.00         100.0         ± 9.6           AAB         QPSK, ULSubframe=2,3.47,8,9)         Y         100.00         121.42         31.28         3.23         80.0         ± 9.6           AAB         QPSK, ULSubframe=2,3.47,8,9)         Y         100.00         116.14         29.02         80.0         ± 9.6           AAA         Mpps, 9pp duty cycle)         Y         1.03         63.38         15.26         150.0         ± 9.6           AAA         Mpps, 9pp duty cycle)         Y         4.58         67.06         16.47         0.00         150.0         ± 9.6           AAA         Mpps, 9pp duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mpps, 9pp duty									
AAB         Mathematical and the second	10404							115.0	
Id406- AAB         CDMA2000, RC3, SO32, SCH0, Full         X         106.00         125.12         32.45         0.00         115.0           AAB         Rate         Y         100.00         117.90         28.49         100.0         ± 9.6           10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, AB         Y         100.00         121.41         33.20         80.0         ± 9.6           AAB         OSK, UL Subframe=2,3.4,7.8,9)         Y         100.00         118.14         29.02         80.0           10415-         IEEE 802.110 WiFi 2.4 GHz (DSSS, 1         X         1.05         63.84         15.45         0.00         150.0         ± 9.6           AAA         Mbps, 99pe duty cycle)         Y         1.03         63.83         15.26         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Long         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Long         Y         4.58         67.06         16.47         0.00         150.0         ± 9.6		CDMA2000 (1XEV-DO, Rev. A)					0.00		± 9.6 %
10406- AAB         CDMA2000, RC3, SO32, SCH0, Full         X         100.00         125.12         32.45         0.00         100.0         ± 9.6           AAB         Rate         Y         100.00         124.11         32.05         100.0         19.6           10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe-2,3,4,7,6,9)         Y         100.00         118.14         29.02         80.0         ± 9.6           10415- GAAB         QPSK, UL Subframe-2,3,4,7,6,9)         Y         100.00         118.14         29.02         80.0         ± 9.6           10415- GAAA         Mbps, 99pc duty cycle)         Y         1.03         63.84         15.26         150.0         ± 9.6           10416- GAAA         Mbps, 99pc duty cycle)         Y         4.72         66.95         16.47         0.00         150.0         ± 9.6           10417- AAA         GFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           10417- AAA         GFDM, 6 Mbps, 99pc duty cycle, Long         Y         4.58         67.06         16.39         150.0         ± 9.6           10418- GAA         Mps, 99pc duty cycle, Long         Y         4.58         67.05         16.47									
AAB         Rate         Y         100.00         117.90         28.49         100.00         100.00         123.5           10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, AAB         X         100.00         121.42         31.29         3.23         80.0         ± 9.6           0410- AAB         OPSK, UL, Subframe=2,3,4,7,8,9)         Y         100.00         121.42         31.29         3.23         80.0         ± 9.6           10415-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.05         63.84         15.45         0.00         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle)         Y         1.03         63.83         15.26         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle)         Y         1.03         63.06         14.44         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Long         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle, Long         Y         4.57         66.95         16.41         150.0	10406								
10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, OPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         121,42         31.29         3.23         80.0         ± 9.6           10415- AAB         OPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         121,42         31.29         3.23         80.0         ± 9.6           10415- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 AAA         X         1.05         63.84         15.45         0.00         150.0         ± 9.6           10416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- CFDM, 6 Mbps, 99pc duty cycle)         Y         1.03         63.83         15.26         150.0         ± 9.6           10417- IEEE 802.11a/h WiFi 2.6 GHz (OFDM, 6         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           10417- IO417- IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         150.0         ± 9.6           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         ± 9.6           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.2							0.00		± 9.6 %
10410- AAB         LTE-TD (SC-FDMA, 1 RB, 10 MHz, AAB         X         100.00         121.42         31.29         3.23         80.0         ± 9.6           10415- AAA         PSK, UL, Subframe=2,3,4,7,8,9)         Y         100.00         118.14         29.02         80.0           10415- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.05         63.84         15.46         0.00         150.0         ± 9.6           0416- AAA         Mbps, 99pc duty cycle)         Y         1.03         63.83         15.26         150.0         ± 9.6           0416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- V         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         PGDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.23         16.41 <td< td=""><td>·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	·								
AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         118,14         29,02         80.0           10415-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.005         63.84         15.45         0.00         150.0         \$9.0           10416-         IEEE 802.11g WiFi 2.4 GHz (ERP-         Z         1.03         63.83         15.26         150.0         \$9.0           10416-         IEEE 802.11g WiFi 2.4 GHz (ERP-         Z         1.03         63.86         16.47         0.00         150.0         \$9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         \$9.6           10417-         IEEE 802.11a/n WiFi 5 GHz (OFDM, 6         X         4.72         66.95         16.47         0.00         150.0         \$9.6           10417-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.71         67.09         16.48         0.00         150.0         \$9.6           10418-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.71         67.09         16.48         0.00         150.0         \$9.6           10419-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.71         67.05         16	10110								
IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)         X         1.05         63.84         15.26         80.0           10416- AAA         HEEE 802.11g WiFi 2.4 GHz (DSSS, 1 AAA         Y         1.03         63.83         15.26         150.0         ± 9.6           10416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         Y         1.03         63.06         14.64         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           10417- AAA         GEDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           10417- IO417- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AA         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.57         67.23         16.41         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.33         16.41         1							3.23	80.0	± 9.6 %
10415- AAA       IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)       X       1.05       63.84       15.45       0.00       150.0       ± 9.6         10416- AAA       IEEE 802.11g WIFI 2.4 GHz (ERP- Z       Z       1.03       63.06       14.64       150.0       ± 9.6         AAA       OFDM, 6 Mbps, 99pc duty cycle)       Y       4.58       67.06       16.39       150.0       ± 9.6         10417- AAA       IEEE 802.11a/n WIFI 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)       Y       4.58       67.06       16.39       150.0       ± 9.6         10417- AAA       IEEE 802.11a/n WIFI 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)       Y       4.58       67.06       16.39       150.0       ± 9.6         10418- AAA       IEEE 802.11g WIFI 2.4 GHz (DSSS- CFDM, 6 Mbps, 99pc duty cycle, Long preambule)       Y       4.57       67.23       16.41       150.0       ± 9.6         10419- AAA       IEEE 802.11g WIFI 2.4 GHz (DSSS- CFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.59       67.17       16.41       150.0       ± 9.6         10422- AAA       IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       Y       4.59       67.17       16.41       150.0       ± 9.6         10422- AAA       IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       Y       4.86								80.0	
AAA         Mbps, 99pc duty cycle)         Y         1.03         63.83         15.26         150.0           10416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         Y         1.03         63.06         14.64         150.0           10416- AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0           10417- IO417- IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 AAA         Y         4.58         67.06         16.39         150.0           10417- AAA         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 AAA         X         4.72         66.95         16.47         0.00         150.0         ±9.6           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         ±9.6           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.23         16.41         150.0         ±9.6           10419- Dreambule)         Y         4.59         67.17         16.41         150.0         ±9.6           10422- BEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.59         67.17         16.41         150.0         ±9.6           10422	10.11-							80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)					0.00	150.0	±9.6 %
10416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           Id417-         IEEE 802.11a/n WiFi 5 GHz (OFDM, 6         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle, Long preambule)         Y         4.58         67.06         16.39         150.0         ± 9.6           10418-         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.57         67.23         16.41         150.0         ± 9.6           10419-         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.05         16.49         0.00         150.0         ± 9.6           10422-         IEEE 802.11n (HT Greenfield, 7.2 Mbps, X         4.86         67.05         16.50         0.00         150.0         ± 9.6           AAA         B						15.26		150.0	
10416- AAA       IEEE 802.11g WiFi 2.4 GHz (ERP- CFDM, 6 Mbps, 99pc duty cycle)       X       4.72       66.95       16.47       0.00       150.0       ± 9.6         10417- AAA       IEEE 802.11a/h WiFi 5 GHz (OFDM, 6       X       4.72       66.95       16.47       0.00       150.0       ± 9.6         AAA       Mbps, 99pc duty cycle)       Y       4.58       67.06       16.39       150.0       ± 9.6         AAA       Mbps, 99pc duty cycle)       Y       4.58       67.06       16.39       150.0       ± 9.6         AAA       Mbps, 99pc duty cycle, Iong preambule)       Z       4.69       66.77       16.29       150.0       ± 9.6         10418-       IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)       Y       4.57       67.23       16.41       150.0       ± 9.6         10419-       IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.57       67.05       16.49       0.00       150.0       ± 9.6         10419-       IEEE 802.11n (HT Greenfield, 7.2 Mbps, X       4.86       67.05       16.50       0.00       150.0       ± 9.6         10422-       IEEE 802.11n (HT Greenfield, 7.2 Mbps, X       4.86       67.45       16.64       0.00	10.00								
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					66.95	16.47	0.00	150.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				4.58	67.06	16.39		150.0	
10417- AAA         IEEE 802.111a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)         X         4.72         66.95         16.47         0.00         150.0         ± 9.6           AAA         Mbps, 99pc duty cycle)         Y         4.58         67.06         16.39         150.0         ± 9.6           IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.57         67.09         16.48         0.00         150.0         ± 9.6           IO419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.03         16.41         150.0         ± 9.6           IO419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.59         67.17         16.41         150.0         ± 9.6           IO422- BEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.86         67.05         16.64         0.00         150.0         ± 9.6           IO422- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           IO423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0				4.69	66.77	16.29			
Z         4.69         66.77         16.29         150.0           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         X         4.71         67.09         16.48         0.00         150.0         ± 9.6           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.67         66.90         16.28         150.0         ± 9.6           10422- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.69         67.05         16.49         0.00         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)         X         4.86         67.05         16.50         0.00         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10424- AAA         IEEE 802.11n (HT Greenfield, 72.2         X         4.97         67.38         16.61         0.00         150.0         ± 9.6		IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.72	66.95	16.47	0.00		± 9.6 %
Z         4.69         66.77         16.29         150.0           10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         X         4.71         67.09         16.48         0.00         150.0         ± 9.6           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.23         16.41         150.0         ± 9.6           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         X         4.73         67.05         16.49         0.00         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)         X         4.86         67.05         16.50         0.00         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10424- AAA         IEEE 802.11n (HT Greenfield, 72.2         X         4.97         67.38         16.61         0.00         150.0         ± 9.6			Y	4.58	67.06	16.39		150.0	
10418- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         X         4.71         67.09         16.48         0.00         150.0         ± 9.6           10419- IO419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.57         67.23         16.41         150.0         ± 9.6           AAA         DFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.59         67.17         16.41         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         X         4.70         66.86         16.30         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         X         4.86         67.05         16.60         0.00         150.0         ± 9.6           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10424- AAA         Mbps, 64-QAM)         Y         4.88         67.49         16.53         150.0         ± 9.6			Z	4.69					
Image: Constraint of the system of		OFDM, 6 Mbps, 99pc duty cycle, Long					0.00		± 9.6 %
Z         4.67         66.90         16.28         150.0           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- preambule)         X         4.73         67.05         16.49         0.00         150.0         ± 9.6           AAA         OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.59         67.17         16.41         150.0         ± 9.6           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         X         4.86         67.05         16.50         0.00         150.0         ± 9.6           10422- BESK)         Y         4.71         67.16         16.42         150.0         ± 9.6           AAA         BPSK)         Y         4.86         67.05         16.50         0.00         150.0         ± 9.6           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           10423- AAA         Mbps, 16-QAM)         Y         4.88         67.49         16.53         150.0         ± 9.6           10424- AAA         Mbps, 64-QAM)         Y         4.80         67.44         16.61         0.00         150.0         ± 9.6           10424- AAA         Mbps,			Y	4.57	67.23	16.41		150.0	
10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         X         4.73         67.05         16.49         0.00         150.0         ± 9.6           10422- AAA         Y         4.59         67.17         16.41         150.0         150.0         160.0         150.0         10422-           10422- BPSK)         IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)         X         4.86         67.05         16.50         0.00         150.0         ± 9.6           10423- AAA         BPSK)         Y         4.71         67.16         16.42         150.0         16.00         150.0         ± 9.6           10423- AAA         Mbps, 16-QAM)         Y         4.71         67.45         16.64         0.00         150.0         ± 9.6           10424- AAA         Mbps, 64-QAM)         Y         4.88         67.49         16.53         150.0         ± 9.6           10424- AAA         Mbps, 64-QAM)         Y         4.80         67.44         16.61         0.00         150.0         ± 9.6           10424- AAA         Mbps, 64-QAM)         Y         4.80         67.44         16.51         150.0           10425- AAA         BPSK)         Y         5.40         6			Z	4.67					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		OFDM, 6 Mbps, 99pc duty cycle, Short	x	4.73			0.00		± 9.6 %
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	4.59	67.17	16.41		150.0	
10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)         X         4.86         67.05         16.50         0.00         150.0         ± 9.6           AAA         BPSK)         Y         4.71         67.16         16.42         150.0         ± 9.6           IEEE 802.11n (HT Greenfield, 43.3         X         5.07         67.45         16.64         0.00         150.0         ± 9.6           AAA         Mbps, 16-QAM)         Y         4.88         67.49         16.53         150.0         ± 9.6           AAA         Mbps, 16-QAM)         Y         4.88         67.49         16.53         150.0         ± 9.6           10424-         IEEE 802.11n (HT Greenfield, 72.2         X         4.97         67.38         16.61         0.00         150.0         ± 9.6           AAA         Mbps, 64-QAM)         Y         4.80         67.44         16.51         150.0         ± 9.6           AAA         Mbps, 64-QAM)         Y         4.80         67.44         16.51         150.0         ± 9.6           AAA         BPSK)         Y         5.40         67.74         16.67         0.00         150.0         ± 9.6           AAA         BPSK)         Y			Z						··· · · · ·
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		IEEE 802.11n (HT Greenlield, 7.2 Mbps, BPSK)	Х				0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.71	67.16	16.42		150.0	
10423- AAA       IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)       X $5.07$ $67.45$ $16.64$ $0.00$ $150.0$ $\pm 9.6$ Y       4.88 $67.49$ $16.53$ $150.0$ $\pm 9.6$ Z       5.03 $67.26$ $16.46$ $150.0$ $\pm 9.6$ 10424- AAA       IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)       X $4.97$ $67.38$ $16.61$ $0.00$ $150.0$ $\pm 9.6$ AAA       Mbps, 64-QAM)       Y $4.80$ $67.44$ $16.51$ $150.0$ $\pm 9.6$ AAA       Mbps, 64-QAM)       Y $4.80$ $67.44$ $16.51$ $150.0$ $\pm 9.6$ 10425- AAA       IEEE 802.11n (HT Greenfield, 15 Mbps, AAA       X $5.55$ $67.72$ $16.76$ $0.00$ $150.0$ $\pm 9.6$ 10425- AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, AAA       X $5.56$ $67.74$ $16.67$ $150.0$ $\pm 9.6$ 10426- AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, AAA $X$ $5.56$ $67.76$ $16.77$ $0.00$ $150.0$ $\pm 9.6$									<u> </u>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			TY	4.88	67.49	16,53		150.0	· · "
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.80	67.44	16.51		150.0	
10425- AAA       IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)       X       5.55       67.72       16.76       0.00       150.0       ± 9.6         Y       5.40       67.74       16.67       150.0       ± 9.6         Z       5.52       67.56       16.60       150.0         10426- AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)       X       5.56       67.76       16.77       0.00       150.0       ± 9.6									
Z         5.52         67.56         16.60         150.0           10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         X         5.56         67.76         16.77         0.00         150.0         ± 9.6							0.00		± 9.6 %
Z         5.52         67.56         16.60         150.0           10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         X         5.56         67.76         16.77         0.00         150.0         ± 9.6			Y	5.40	67.74	16.67		150.0	· · · · · ·
10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         X         5.56         67.76         16.77         0.00         150.0         ± 9.6							<u> </u>		·······
Y 5.41 67.76 16.67 150.0							0.00		± 9.6 %
			Υ I	5 4 1	67 76	16.67		150.0	
Z 5.53 67.59 16.61 150.0							·		

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.58	67.76	16.77	0.00	150.0	± 9.6 %
		Y	5.42	67.74	16.66		150.0	
		Ζ	5.55	67.59	16.61		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.39	70.34	18.26	0.00	150.0	± 9.6 %
		Y	4.45	71.92	18.77		150.0	
		Z	4.28	69.73	17.80		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.47	67.55	16.57	0.00	150.0	± 9.6 %
		Y	4.28	67.68	16.44		150.0	
		Ζ	4.42	67.30	16.33		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.75	67.43	16.59	0.00	150.0	± 9.6 %
		Y	4.57	67.51	16.47		150.0	
		Z	4.71	67.22	16.38		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	×	4.99	67.43	16.63	0.00	150.0	± 9.6 %
		Y	4.82	67.48	16.53		150.0	
10434		Z	4.95	67.24	16.45		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.48	71.07	18.26	0.00	150.0	± 9.6 %
· · · · · -		Y	4.62	73.01	18.85		150.0	
		Z	4.34	70.35	17.75		150.0	
10435- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	121.26	31.21	3.23	80.0	± 9.6 %
		Y	100.00	117.94	28.93		80.0	
		Z	100.00	120.94	31.19		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.79	67.68	16.16	0.00	150.0	± 9.6 %
		Y	3.59	67.83	15.87		150.0	
		Z	3.72	67.28	15.81		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.28	67.32	16.43	0.00	150.0	± 9.6 %
		Y	4.12	67.46	16.30		150.0	
		Z	4.23	67.06	16.18		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.53	67.25	16.49	0.00	150.0	± 9.6 %
		Y	4.38	67.35	16.38		150.0	1
		Z	4.49	67.03	16.27		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.71	67.18	16.49	0.00	150.0	± 9.6 %
		Y	4.57	67.25	16.39		150.0	
		Z	4.68	66.98	16.29		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.73	68.01	15.94	0.00	150.0	± 9.6 %
		Y	3.50	68.08	15.53		150.0	
		Z	3.65	67.53	15.55		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.41	68.33	16.92	0.00	150.0	± 9.6 %
		Y	6.26	68.26	16.79		150.0	1
		Z	6.38	68.19	16.79		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	×	3.89	65.58	16.22	0.00	150.0	± 9.6 %
		Y	3.82	65.69	16.10		150.0	
		Z	3.87	65.41	16.01		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.54	67.26	15.47	0.00	150.0	± 9.6 %
		Y	3.31	67.35	14.92		150.0	ļ
		Z	3.47	66.87	15.11		150.0	L
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.64	65.34	16.09	0.00	150.0	± 9.6 %
		Y	4.30	65.17	15.60		150.0	
		Z	4.52	64.85	15.72	1	150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	1.11	71.80	18.35	0.00	150.0	± 9.6 %
,,,,,,		Ŷ	1.02	70.94	17.72		150.0	
		Z	0.94	68.21	16.13		<u>150.0</u> 150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.25	33.13	3.29	80.0	± 9.6 %
		Y	100.00	123.29	31.43		80.0	
10.100		<u>Z</u>	100.00	123.80	32.59		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.09	26.31	3.23	80.0	± 9.6 %
		Y Z	100.00	103.84	22.21		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00 100.00	110.71 108.22	26.28 24.94	3.23	80.0 80.0	± 9.6 %
		Y	4.72	73.15	13.51		80.0	
		Z	72.14	104.46	24.20		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.51	32.16	3.23	80.0	± 9.6 %
		Y	100.00	120.82	30.14		80.0	
40405		Z	100.00	122.14	31.67		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.62	26.08	3.23	80.0	± 9.6 %
		Y	27.97	91.21	19.17		80.0	
10466		Z	100.00	110.30	26.07		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.77	24.72	3.23	80.0	± 9.6 %
		Y	3.48	70.24	12.45		80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	39.27 100.00	97.36 123.71	22.41 32.25	3.23	80.0 80.0	± 9.6 %
		Y	100.00	121.09	30.25		80.0	
•••		Z	100.00	122.32	31.75		80.0	· · · · · · · · · · · · · · · · · · ·
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.77	26.14	3.23	80.0	±9.6 %
		Y	40.47	94.85	20.08		80.0	· · · · · · · · · · · · · · · · · · ·
		Z	100.00	110.43	26.13		80.0	
10469- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.78	24.72	3.23	80.0	± 9.6 %
·		Y	3.50	70.33	12.47		80.0	
		Z	40.62	97.74	22.51		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.74	32.26	3.23	80.0	± 9.6 %
		Y	100.00	121.11	30.26		80.0	
10471-		Z	100.00	122.35	31.76		80.0	. <u> </u>
AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.72	26.12	3.23	80.0	± 9.6 %
		Y Z	38.79 100.00	94.39	19.96		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	<u>110.39</u> 107.74	<u>26.11</u> 24.69	3.23	80.0 80.0	± 9.6 %
		Y	3.46	70.20	12.41		80.0	
		Z	40.93	97.80	22.51		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	123.71	32.25	3.23	80.0	±9.6 %
		Y	100.00	121.07	30.24		80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 100.00	122.32 110.73	31.75 26.12	3.23	80.0 80.0	± 9.6 %
		Y	37.59	94.10	19.89		00.0	<u> </u>
	······	Z	100.00	110.40	26.11		80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.75	26.11 24.70	3.23	80.0 80.0	± 9.6 %
	1 QAM, UL OUDII di 16-2.0.4.7.0.31							
ААВ		Ŷ	3.43	70.14	12.40		80.0	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.58	26.05	3.23	80.0	± 9.6 %
		Y	28.26	91.26	19.16		80.0	
		Ż	100.00	110.26	26.05	• ••	80.0	
10478- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.71	24.68	3.23	80.0	± 9.6 %
		Y	3.38	69.99	12.33		80.0	
		Z	39.53	97.39	22.40		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	16.61	96.96	27.34	3.23	80.0	± 9.6 %
		Y	32.48	106.45	28.76		80.0	·····
		Z	11.40	90.02	25.04		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	20.13	94.40	24.94	3.23	80.0	±9.6 %
		Y	34.21	99.63	24.79		80.0	
		Ζ	12.99	87.40	22.71		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	17.26	91.33	23.70	3.23	80.0	± 9.6 %
<u> </u>		Y	20.52	91.89	22.28		80.0	
		Z	11.58	85.08	21.67		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	82.36	21.43	2.23	80.0	± 9.6 %
		Y	6.22	80.40	19.88		80.0	
10100		Ζ	5.41	77.39	19.43	L	80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	10.36	84.69	22.14	2.23	80.0	± 9.6 %
		Y	9.30	82.35	20.02		80.0	
		Ζ	8.11	80.45	20.55		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.50	83.16	21.63	2.23	80.0	± 9.6 %
		Y	8.10	80.30	19.34		80.0	
		Z	7.64	79.37	20.17		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.05	82.24	22.03	2.23	80.0	± 9.6 %
		Y	6.34	81.22	21.08		80.0	
		Z	5.64	78.03	20.28		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.27	74.77	19.00	2.23	80.0	±9.6 %
		Y	4.82	74.06	18.02		80.0	
		Z	4.76	72.67	17.96		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.20	74.21	18.78	2.23	80.0	±9.6 %
		Y	4.72	73.41	17.75		80.0	
		Z	4.74	72.26	17.79		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	6.49	79.45	21.44	2.23	80.0	±9.6 %
		Y	5.74	78.36	20.74		80.0	
		Z	5.67	76.65	20.18		80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.12	73.18	19.22	2.23	80.0	± 9.6 %
		Y	4.72	72.73	18.67		80.0	ļi
		Z	4.87	71.89	18.50		80.0	
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.15	72.75	19.07	2.23	80.0	±9.6 %
		Y	4.76	72.36	18.54		80.0	ļ
10101		Z	4.93	71.59	18.41		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.99	76.19	20.30	2.23	80.0	± 9.6 %
		Y	5.39	75.34	19.75		80.0	
1010-		Z	5.53	74.37	19.41		80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.26	71.76	18.85	2.23	80.0	± 9.6 %
		Y	4.86	71.30	18.38		80.0	
		Z	5.11	70.90	18.33		80.0	

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.30	71.51	18.76	2.23	80.0	± 9.6 %
		Y	4.91	71.07	18.30		80.0	1
		Z	5.17	70.71	18.27		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.84	78.43	20.95	2.23	80.0	± 9.6 %
		Y	6.08	77.35	20.35		80.0	· · · · · ·
		Z	6.10	76.07	19.88		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.38	72.41	19.10	2.23	80.0	± 9.6 %
		Y	4.95	71.82	18.61		80.0	
		Z	5.20	71.44	18.53		80.0	· · · · · ·
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.39	71.89	18.93	2.23	80.0	± 9.6 %
		Y	4.98	71.37	18.47		80.0	
		Z	5.24	71.04	18.41		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.97	79.48	19.78	2.23	80.0	± 9.6 %
		Y	4.38	75.06	17.02		80.0	
		Z	4.42	74.52	17.73	·	80.0	1
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.17	71.56	15.92	2.23	80.0	± 9.6 %
		Y	2.60	65.94	12.29		80.0	1
		Z	3.55	68.95	14.65	·	80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.06	70.87	15.52	2.23	80.0	± 9.6 %
		Y	2.47	65.10	11.77		80.0	1
		Z	3.49	68.43	14.31		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.49	80.29	21.53	2.23	80.0	± 9.6 %
		Y	5.83	79.38	20.74		80.0	
		Z	5.49	76.96	20.08		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.17	73.94	19.00	2.23	80.0	±9.6 %
		Y	4.77	73.47	18.24		80.0	
		Ζ	4.79	72.25	18.12		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.19	73.61	18.84	2.23	80.0	± 9.6 %
		Ý	4.79	73.16	18.07		80.0	
		Z	4.83	72.02	17.99		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.41	79.23	21.35	2.23	80.0	± 9.6 %
		Y	5.64	78.08	20.63		80.0	
		Z	5.60	76.47	20.11		80.0	
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.09	73.10	19.17	2.23	80.0	± 9.6 %
<u> </u>		Y	4.69	72.61	18.60		80.0	
(		Z	4.85	71.82	18.46		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.13	72.66	19.02	2,23	80.0	± 9.6 %
		Y	4.73	72.25	18.47		80.0	
10555		Z	4.91	71.52	18.36		80.0	
10506- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.78	78.28	20.88	2.23	80.0	± 9.6 %
		Y	6.01	77.16	20.27		80.0	
		Z	6.06	75.95	19.82		80.0	
10507- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.36	72.35	19.07	2.23	80.0	± 9.6 %
		Y	4.93	71.74	18.57		80.0	

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.37	71.83	18.89	2.23	80.0	± 9.6 %
		Y	4.96	71.29	18.42		00.0	
		ź	5.23	70.98	18.38		80.0 80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.48	75.49	19.83	2.23	80.0	± 9.6 %
		Ŷ	5.91	74.73	19.37		80.0	
		z	6.04	73.93	19.06		80.0	
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.74	71.59	18.80	2.23	80.0	±9.6 %
		Y	5.32	71.00	18.37		80.0	
		Z	5.62	70.87	18.36		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.74	71.18	18.68	2.23	80.0	± 9.6 %
		Y	5.33	70.64	18.26		80.0	
		Z	5.63	70.53	18.27		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.25	77.99	20.61	2.23	80.0	± 9.6 %
<u> </u>		Y	6.50	76.91	20.04		80.0	
40540		Z	6.53	75.84	19.64		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.72	72.19	19.03	2.23	80.0	± 9.6 %
		Y	5.25	71.45	18.54		80.0	
10511		Z	5.56	71.34	18.53	_	80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.63	71.53	18.83	2.23	80.0	± 9.6 %
		Y	5.21	70.89	18.37		80.0	
		Z	5.51	70.80	18.38		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.02	64.11	15.57	0.00	150.0	±9.6 %
<u> </u>		Y	1.00	64.07	15.36		150.0	
40540		Z	0.99	63.25	14.70		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.98	79.68	22.01	0.00	150.0	± 9.6 %
		Y	0.77	75.78	20.20		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	Z X	0.64 0.91	70.56 67.05	17.22 16.78	0.00	150.0 150.0	± 9.6 %
MM	wops, sope duty cycle)		0.97	66.64	16.37		450.0	
		Y Z	0.87 0.85	66.61 65.23	15.33		150.0 150.0	
10518- AAA	IEEE 802.11a/n WIFI 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.72	67.03	16.46	0.00	150.0	± 9.6 %
		Y	4.58	67.14	16.37		150.0	
		Z	4.68	66.84	16.27		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.94	67.33	16.60	0.00	150.0	± 9.6 %
		Y	4.77	67.38	16.49		150.0	
10505		Z	4.90	67.14	16.41		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.79	67.32	16.53	0.00	150.0	± 9.6 %
		Y	4.62	67.35	16.42		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.75 4.72	67.11 67.33	16.33 16.52	0.00	150.0 150.0	± 9.6 %
		Y	4.55	67.35	16.41		150.0	
		Z	4.68	67.35	16.32		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.76	67.29	16.55	0.00	150.0	± 9.6 %
		Y	4.61	67.43	16.49		150.0	
		Z	4.73	67.10	16.35		150.0	

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.64	67.20	16.41	0.00	150.0	± 9.6 %
	Mbps, 99pc duty cycle)	Y	4,49	07.04	40.04		450.0	
		Z		67.31	16.34		150.0	
10524-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.60	66.98	16.20		150.0	
AAA	Mbps, 99pc duty cycle)		4.72	67.26	16.54	0.00	150.0	± 9.6 %
		Y	4.55	67.35	16.45		150.0	
40505		Z	4.68	67.06	16.34		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.67	66.28	16.12	0.00	150.0	± 9.6 %
		Y	4.54	66.41	16.05		150.0	
40500		Z	4.64	66.07	15.92		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.88	66.69	16.27	0.00	150.0	± 9.6 %
		Y	4.71	66.78	16.19		150.0	
1000		Z	4.84	66.48	16.07		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.79	66.67	16.23	0.00	150.0	±9.6 %
		Y	4.64	66.75	16.14		150.0	
10500		Z	4.75	66.45	16.02	1	150.0	
10528- AAA	IEEE 802.11ac WIFI (20MHz, MCS3, 99pc duty cycle)	X	4.81	66.69	16.26	0.00	150.0	± 9.6 %
		Y	4.65	66.76	16.17		150.0	
		Z	4.77	66.47	16.05		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.81	66.69	16.26	0.00	150.0	± 9.6 %
		Y	4.65	66.76	16.17		150.0	·
		Z	4.77	66.47	16.05		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.83	66.85	16.29	0.00	150.0	± 9.6 %
		Y	4.65	66.88	16.19		150.0	
		Z	4.78	66.62	16.08		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.68	66.72	16.24	0.00	150.0	±9.6 %
		Y	4.51	66.74	16.13		150.0	<u> </u>
		z	4.63	66.47	16.02		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.83	66.71	16.24	0.00	150.0	± 9.6 %
		Y	4.66	66.81	16.16		150.0	
		Z	4.78	66.49	16.03		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.33	66.83	16.29	0.00	150.0	± 9.6 %
		Y	5.18	66.84	16.20		150.0	
		Z	5.29	66.64	16.12		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.40	66.97	16.35	0.00	150.0	± 9.6 %
		Y	5.25	67.01	16.28		150.0	
		Z	5.36	66.78	16.17	· · · -	150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.27	66.97	16.34	0.00	150.0	± 9.6 %
		Y	5.12	66.97	16.25		150.0	<u> </u>
		Z	5.23	66.76	16.15	<u>.</u>	150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.33	66.94	16.32	0.00	150.0	± 9.6 %
		Y	5.18	66.94	16.23		150.0	· · · · · · · · · · · · · · · · · · ·
		Ż	5.29	66.75	16.14		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.45	67.02	16.40	0.00	150.0	± 9.6 %
		Y	5.27	66.95	16.28		150.0	
		Ż	5.41	66.83	16.23	L	150.0	· · · · · · · · · · · · · · · · · · ·
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.35	66.96	16.39	0.00	150.0	± 9.6 %
AAA					1		1	
		Y	5.20	66.97	16.30		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.33	66.87	16.34	0.00	150.0	± 9.6 %
		Y	5.17	66.84	16.23		150.0	ł
		Z	5.29	66.67	16.16		150.0	<u> </u>
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	Х	5.48	66.90	16.37	0.00	150.0	±9.6 %
		Y	5.32	66.90	16.27		150.0	
		Z	5.44	66.72	16.20		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.56	66.90	16.38	0.00	150.0	± 9.6 %
		Y	5.40	66.93	16.30		150.0	1
		Z	5.52	66.73	16.22		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.60	66.92	16.27	0.00	150.0	± 9.6 %
		Y	5.49	66.94	16.19		150.0	
		Z	5.57	66.75	16.10		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.82	67.35	16.42	0.00	150.0	± 9.6 %
		Y	5.68	67.35	16.34		150.0	
10546		Z	5.79	67.18	16.26		150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	Х	5.71	67.23	16.38	0.00	150.0	± 9.6 %
		Y	5.56	67.16	16.26		150.0	
		Z	5.67	67.04	16.21		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.79	67.29	16.40	0.00	150.0	± 9.6 %
		Y	5.63	67.19	16.27		150.0	
		Z	5.75	67.11	16.24		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.16	68.54	17.00	0.00	150.0	± 9.6 %
		Y	5.89	68.14	16.71		150.0	
		Z	6.10	68.32	16.82		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.72	67.17	16.36	0.00	150.0	± 9.6 %
		Y	5.58	67.16	16.27		150.0	
		Z	5.68	66.99	16.19		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.74	67.28	16.37	0.00	150.0	± 9.6 %
		Y	5.59	67.21	16.26		150.0	
		Z	5.70	67.08	16.20		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.64	67.02	16.26	0.00	150.0	± 9.6 %
		Y	5.50	67.01	16.17		150.0	1
		Z	5.60	66.83	16.09		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.73	67.06	16.31	0.00	150.0	± 9.6 %
		Y	5.58	67.04	16.21		150.0	
		Z	5.69	66.89	16.15		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.01	67.31	16.36	0.00	150.0	± 9.6 %
		Y	5.89	67.29	16.27		150.0	
		Z	5.97	67.14	16.21		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.16	67.66	16.51	0.00	150.0	± 9.6 %
		Y	6.02	67.59	16.39		150.0	
		Z	6.12	67.49	16.35		150.0	
10556- AAA	IEEE 1602.11ac WIFi (160MHz, MCS2, 99pc duty cycle)	Х	6.17	67.67	16.51	0.00	150.0	± 9.6 %
		Y	6.04	67.64	16.41		150.0	
		Z	6.14	67.50	16.35		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.16	67.64	16.52	0.00	150.0	± 9.6 %
		Y	6.01	67.55	16.38		150.0	
		Z	6.12	67.46	16.36		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.23	67.85	16.64	0.00	150.0	± 9.6 %
		Y	6.06	67.71	16.48	·····	150.0	· · · · · ·
		Z	6.19	67.66	16.47		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.21	67.65	16.58	0.00	150.0	± 9.6 %
		Y	6.05	67.56	16.44		150.0	
		Z	6.17	67.48	16.42		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.12	67.61	16.60	0.00	150.0	± 9.6 %
		Y	5.97	67.52	16.46	1	150.0	
		Z	6.09	67.44	16.44		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.30	68.15	16.87	0.00	150.0	± 9.6 %
		Y	6.10	67.92	16.66		150.0	
		Z	6.26	67.96	16.71		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.62	68.62	17.05	0.00	150.0	± 9.6 %
		Y	6.35	68.25	16.78		150.0	
		Z	6.58	68.47	16.91		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	Х	5.06	67.17	16.65	0.46	150.0	± 9.6 %
		Y	4.90	67.19	16.50		150.0	
		Z	5.03	67.02	16.49		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.32	67.64	16.96	0.46	150.0	± 9.6 %
		Y	5.14	67.66	16.84		150.0	
		Z	5.29	67.48	16.80		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.16	67.53	16.80	0.46	150.0	± 9.6 %
		Y	4.97	67.52	16.66		150.0	
		Z	5.12	67.36	16.63		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.18	67.87	17.11	0.46	150.0	± 9.6 %
		Y	5.01	67.94	17.03		150.0	
		Z	5.14	67.68	16.93	·	150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.07	67.28	16.58	0.46	150.0	± 9.6 %
		Y	4.89	67.27	16.41		150.0	
		Z	5.04	67.14	16.42		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	Х	5.11	67.89	17.13	0.46	150.0	± 9.6 %
		Y	4.97	68.06	17.11		150.0	
		Z	5.08	67.69	16.94		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.16	67.75	17.08	0.46	150.0	± 9.6 %
		Y	5.00	67.87	17.02		150.0	
4057		Z	5.13	67.56	16.90		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.41	67.04	17.13	0.46	130.0	± 9.6 %
		Y	1.34	66.60	16.67		130.0	
		Z	1.38	66.01	16.24		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.44	67.79	17.55	0.46	130.0	± 9.6 %
		Y	1.37	67.37	17.11		130.0	
		Z	1.40	66.61	16.58		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	48.76	135.45	36.87	0.46	130.0	± 9.6 %
		Y	13.63	114.31	31.46		130.0	
		Z	3.91	91.83	24.74		130.0	
10574- AAA	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.88	76.30	21.44	0.46	130.0	±9.6 %
·		Y	1.78	75.95	21.10		130.0	
		Z	1.63	72.68	19.39			

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.87	67.03	16.75	0.46	130.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	4.71	67.06	16.59		130.0	
		Ż	4.85	66.89	16.59			
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.90	67.18	16.80	0.46	130.0	100%
AAA	OFDM, 9 Mbps, 90pc duty cycle)					0.46	130.0	± 9.6 %
		Y	4.74	67.24	16.66		130.0	
40577		Z	4.88	67.03	16.63		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	5.14	67.51	16.98	0.46	130.0	± 9.6 %
		Y	4.95	67.52	16.83		130.0	
·		Z	5.11	67.36	16.82		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	5.03	67.68	17.07	0.46	130.0	±9.6 %
		Y	4.85	67.72	16.95		130.0	
		Z	5.00	67.50	16.89		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.82	67.12	16.49	0.46	130.0	± 9.6 %
		Y	4.61	66.97	16.24		130.0	
		Z	4.79	66.96	16.33		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.86	67.08	16.49	0.46	130.0	± 9.6 %
		Y	4.65	66.99	16.25		130.0	
40504		Z	4.84	66.94	16.33		130.0	·
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.94	67.77	17.04	0.46	130.0	± 9.6 %
		Y	4.75	67.79	16.91		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	4.91	67.57	16.84		130.0	··· ····
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.77	66.89	16.31	0.46	130.0	± 9.6 %
		Y	4.55	66.70	16.01		130.0	
		Ż	4.75	66.75	16.15		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.87	67.03	16.75	0.46	130.0	± 9.6 %
		Y	4.71	67.06	16.59		130.0	
		Z	4.85	66.89	16.59		130.0	
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.90	67.18	16.80	0.46		100%
AAA	Mbps, 90pc duty cycle)	Ŷ				0.40	130.0	± 9.6 %
			4.74	67.24	16.66		130.0	
10585-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	Z X	4.88 5.14	67.03 67.51	16.63 16.98	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)	Y	4.95	67.52	16.83	0.40		±9.0 %
							130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	Z X	<u>5.11</u> 5.03	67.36 67.68	16.82 17.07	0.46	130.0 130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.85	67.72	16.95		130.0	
		Ż	5.00	67.50	16.89		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.82	67.12	16.49	0.46	130.0	± 9.6 %
		Y	4.61	66.97	16.24		130.0	
		Z	4.79	66.96	16.33		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.86	67.08	16.49	0.46	130.0	±9.6 %
		Y	4.65	66.99	16.25		130.0	
		z	4.84	66.94	16.33		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.94	67.77	17.04	0.46	130.0	± 9.6 %
		Y	4.75	67.79	16.91		130.0	I
		Z	4.91	67.57	16.84		130.0	
		X	4.77	66.89	16.31	0.46	130.0	± 9.6 %
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)			00000				
10590- AAA	Mbps, 90pc duty cycle)	Y	4.55	66.70	16.01		130.0	

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	5.02	67.07	16.83	0.46	130.0	± 9.6 %
		Y	4.86	67.11	16.68		130.0	
		Z	5.00	66.93	16.67		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.20	67.42	16.95	0.46	130.0	± 9.6 %
		Y	5.02	67.45	16.81		130.0	
		Z	5.17	67.28	16.79		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.13	67.39	16.87	0.46	130.0	± 9.6 %
		Y	4.94	67.36	16.70		130.0	
		Z	5.11	67.24	16.71		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.18	67.52	17.00	0.46	130.0	± 9.6 %
		Y	5.00	67.54	16.86		130.0	
		Z	5.15	67.37	16.84		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.16	67.51	16.92	0.46	130.0	±9.6 %
		Y	4.97	67.49	16.75		130.0	
40500		Z	5.13	67.35	16.75		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.10	67.51	16.92	0.46	130.0	±9.6 %
		Y	4.90	67.49	16.76		130.0	
		Z	5.07	67.36	16.76		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	5.05	67.46	16.83	0.46	130.0	± 9.6 %
		Y	4.85	67.39	16.64		130.0	
		Z	5.02	67.30	16.67		130.0	·
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.03	67.69	17.08	0.46	130.0	± 9.6 %
		Y	4.84	67.66	16.92	···· .	130.0	
		Z	5.00	67.51	16.90		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.70	67.69	17.03	0.46	130.0	±9.6 %
		Y	5.52	67.61	16.86		130.0	
		Z	5.67	67.57	16.89		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.93	68.39	17.35	0.46	130.0	±9.6 %
		Y	5.66	68.03	17.04		130.0	
		Z	5.89	68.22	17.20		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.76	67.96	17.15	0.46	130.0	± 9.6 %
		Y	5.55	67.79	16.94		130.0	
		Z	5.73	67.82	17.01		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.85	67.98	17.08	0.46	130.0	± 9.6 %
		Y	5.64	67.79	16.85		130.0	
		Z	5.82	67.84	16.94		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.95	68.31	17.37	0.46	130.0	± 9.6 %
		Y	5.73	68.12	17.15		130.0	
		Z	5.91	68.13	17.20		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.70	67.66	17.03	0.46	130.0	± 9.6 %
		Y	5.53	67.58	16.87		130.0	
		Z	5.68	67.53	16.89		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.82	67.98	17.20	0.46	130.0	± 9.6 %
		Y	5.64	67.90	17.03		130.0	
		Z	5.79	67.85	17.07		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.59	67.45	16.81	0.46	130.0	± 9.6 %
		- Y	5.39	67.26	16.56		130.0	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.85	66.37	16.44	0.46	130.0	± 9.6 %
		Y	4.70	66.44	16.32		130.0	<u></u>
		Z	4.82	66.20	16.26		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	x	5.07	66.80	16.60	0.46	130.0	± 9.6 %
		Y	4.89	66.85	16.48		130.0	
		Z	5.04	66.63	16.42		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.96	66.70	16.47	0.46	130.0	± 9.6 %
		Y	4.78	66.70	16.32		130.0	
		Z	4.93	66.52	16.29		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.01	66.84	16.62	0.46	130.0	± 9.6 %
		Y	4.83	66.87	16.49		130.0	
		Z	4.98	66.66	16.44		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.94	66.69	16.49	0.46	130.0	± 9.6 %
		Y	4.75	66.67	16.34		130.0	
		Z	4.91	66.51	16.31		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.96	66.85	16.54	0.46	130.0	± 9.6 %
		Y	4.76	66.83	16.38		130.0	
		Z	4.92	66.67	16.36		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.97	66.79	16.45	0.46	130.0	± 9.6 %
		Y	4.76	66.71	16.26		130.0	
		Z	4.94	66.60	16.27		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.90	66.94	16.66	0.46	130.0	± 9.6 %
		Y	4.71	66.92	16.51		130.0	
		Z	4.86	66.73	16.46		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.94	66.52	16.29	0.46	130.0	± 9.6 %
		Y	4.74	66.48	16.10		130.0	
		Z	4.91	66.36	16.12		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.51	66.93	16.62	0.46	130.0	±9.6 %
		Y	5.34	66.89	16.49		130.0	
		Z	5.48	66.77	16.47		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.57	67.04	16.64	0.46	130.0	± 9.6 %
		Y	5.41	67.05	16.54		130.0	
		Z	5.54	66.88	16.49		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.46	67.12	16.70	0.46	130.0	±9.6 %
		Y	5.30	67.08	16.57		130.0	
		Z	5.43	66.94	16.53		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.49	66.94	16.55	0.46	130.0	± 9.6 %
		Y	5.31	66.88	16.40		130.0	
		Z	5.46	66.78	16.40		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.61	67.07	16.67	0.46	130.0	± 9.6 %
		Y	5.41	66.92	16.47		130.0	
		Z	5.58	66.91	16.51	ļ	130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.57	67.08	16.78	0.46	130.0	± 9.6 %
		Y	5.41	67.05	16.66		130.0	
		Z	5.54	66.91	16.62		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.58	67.21	16.84	0.46	130.0	± 9.6 %
		Y	5.42	67.22	16.74		130.0	
		Z	5.54	67.04	16.67		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.47	66.83	16.54	0.46	130.0	± 9.6 %
<u>`</u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Y	5.29	66.72	16.36		130.0	
		Z	5.44	66.67	16.38		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.65	66.97	16.67	0.46	130.0	± 9.6 %
		Y	5.48	66.92	16.52		130.0	
		Z	5.63	66.83	16.52	· ··	130.0	
10625-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	6.08	68.09	17.28	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Y	5.86	67.92	17.07	0.40		19.0 %
		z	6.05	67.92			130.0	
10626-	IEEE 802.11ac WiFi (80MHz, MCS0,	X	<u> </u>		17.14	0.40	130.0	
AAA	90pc duty cycle)		_	66.94	16.55	0.46	130.0	± 9.6 %
		Y	5.63	66.92	16.43		130.0	
10007		Z	5.73	66.80	16.40		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.03	67.53	16.79	0.46	130.0	± 9.6 %
		Y	5.87	67.49	16.67		130.0	
		Z	6.00	67.38	16.65		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.84	67.16	16.55	0.46	130.0	± 9.6 %
		Y	5.67	67.02	16.37		130.0	
		Z	5.81	67.01	16.41		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.93	67.23	16.58	0.46	130.0	± 9.6 %
		Y	5.75	67.09	16.40		130.0	
		Z	5.90	67.08	16.43		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.57	69.29	17.61	0.46	130.0	± 9.6 %
		Y	6.20	68.62	17.15		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	6.52	69.09	17.44	•	130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.37	68.79	17.53	0.46	130.0	± 9.6 %
		Y	6.10	68.43	17.26		400.0	<u> </u>
<u> </u>		z z	6.32	68.57			130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.00	67.56	17.35 16.93	0.46	130.0 130.0	± 9.6 %
		Y	5.85	67.56	16.85		130.0	
		z	5.96	67.39	16.77		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.94	67.43	16.71	0.46	130.0	± 9.6 %
		Y	5.73	67.19	16.48		130.0	
		Ż	5.91	67.25	16.55			
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.91	67.37	16.74	0.46	130.0 130.0	± 9.6 %
		Y	5.72	67.22	16.56	·	130.0	
		Ż	5.87	67.19	16.57		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.80	66.77	16.19	0.46	130.0	± 9.6 %
		Y	5.59	66.52	15.94	<u> </u>	130.0	
		z	5.77	66.64	16.07		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.17	67.34	16.65	0.46	130.0	± 9.6 %
		Y	6.04	67.28	16.50		130.0	
		Z	6.15	67.20	16.51		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.35	67.76	16.83	0.46	130.0	± 9.6 %
		TY 1	6.20	67.66	16.68		130.0	
		z	6.32	67.61	16.69		130.0	
					10.09		1 130.0	1
10638-	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.35	67.72	16.79	0.46	130.0	± 9.6 %
	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)					0.46		± 9.6 %

February 10, 2017

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.35	67.74	16.85	0.46	130.0	± 9.6 %
		Y	6.18	67.59	16.66		130.0	
		Z	6.32	67.59	16.70		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.39	67.87	16.86	0.46	130.0	± 9.6 %
		Y	6.18	67.60	16.61	·	130.0	
		Z	6.36	67.71	16.72		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.37	67.56	16.72	0.46	130.0	± 9.6 %
		Y	6.22	67.48	16.57		130.0	
		Z	6.34	67.42	16.59		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.43	67.86	17.02	0.46	130.0	± 9.6 %
		Y	6.27	67.76	16.88		130.0	
		Z	6.40	67.70	16.88		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.27	67.59	16.80	0.46	130.0	±9.6 %
		Y	6.10	67.43	16.61		130.0	
		Z	6.24	67.44	16.67		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	Х	6.52	68.35	17.21	0.46	130.0	±9.6 %
		Y	6.27	67.95	16.89		130.0	
		Z	6.48	68.18	17.06		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.86	68.85	17.40	0.46	130.0	± 9.6 %
		Y	6.65	68.64	17.18		130.0	
		Z	6.84	68.75	17.29		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	42.01	120.68	39.91	9.30	60.0	± 9.6 %
		Y	39.04	120.15	39.21		60.0	
		Z	32.57	113.89	37.85		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	44.40	122.83	40.67	9.30	60.0	± 9.6 %
		Y	37.67	120.23	39.39		60.0	
		Z	34.51	116.06	38.63		60.0	
10648- AAA	CDMA2000 (1x Advanced)	Х	0.92	66.62	13.41	0.00	150.0	± 9.6 %
		Y	0.77	65.29	11.91		150.0	
		Z	0.81	64.38	11.88		150.0	

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

### Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Swiss Calibration Service

Accreditation No.: SCS 0108

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Client PC	Test
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Certificate No: ES3-3288\_Jan17

## CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3288
Calibration procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	January 13, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

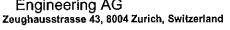
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration		
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17		
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17		
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17		
Reference 20 dB Allenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17		
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17		
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17		
Secondary Standards	ID	Check Date (in house)	Scheduled Check		
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18		
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18		
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18		
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18		
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17		

Calibrated by:	Name Michael Weber	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	Jalo Kot-
This calibration certificat	e shall not be reproduced except in full wi	thout written approval of the laboration	issued: January 16, 2017

### Calibration Laboratory of Schmid & Partner Engineering AG





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Accreditation No.: SCS 0108

- S Servizio svizzero di taratura
- Swiss Calibration Service

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### Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- Techniques", June 2013
  b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is
  implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included
  in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

# Probe ES3DV3

## **SN:3288**

Manufactured: July 6, 2010 Calibrated:

January 13, 2017

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

### **Basic Calibration Parameters**

<b></b>	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.14	1.10	1.09	± 10.1 %
DCP (mV) <sup>B</sup>	103.6	103.6	103.7	

### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	С	D dB	VR m∨	Unc <sup>E</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	195.6	±3.3 %
		Y	0.0	0.0	1.0		197.9	
		Z	0.0	0.0	1.0		194.9	

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

	<b>C</b> 1	C2	α	T1	T2	Т3	T4	T5	Т6
	fF	fF	V-1	ms.V⁻²	ms.V⁻¹_	ms	V <sup>−2</sup>	V-1	
Х	49.97	354.9	34.78	26.52	1.376	5.1	1.923	0.171	1.008
Y	51.2	365.6	35.05	27.41	1.73	5.1	1.782	0.195	1.01
Z	48.73	346.4	34.73	27.43	1.736	5.1	0.892	0.334	1.008

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

					5			
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.84	6.84	6.84	0.59	1.46	± <u>12.0 %</u>
835	41.5	0.90	6.60	6.60	6.60	0.53	1.50	± 12.0 %
1750	40.1	1.37	5.51	5.51	5.51	0.78	1.20	± 12.0 %
1900	40.0	1.40	5.31	5.31	5.31	0.78	1.19	± 12.0 %
2300	39.5	1.67	4.90	4.90	4.90	0.69	1.31	± 12.0 %
2450	39.2	1.80	4.72	4.72	4.72	0.72	1.31	<u>± 12.0 %</u>
2600	39.0	1.96	4.55	4.55	4.55	0.67	1.40	± 12.0 %

### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

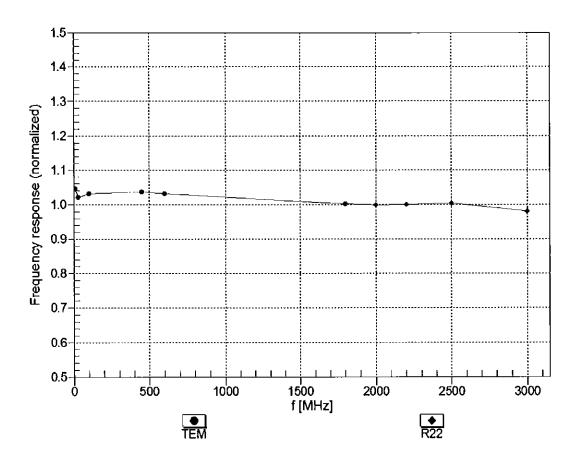
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.32	6.32	6.32	0.80	1.17	± 12.0 %
835	55.2	0.97	6.30	6.30	6 <u>.30</u>	0.46	1.53	± 12.0 %
1750	53.4	1.49	5.09	5.09	5.09	0.70	1.35	<u>± 12.0 %</u>
1900	53.3	1.52	4.89	4.89	4.89	0.51	1.64	<u>± 12.0 %</u>
2300	52.9	1.81	4.69	4.69	4.69	0.78	1.34	± 12.0 %
2450	52.7	1.95	4.51	4.51	4.51	0.77	1.15	<u>± 12.0 %</u>
2600	52.5	2.16	4.35	4.35	4.35	0.80	1.15	± 12.0 %

### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

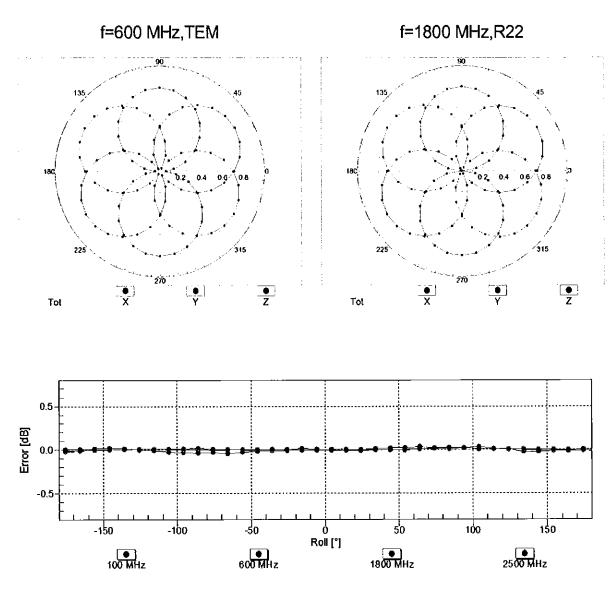
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



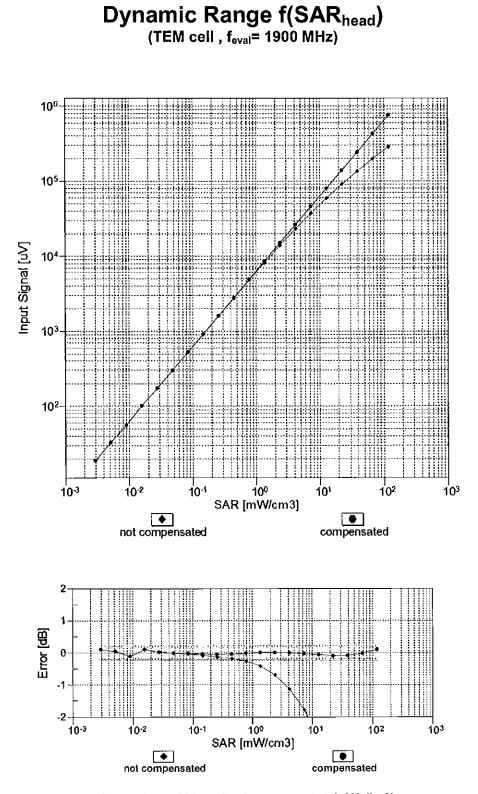
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

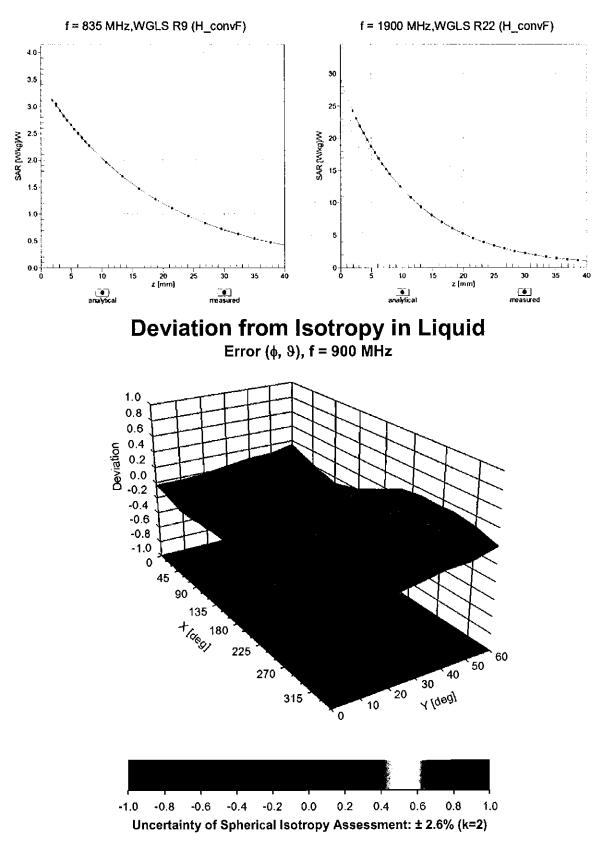


## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



### Uncertainty of Linearity Assessment: ± 0.6% (k=2)



## **Conversion Factor Assessment**

### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	94.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

### Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	cw	X	0.00	0.00	1.00	0.00	195.6	± 3.3 %
		Y	0.00	0.00	1.00		197.9	
10010-	SAR Validation (Square, 100ms, 10ms)	Z	0.00	0.00 88.68	1.00 21.04	10.00	194.9	
CAA	or a validation (oquale, rooms, roms)	^	10.47	00.00	21.04	10.00	25.0	± 9.6 %
		Y	12.58	86.20	20.78		25.0	
10044		Z	13.43	87.12	21.11		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.03	67.07	15.06	0.00	150.0	± 9.6 %
		Y Z	1.03 0.96	66.59 65.45	14.73 13.96	<u> </u>	150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.28	64.78	15.61	0.41	150.0 150.0	± 9.6 %
		Y	1.29	64.59	15.42		150.0	
		Z	1.27	64.13	15.00		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	×	5.04	67.21	17.36	1.46	150.0	± 9.6 %
		Y	5.07	67.20	17.35		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	Z X	<u>5.04</u> 100.00	67.14 120.53	17.24 31.89	9.39	150.0 50.0	± 9.6 %
		Y	100.00	121.39	32.62		50.0	
		Z	100.00	121.67	32.78		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	120.44	31.89	9.57	50.0	± 9.6 %
		Y	100.00	121.38	32.67		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z X	100.00 100.00	121.62 117.76	32.81 29.52	6.56	50.0 60.0	± 9.6 %
		Y	100.00	118.38	30.06		60.0	
		Z	100.00	<u>1</u> 18.52	30.15		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	13.03	99.39	38.55	12.57	50.0	± 9.6 %
		Y Z	18.55 15.92	109.69 103.55	42.60 39.76		50.0 50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.09	103.55	37.71	9.56	60.0	± 9.6 %
		Y	26.31	113.50	39.58		60.0	
1000-		Z	18.46	103.77	36.07		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	117.25	28.48	4.80	80.0	± 9.6 %
		Y Z	100.00 100.00	117.62 117.64	28.87 28.89		80.0 80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	118.00	28.08	3.55	100.0	± 9.6 %
		Y	100.00	118.10	28.32		100.0	
		Z	100.00	117.95	28.27		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	12.04	94.68	31.93	7.80	80.0	±9.6 %
		Y Z	13.90 11.33	97.76 92.35	33.13 30.92		80.0 80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	92.35	28.30	5.30	70.0	± 9.6 %
		Y	100.00	116.84	28.82	<u> </u>	70.0	
		Z	100.00	116.83	28.83		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	×	100.00	119.07	27.09	1.88	100.0	± 9.6 %
		Y	100.00	118.99	27.24		100.0	
			100.00	118.17	26.90	I	100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	x	100.00	124.31	28.26	1.17	100.0	± 9.6 %
		Y	100.00	123.44	28.09		100.0	
		z	100.00	121.81	27.42	<u> </u>	100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	56.85	116.89	31.97	5.30	70.0	± 9.6 %
		Y	26.10	103.93	28.65		70.0	
		Z	22.89	101.34	27.75		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	9.34	90.97	23.06	1.88	100.0	± 9.6 %
_		Y	6.38	85.07	21.22		100.0	
		Z	5.62	82.82	20.22		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	×	4.25	81.28	19.62	1.17	100.0	± 9.6 %
		Y	3.49	78.07	18.48		100.0	
		Z	3.10	76.08	17.48		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	×	100.00	126.29	34.32	5.30	70.0	± 9.6 %
		Y	35.39	109.10	30.14		70.0	
		Z	30.89	106.39	29.23		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	×	8.50	89.67	22.62	1.88	100.0	±9.6 %
		Y	6.04	84.34	20.94		100.0	
		Z	5.26	81.97	19.90		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	4.37	81.97	19.96	1.17	100.0	± 9.6 %
		Y	3.55	78.57	18.76		100.0	
		Z	3.15	76.51	17.73		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.80	71.63	15.63	0.00	150.0	±9.6 %
		Y	1.66	70.11	14.97		150.0	
		Ζ	1.49	68.70	14.08		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	116.14	28.97	7.78	50.0	± 9.6 %
		Y	100.00	117.01	29.65		50.0	
		Z	100.00	117.18	29.75		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	92.29	0.00	0.00	150.0	± 9.6 %
		Y	0.01	100.89	2.17		150.0	
		Z	0.01	87.03	0.28		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	100.00	122.42	34.27	13.80	25.0	± 9.6 %
		Y	25.19	99.36	28.69		25.0	
		Z	33.23	104.34	30.21		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	х	100.00	120.89	32.45	10.79	40.0	± 9.6 %
		Y	37.38	105.78	29.10		40.0	
		Z	50.18	110.83	30.56		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	32.71	105.58	29.92	9.03	50.0	±9.6 %
		Ŷ	21.17	97.74	27.82		<u>50.</u> 0	
		Z	20.25	96.76	27.43		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	8.39	87.11	28.40	6.55	100.0	± 9.6 %
		Y	9.28	89.02	29.19		100.0	
1005		Z	8.14	85.62	27.66		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.42	66.72	16.61	0.61	110.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.43	<u>6</u> 6.45	16.37		110.0	
		Z	1.40	65.86	15.89		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	133.06	34.29	1.30	110.0	±9.6 %
		Y	99.99	131.84	33.87		110.0	
		Z	20.67	108.16	28.15		110.0	

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10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	9.65	97.08	27.47	2.04	110.0	± 9.6 %
		Y	7.84	92.73	26.00		110.0	
		Z	6.27	88.57	24.47		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	Х	4.78	67.02	16.66	0.49	100.0	± 9.6 %
		Y	4.80	66.96	16.63		100.0	
		Z	4.76	66.89	16.51		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.81	67.16	16.79	0.72	100.0	± 9.6 %
		Y	4.84	67.11	16.76		100.0	
		Z	4.80	67.03	16.64		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	х	5.12	67.46	17.04	0.86	100.0	± 9.6 %
		Y	5.15	67.42	17.03		100.0	
		Z	5.10	67.34	16.90		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.01	67.45	17.21	1.21	100.0	± 9.6 %
		Y	5.05	67.43	17.19		100.0	
		Z	5.00	67.35	17.07		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.05	67.55	17.42	1.46	100.0	± 9.6 %
		Y	5.10	67.55	17.42		100.0	
		Z	5.05	67.47	17.29		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.37	67.76	17.89	2.04	100.0	± 9.6 %
		Y	5.42	67.79	17.92		100.0	
		Z	5.38	67.71	17.79		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.47	67.97	18.21	2.55	100.0	± 9.6 %
		Y	5.53	68.04	18.26		100.0	
		Z	5.48	67.93	18.11		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.55	67.95	18.39	2.67	100.0	± 9.6 %
		Y	5.61	68.05	18.47		100.0	
		Z	5.57	67.94	18.31		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.17	67.41	17.73	1.99	100.0	± 9.6 %
		Y	5.21	67.42	17.74	_	100.0	
		Z	5.18	67.36	17.62		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.20	67.89	18.03	2.30	100.0	± 9.6 %
		Y	5.25	67.92	18.05		100.0	
		Z	5.21	67.84	17.92		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.31	68.19	18.44	2.83	100.0	± 9.6 %
		Y	5.37	68.25	18.48		100.0	
		Z	5.34	68.17	18.34		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.33	68.21	18.66	3.30	100.0	± 9.6 %
		Y	5.40	68.30	18.72		100.0	
		Z	5.37	68.22	18.58		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.43	68.53	19.09	3.82	90.0	± 9.6 %
		Y	5.52	68.69	19.19		90.0	
		Z	5.48	68.57	19.02		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.45	68.35	19.22	4.15	90.0	± 9.6 %
		Y	5.54	68.54	19.34		90.0	
		Z	5.52	68.43	19.18		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.48	68.44	19.33	4.30	90.0	± 9.6 %
		TY	5.58	68.64	19.46		90.0	
		Z	5.56	68.53	19.29		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	x	0.86	66.00	12.67	0.00	150.0	± 9.6 %
		Y	0.84	65.24	12.29		150.0	1
		Z	0.78	64.30	11.54		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	1.63	62.58	7.49	4,77	80.0	± 9.6 %
		Y	1.83	63.34	8.19		80.0	
		Z	1.83	63.28	8.17		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	117.83	29.57	6.56	60.0	± 9.6 %
		Y	100.00	118.44	30.11		60.0	
		Z	100.00	118.59	30.20		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.83	67.54	15.57	0.00	150.0	± 9.6 %
		Y	1.82	67.09	15.29		150.0	
10000		Z	1.76	66.54	14.86		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.80	67.49	15.53	0.00	150.0	± 9.6 %
		Y	1.78	67.05	15.26		150.0	
40000		Z	1.72	66.48	14.82		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	21.11	108.17	37.70	9.56	60.0	± 9.6 %
		Y	26.22	113.37	39.53		60.0	
40400		Z	18.45	103.72	36.05		60.0	
10100- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.14	70.26	16.61	0.00	150.0	± 9.6 %
		Y	3.11	69.92	16.40		150.0	
40404		Z	3.00	69.31	16.04		150.0	
10101- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.27	67.62	15.91	0.00	150.0	± 9.6 %
		Y	3.28	67.48	15.81		150.0	
_		Z	3.21	67.16	15.57	_	150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.38	67.60	16.01	0.00	150.0	± 9.6 %
<u>-</u>		Y	3.38	67.43	15.90		150.0	
		Z	3.32	67.16	15.68		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.92	80.06	22.10	3.98	65.0	± 9.6 %
		Y	8.72	79.23	21.75		65.0	
		Z	8.55	78.87	21.55		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.27	77.35	21.84	3.98	65.0	± 9.6 %
		Y	8.38	77.28	21.82		65.0	
		Z	8.21	76.80	21.52		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.38	75.09	21.17	3.98	65.0	± 9.6 %
		Y	7.56	75.20	21.21		65.0	
		Z	7.30	74.45	20.79		65.0	
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.75	69.51	16.43	0.00	150.0	± 9.6 %
		Y	2.73	69.16	16,22		150.0	L
10.10-		Z	2.63	68.56	15.84		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.93	67.45	15.81	0.00	150.0	±9.6 %
·		Y	2.93	67.26	15.68	ļ	150.0	1
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Z X	2.87 2.24	66.93 68.60	15.42 16.04	0.00	1 <u>50.0</u> 150.0	± 9.6 %
		Y	2.23	68.25	15.83		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	2.23	67.59	15.83		150.0	
				1 07.39	10.30	1	1 100.0	1
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.63	68.18	16.07	0.00	150.0	± 9.6 %
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)					0.00		± 9.6 %

10112-	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.05	67.45	15.87	0.00	150.0	± 9.6 %
CAD	MHz, 64-QAM)		_					
		Y	3.05	67.25	15.74		150.0	
		Z	2.99	66.96	15.50		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.79	68.32	16.21	0.00	150.0	± 9.6 😿
		Y	2.76	67.88	15.95		150.0	
		Z	2.70	67.63	15.70		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.18	67.41	16.48	0.00	150.0	± 9.6 %
0.10		Y	5.20	67.34	16.44		150.0	
		z	5.16	67.26	16.33		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.49	67.59	16.58	0.00	150.0	± 9.6 %
		Y	5.51	67.56	16.56		150.0	
		Ż	5.46	67.43	16.43		150.0	· · · · · · · · · · · · · · · · · · ·
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	x	5.29	67.62	16.51	0.00	150.0	± 9.6 %
		Y	5.30	67.57	16.48		150.0	·
		z	5.26	67.46	16.36	<u> </u>	150.0	-
10117-	IEEE 802.11n (HT Mixed, 13.5 Mbps,	X	5.15	67.27	16.43	0.00	150.0	± 9.6 %
CAB	BPSK)					0.00		1 9.0 %
		Y	5.17	67.22	16.40		150.0	
10118-		Z	5.12	67.11	16.28	<u> </u>	150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.58	67.82	16.70	0.00	150.0	±9.6 %
		Y	5.60	67.79	16.69		150.0	
		Z	5.54	67.65	16.55		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	х	5.26	67.56	16.50	0.00	150.0	± 9.6 %
		Y	5.28	67.51	16.46		150.0	
		Z	5.23	67.40	16.34		150.0	· · ·
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	х	3.42	67.60	15.93	0.00	150.0	± 9.6 %
		Y	3.42	67.45	15.83		150.0	
		Z	3.36	67.18	15.61		150.0	
10141-	LTE-FDD (SC-FDMA, 100% RB, 15	x	3.54	67.70	16.10	0.00	150.0	± 9.6 %
CAC	MHz, 64-QAM)	Y	3.54	67.53	15.99	0.00		
		Z					150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	3.48 2.01	67.29 68.55	<u>15.79</u> 15.71	0.00	150.0 150.0	± 9.6 %
UAD		Y	1.99	68.09	15.45		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Z X	<u>1.89</u> 2.49	67.37 68.87	14.94 15.80	0.00	150.0 150.0	± 9.6 %
		Y	2.44	68.24	15.47		150.0	
		z	2.36	67.85	15.12		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	x	2.28	66.73	14.26	0.00	150.0	± 9.6 %
		Y	2.28	66.47	14.14		150.0	-
		Z	2.20	66.02	13.73		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	x	1.28	65.56	12.15	0.00	150.0	± 9.6 %
		Y	1.27	65.10	11.97		150.0	
		Z	1.18	64.31	11.28		150.0	
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	x	2.45	68.71	12.81	0.00	150.0	± 9.6 %
CAD		+~ <del></del> ↓	2.66	69.78	13.59		150.0	
CAD		[ Y I	Z.00					
CAD		YZ						
10147-	LTE-FDD (SC-FDMA, 100% RB, 1.4	Y Z X	<u>1.98</u> 3.08	66.37 71.58	11.72 14.21	0.00	150.0 150.0	± 9.6 %
		Z	1.98	66.37	11.72	0.00	150.0	± 9.6 %

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10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.94	67.51	15.86	0.00	150.0	± 9.6 %
		Y	2.94	67.31	15.72		150.0	
		Z	2.87	66.98	15.46		150.0	
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.06	67.50	15.91	0.00	150.0	±9.6 %
		Y	3.06	67.29	15.78		150.0	
		Z	3.00	67.01	15.54		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.65	82.82	23.23	3.98	65.0	± 9.6 %
		Y	9.32	81.74	22.79		65.0	
		Z	9.14	81.35	22.57		65.0	
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.90	77.63	21.67	3.98	65.0	± 9.6 %
		Y	8.01	77.54	21.66		65.0	
		Z	7.81	76.96	21.29		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	8.36	78.62	22.43	3.98	65.0	± 9.6 %
		Y	8.41	78.35	22.32		65.0	
		Z	8.25	77.92	22.03		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.28	69.00	16.29	0.00	150.0	±9.6 %
		Y	2.27	68.58	16.04		150.0	
		Z	2.17	67.93	15.61		150.0	
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	2.64	68.19	16.09	0.00	150.0	± 9.6 %
		Y	2.61	67.76	15.83		150.0	
		Z	2.55	67.45	15.56		150.0	
10156- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.86	68.63	15.52	0.00	150.0	± 9.6 %
		Y	1.83	68.07	15.22		150.0	
		Z	1.73	67.27	14.65		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.12	67.28	14.31	0.00	150.0	± 9.6 %
		Y	2.10	66.88	14.12		150.0	
		Z	2.01	66.34	13.65		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.79	68.38	16.25	0.00	150.0	± 9.6 %
		Y	2.77	67.93	15.99		150.0	
		Z	2.71	67.68	15.75		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.22	67.73	14.59	0.00	150.0	± 9.6 %
		Y	2.20	67.25	14.36		150.0	
		Z	2.10	66.73	13.91		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.77	68.69	16.26	0.00	150.0	± 9.6 %
		Y	2.77	68.42	16.09		150.0	
		Z	2.68	67.94	15.76		150.0	
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.96	67.44	15.84	0.00	150.0	± 9.6 %
		Y	2.95	67.20	15.70		150.0	
		Z	2.89	66.92	15.45		150.0	
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.07	67.57	15.95	0.00	150.0	± 9.6 %
		Ϋ́	3.06	67.34	15.80		150.0	
		Z	3.00	67.08	15.57		150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.82	70.81	19.68	3.01	150.0	± 9.6 %
		Y	3.87	70.87	19.83		150.0	
		Z	3.61	69.49	18.97		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.10	75.20	20.68	3.01	150.0	± 9.6 %
0.12		Y	5.13	75.23	20.85		150.0	

10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.85	78.14	22.26	3.01	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.74	77.64	22.17		150.0	ł
		Z	4.94	74.86	20.87		150.0	<u> </u>
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.36	71.61	20.07	3.01	150.0	± 9.6 %
-		Y	3.40	71.74	20.27		150.0	
		Z	3.01	69.13	18.83	1	150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.85	82.01	23.93	3.01	150.0	± 9.6 %
		Y	5.63	81.24	23.79	L	150.0	
		Z	4.19	75.44	21.32		150.0	
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.28	75.38	20.26	3.01	150.0	± 9.6 %
		Y	4.36	75.75	20.63		150.0	
10100		Z	3.43	71.21	18.53		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	26.94	111.93	34.76	6.02	65.0	±9.6 %
•		Y	76.00	132.17	40.23		65.0	
10/70		Z	22.37	106.85	33.09		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	100.00	128.82	36.70	6.02	65.0	± 9.6 %
		Y	100.00	129.16	37.07		65.0	
		Z	42.24	113.60	33.08		65.0	L
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	100.00	126.75	35.60	6.02	65.0	±9.6 %
		Y	100.00	127.12	35.98		65.0	
		Z	31.11	106.64	30.62		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.31	71.22	19.78	3.01	150.0	± 9.6 %
		Y	3.36	71.41	20.03		150.0	
		Z	2.98	68.83	18.58		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.86	82.05	23.95	3.01	150.0	± 9.6 %
		Y	5.64	81.27	23.80		150.0	
		Z	4.20	75.46	21.33		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.34	71.41	19.89	3.01	150.0	±9.6 %
		Y	3.39	71.57	20.12		150.0	
		Z	3.00	68.98	18.68		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.75	81.66	23.77	3.01	150.0	±9.6 %
		Y	5.56	80.97	23.66		150.0	
		Z	4.15	75.23	21.21		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	4.96	78.41	21.90	3.01	150.0	±9.6 %
		Y	4.94	78.34	22.07		150.0	
		Z	3.77	73.18	19.78		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	4.26	75.26	20.20	3.01	150.0	± 9.6 %
		Y	4.34	75.66	20.58		150.0	
		Z	3.42	71.14	18.48		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.33	71.39	19.88	3.01	150.0	± 9.6 %
		Y	3.38	71.55	20.11		150.0	
		Z	3.00	68.96	18.67		150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.74	81.63	23.76	3.01	150.0	± 9.6 %
		Y	5.55	80.94	23.65		150.0	
		Z	4.15	75.21	21.20		150.0	
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.25	75.23	20.18	3.01	150.0	±9.6 %
	<u> </u>	Y	4.33	75.63	20.57		150.0	
		Ż	3.41	71.12	18.47		150.0	

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.35	71.44	19.91	3.01	150.0	± 9.6 %
		Y	3.40	71.59	20.13		150.0	<u> </u>
		Z	3.01	69.00	18.69		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.78	81.74	23.81	3.01	150.0	± 9.6 %
		Y	5.58	81.03	23.69		150.0	
		Z	4.17	75.28	21.24		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.27	75.32	20.23	3.01	150.0	± 9.6 %
		Y	4.36	75.71	20.61		150.0	
		Z	3.43	71.18	18.50		150.0	
10187- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	x	3.36	71.50	19.98	3.01	150.0	± 9.6 %
		Y	3.41	71.65	20.20		150.0	
		Z	3.02	69.06	18.75		150.0	
10188- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	6.10	82.86	24.34	3.01	150.0	± 9.6 %
		Y	5.82	81.92	24.13		150.0	
·		Z	4.30	75.96	21.62		150.0	
10189- AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	×	4.42	75.96	20.58	3.01	150.0	± 9.6 %
		Y	4.49	76.27	20.92		150.0	L
		Z	3.50	71.61	18.78		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	×	4.57	66.79	16.17	0.00	150.0	± 9.6 %
		Y	4.59	66.71	16.13		150.0	
		Z	4.54	66.62	16.00		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.75	67.11	16.29	0.00	150.0	±9.6 %
		Y	4.76	67.04	16.25		150.0	
		Z	4.71	66.93	16.12		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	×	4.79	67.14	16.31	0.00	150.0	± 9.6 %
_		Y	4.81	67.07	16.27		150.0	
		Z	4.76	66.97	16.14	-	150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.85	16.19	0.00	150.0	± 9.6 %
		Y	4.59	66.78	16.15		150.0	
		Z	4.55	66.68	16.02		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.76	67.13	16.31	0.00	150.0	± 9.6 %
		Y	4.78	67.06	16.27		150.0	
		Z	4.73	66.96	16.14		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.79	67.16	16.32	0.00	150.0	± 9.6 %
		Y	4.81	67.09	16.28		150.0	
		Z	4.76	66.98	16.16		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.53	66.86	16.15	0.00	150.0	± 9.6 %
		Y	4.54	66.79	16.11		150.0	
10000		Z	4.50	66.69	15.97	L	150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.75	67.10	16.30	0.00	150.0	± 9.6 %
		Y	4.77	67.04	16.26		<u>1</u> 50.0	
1000		Z	4.72	66.93	16.13		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	×	4.80	67.09	16.31	0.00	150.0	± 9.6 %
		Y	4.82	67.02	16.27		150.0	
		Z	4.77	66.92	16.14		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.12	67.28	16.42	0.00	150.0	± 9.6 %
		Y	5.14	67.23	16.39		150.0	
		Z	5.10	67.12	16.27		150.0	

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.44	67.50	16.56	0.00	150.0	± 9.6 %
		Y	5.45	67.45	16.53		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	<u>5.45</u> 5.41	67.36	16.53		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.17	67.39	16.41	0.00	150.0	± 9.6 %
		Ý	5.19	67.33	16.37		150.0	
		Z	5.14	67.23	16.25		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.84	66.23	15.32	0.00	150.0	± 9.6 %
		Y	2.84	66.05	15.22		150.0	
		Z	2.79	65.84	14.97		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	129.06	36.85	6.02	65.0	± 9.6 %
		Y	100.00	129.37	37.20		65.0	
		Z	46.83	<u>115.6</u> 4	33.72		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	100.00	126.73	35.63	6.02	65.0	± 9.6 %
		Y	100.00	127.14	36.03		65.0	
		Z	38.56	110.41	31.72		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	×	69.69	130.84	39.78	6.02	65.0	± 9.6 %
		Y	75.32	132.43	40.40		65.0	
		Z	25.86	110.08	34.12		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	100.00	128.82	36.71	6.02	65.0	± 9.6 %
		Y	100.00	129.16	37.07		65.0	
		Z	42.44	113.67	33.11		65.0	
10230- <u>CA</u> B	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	100.00	126.56	35.52	6.02	65.0	±9.6%
		Υ	100.00	<u>12</u> 6.99	35.92		65.0	
		Z	35.33	108.76	31.19		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	61.41	128.11	39.01	6.02	65.0	± 9.6 %
		Y	68.04	130.20	39.77		65.0	
		Z	24.14	108.59	33.61		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	100.00	128.83	36.71	6.02	65.0	± 9.6 %
		Y	100.00	129.16	37.07		65.0	
		Z	42.43	113.67	33.11		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	100.00	126.58	35.52	6.02	65.0	± 9.6 %
		Y	100.00	127.00	35.93		65.0	
		Z	35.30	108.76	31,19		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	54.84	125.55	38.23	6.02	65.0	± 9.6 %
		Y	61.72	127.94	39.08		65.0	
		Z	22.69	107.16	33.09		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	100.00	128.84	36.71	6.02	65.0	± 9.6 %
		Y	100.00	129.18	37.08		65.0	
		Z	42.60	113.76	33.13		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	100.00	126.53	35.50	6.02	65.0	± 9.6 %
		Y	100.00	126.95	35.91		65.0	
		Z	35.76	108.95	31.24		65.0	ļ
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	62.38	128.46	39.10	6.02	65.0	± 9.6 %
		Y	69.37	130.62	39.87		65.0	
		Z	24.31	108.75	33.66		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	100.00	128.84	36.71	6.02	65.0	± 9.6 %
		Y	100.00	129.18	37.07		65.0	
		Z	42.41	113.68	33.11		65.0	

10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	100.00	126.59	35.53	6.02	65.0	± 9.6 %
,		Y	100.00	127.02	35.93		65.0	†
		Z	35.25	108.75	31.19		65.0	t
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	62.06	128.36	39.08	6.02	65.0	± 9.6 %
		Y.	68.99	130.52	39.85		65.0	
		Z	24.23	108.70	33.65		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	13.28	90.52	28.93	6.98	65.0	± 9.6 %
		Y	13.96	91.46	29.45		65.0	
		Z	11.68	87.20	27.61		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	12.37	88.95	28.26	6.98	65.0	± 9.6 %
	<u></u>	Y	13.39	90.50	29.02		65.0	
100/0		Z	10.99	85.85	27.01		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	8.91	83.36	27.07	6.98	65.0	± 9.6 %
	·	Y	9.86	85.50	28.12		65.0	
		Z	8.59	81.94	26.36		65.0	-
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.30	82.67	21.25	3.98	65.0	± 9.6 %
		Y	9.85	81.79	21.14	<u> </u>	65.0	
		Z	8.72	79.63	20.08		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	9.87	81.74	20.86	3.98	65.0	± 9.6 %
		Y	<u>9.54</u>	81.03	20.80		65.0	
		Z	8.47	78.92	19.75		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.47	86.04	22.67	3.98	65.0	± 9.6 %
		Y	9.23	83.59	21.87		65.0	
		Z	8.84	82.73	21.39		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.57	78.64	20.58	3.98	65.0	± 9.6 %
		Y	7.38	77.78	20.28		65.0	
	·	Z	7.22	77.31	19.92		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.41	77.82	20.24	3.98	65.0	± 9.6 %
		Y	7.32	77.21	20.04		65.0	
		Z	7.12	76.65	19.64		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	12.11	89.03	24.53	3.98	65.0	± 9.6 %
		Y	10.66	86.38	23.64		65.0	
		Z	10.28	85.63	23.23		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.55	80.96	22.98	3.98	65.0	± 9.6 %
		Y	8.39	80.13	22.64		65.0	
		Z	8.25	79.76	22.37		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	7.86	78.23	21.57	3.98	65.0	± 9.6 %
		Y	7.91	77.96	21.49		65.0	
		Z	7.70	77.39	21.11		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	11.12	87.26	24.79	3.98	65.0	± 9.6 %
		Y	10.34	85.43	24.12		65.0	
		Ζ	10.04	84.83	_23.80		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.69	77.02	21.42	3.98	65.0	± 9.6 %
		Y.	7.81	76.95	21.42		65.0	
		Ζ	7.63	76.42	21.06		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.13	77.95	22.11	3.98	65.0	± 9.6 %
		Y	8.20	77.74	22.03	į	65.0	
		Z	8.05	77.32	21.73		65.0	1

10255- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.20	82.22	23.21	3.98	65.0	± 9.6 %
0/10		Y	8.98	81.31	22.85		65.0	
		z	8.79	80.88	22.65		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	8.08	78.24	18.62	3.98	65.0	± 9.6 %
CAA	MHz, 16-QAM)	Y	8.09	78.13	18.83		65.0	
		Z	7.06	75.90	17.68			
10257-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	7.63	75.90	17.68	3.98	65.0 65.0	± 9.6 %
CAA	MHz, 64-QAM)							
		Y	7.74	77.12	18.34		65.0	
10258-	LTE-TDD (SC-FDMA, 100% RB, 1.4	ZX	6.79 7.91	74.98 80.91	17.22 20.07	3.98	65.0 65.0	± 9.6 %
CAA	MHz, QPSK)				_			
		Y Z	7.29 6.91	79.28	19.56		65.0	
10259-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	7.95	78.29	18.99	2 00	65.0	
CAB	16-QAM)			79.46	21.42	3.98	65.0	± 9.6 %
		Y	7.78	78.64	21.12		65.0	
		Z	7.62	78.20	20.79		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.90	79.04	21,27	3.98	65.0	± 9.6 %
		Y	7.76	78.30	21.00		65.0	
		Z	7.60	77.86	20.67		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.92	87.18	24.28	3.98	65.0	± 9.6 %
		Y	10.01	85.17	23.57		65.0	
		Z	9.66	84.43	23.18		65.0	1
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.53	80.89	22.94	3.98	65.0	±9.6 %
0/10		Y	8.37	80.08	22.61		65.0	
		Ż	8.23	79.70	22.33		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.85	78.21	21.57	3.98	65.0	± 9.6 %
0/10		Y	7.90	77.94	21.48		65.0	
		Ż	7.69	77.37	21.11		65.0	1
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	11.00	87.03	24.69	3.98	65.0	± 9.6 %
0/10		Y	10.26	85.26	24.04		65.0	
		z	9.95	84.63	23.71		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.90	77.63	21.68	3.98	65.0	± 9.6 %
UAU		Y	8.01	77.54	21.66		65.0	
		z'	7.80	76.96	21.30		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.36	78.61	22.42	3.98	65.0	± 9.6 %
0.00		Y	8.41	78.34	22.32		65.0	
	1	z	8.25	77.91	22.03		65.0	-
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.62	82.77	23.21	3.98	65.0	± 9.6 %
040		Y	9.31	81.70	22.78		65.0	
		Z	9.13	81.31	22.56		65.0	<u> </u>
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.35	77.06	21.84	3.98	65.0	± 9.6 %
		Y	8.46	76.99	21.82		65.0	
		Z	8.32	76.57	21.54		65.0	
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.27	76.58	21.70	3.98	65.0	± 9.6 %
		Y	8.39	76.55	21.71		65.0	
		Z	8.25	76.15	21.43		65.0	
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.73	79.17	21.98	3.98	65.0	± 9.6 %
0/10		Y	8.64	78.57	21.73		65.0	<u> </u>
		Ż	8.54	78.33	21.57		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.61	66.54	15.21	0.00	150.0	± 9.6 %
		+ <sub>Y</sub>	2.61	66.33	15.09		4000	
		Z	2.51				150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.62	66.07 67.74	14.82 15.41	0.00	150.0	± 9.6 %
		Y	1.61	67.33	15.16	-·	150.0	<u> </u>
-		Z	1.53	66.52	14.60		150.0	<u> </u>
10277- CAA	PHS (QPSK)	X	4.16	66.85	11.50	9.03	50.0	± 9.6 %
		Y	4.63	67.94	12.46		50.0	
		Z	4.60	67.78	12.32		<u>5</u> 0.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	9.85	82.12	20.69	9.03	50.0	± 9.6 %
		Y	9.12	80.62	20.44		50.0	
10279-		Z	8.86	79.95	20.07		50.0	
CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	×	9.99	82.27	20.78	9.03	50.0	± 9.6 %
		Y	9.28	80.82	20.54		50.0	
10290-		Z	8.98	80.08	20.15		50.0	
AAB	CDMA2000, RC1, SO55, Full Rate	X	1.46	68.64	14.01	0.00	150.0	±9.6 %
	<u> </u>	Y	1.41	67.76	13.62		150.0	
10291-	CDMA2000, RC3, SO55, Full Rate	Z X	1.28	66.63	12.83	0.00	150.0	
AAB			0.85	65.79	12.54	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	0.83	65.06	12.17		150.0	· · · ·
10292-		Z	0.77	64.16	11.44		150.0	
AAB	CDMA2000, RC3, SO32, Full Rate	X	1.05	69.62	14.81	0.00	150.0	± 9.6 %
		Y	0.97	67.98	14.02		150.0	
10000		Z	0.87	66.50	13.03		150.0	<u> </u>
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	1.55	75.31	17.73	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.27	71.79	16.21		150.0	
10295-		Z	1.11	69.79	15.04		150.0	
AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	14.00	90.89	26.40	9.03	50.0	±9.6 %
		× I	12,77	88.70	25.78		50.0	
40007		Z	12.63	88.15	25.40		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.76	69.60	16.50	0.00	150.0	± 9.6 %
		Y	2.74	69.24	16.28	·	150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Z X	2.64 1.59	68.64 67.69	15.90 14.15	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	1.56	67.07	13.85		150.0	
		Ż	1.45	66.19	13.19		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	3.37	72.61	15.51	0.00	150.0	± 9.6 %
		Y	3.48	73.06	15.96		150.0	
		Ζ	2.61	69.32	14.07		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.30	66.78	12.17	0.00	150.0	± 9.6 %
		Y	2.43	67.41	12.73		150.0	
10301-	IEEE 802.16e WIMAX (29:18, 5ms,	Z	2.01	65.30	11.43		150.0	
AAA	10MHz, QPSK, PUSC)	X	5.22	66.94	18.03	4.17	80.0	± 9.6 %
		Y	5.49	67.87	18.58		80.0	
10302-		Z	<u>5.31</u>	67.15	18.03		80.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.73	67.64	18.82	4.96	80.0	±9.6 %
		<u>Y</u>	5.99	<u>68.5</u> 8	19.39		80.0	
-		Z	5.82	67.86	18.83		80.0	

10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.53	67.50	18.75	4.96	80.0	± 9.6 %
		Y	5.80	68.54	19.39	·	80.0	·
		Z	5.63	67.76	18.78		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.26	67.09	18.10	4.17	80.0	± 9.6 %
		T Y T	5.48	67.88	18.57		80.0	
		Z	5.33	67.25	18.07		80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	6.11	74.04	22.57	6.02	50.0	± 9.6 %
		Y	7.32	78.18	24.64		50.0	
		Z	6.76	75.96	23.25		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.53	68.89	20.02	6.02	50.0	± 9.6 %
		Y	6.06	70.93	21.19		50.0	
		Z	6.08	71.68	21.53		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	5.79	71.27	21.31	6.02	50.0	± 9.6 %
		Y	6.08	71.47	21.28		50.0	
		Z	6.16	72.46	21.75		50.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	5.83	71.72	21.55	6.02	50.0	± 9.6 %
	<b>-</b>	Y	6.13	71.90	21.50		50.0	
		Z	6.24	73.01	22.02		50.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.60	69.14	20.17	6.02	50.0	± 9.6 %
		Y	6.15	71.25	21.38		50.0	
		Z	5.82	69.74	20.33		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.76	70.87	21.20	6.02	50.0	± 9.6 %
		Y	6.05	71.14	21.21		50.0	
		Z	6.10	72.01	21.62		50.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.12	68.91	16.16	0.00	150.0	± 9.6 %
		Y	3.09	68.57	15.95		150.0	
		Z	2.98	68.02	15.62		150.0	
10313- AAA	iDEN 1:3	X	9.49	83.32	20.31	6.99	70.0	± 9.6 %
		Y	8.42	81.34	19.78		70.0	
		Z	8.14	80.74	19.54		70.0	
10314- AAA	IDEN 1:6	X	17.53	97.10	27.48	10.00	30.0	± 9.6 %
		Y	11.54	89.55	25.24		30.0	
		Z	11.83	89.83	25.30		30.0	L
10315- AAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.15	64.32	15.34	0.17	150.0	± 9.6 %
		Y	1.16	64.08	15.10		150.0	
		Z	1.14	63.64	14.68		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.66	66.96	16.39	0.17	150.0	± 9.6 %
		Y	4.68	66.90	16.35		150.0	
		Z	4.64	66.81	16.22	L	150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.66	66.96	16.39	0.17	150.0	± 9.6 %
		Y	4.68	66.90	16.35		150.0	
		Z	4.64	66.81	16.22		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.74	67.16	16.29	0.00	150.0	± 9.6 %
		Y	4.76	67.12	16.26		150.0	
		Z	4.71	66.99	16.12		<u>150.0</u>	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.46	67.42	16.49	0.00	150.0	± 9.6 %
AAC	1 · · · · · · · · · · · · · · · · · · ·	1		1	t	1	t	1
		Y	5.48	67.39	16.49		150.0	1

Y         5.72         67.65         16.46         150.0           10403.         CDMA2000 (1xEV-DO, Rev. 0)         X         1.46         68.64         14.01         0.00         115.0         ± 8.8 %           AB         Y         1.41         67.76         13.62         115.0         ± 8.8 %           10404         CDMA2000 (1xEV-DO, Rev. A)         X         1.46         68.64         14.01         0.00         115.0         ± 9.6 %           AB         Y         1.41         67.76         13.62         115.0         ± 9.6 %           AB         Y         1.41         67.76         13.62         115.0         ± 9.6 %           AB         Rale         Y         100.00         117.01         28.16         0.00         100.0         ± 9.6 %           AB         PSK, UL Subframe=2,34.7.8,9         Y         100.00         121.25         30.71         80.0         ± 9.6 %           AAB         OPSK, UL Subframe=2,34.7.8,9         Y         100.00         121.22         30.61         80.0         ± 9.6 %           AAB         OPSK, UL Subframe=2,34.7.8,9         Y         1033         62.80         14.30         150.0         ± 9.6 % <td< th=""><th>10402- AAC</th><th>IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)</th><th>x</th><th>5.70</th><th>67.69</th><th>16.48</th><th>0.00</th><th>150.0</th><th>± 9.6 %</th></td<>	10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	x	5.70	67.69	16.48	0.00	150.0	± 9.6 %
10403. AAB         CDMA2000 (1xEV-DO, Rev. 0)         X         1.46         68.64         14.01         0.00         115.0         ± 9.8 %           10403. AAB         CDMA2000 (1xEV-DO, Rev. A)         X         1.41         67.76         13.62         115.0         ± 9.8 %           10404. AAB         CDMA2000 (1xEV-DO, Rev. A)         X         1.44         66.63         12.83         115.0           10404. AAB         CDMA2000, RC3, S032, SCH0, Full         X         1.44         67.67         13.62         115.0           10406. AAB         CDMA2000, RC3, S032, SCH0, Full         X         100.00         118.84         28.10         100.00         ± 9.6 %           AAB         Rate         Y         100.00         118.84         28.10         100.0         100.0         ± 9.6 %           AAB         QPSK, UL Subframe-2,3,4.7,8,9         Y         100.00         121.35         30.74         80.0         ± 9.6 %           AAA         Mps, 93pc duty cycle)         Y         1.03         63.20         14.52         0.00         150.0         ± 9.6 %           AAA         Mps, 93pc duty cycle)         Y         1.03         66.75         16.19         150.0         ± 9.6 %           AAA			Y	5.72	67.65	16.46		150.0	<u> </u>
10403.         CDMA2000 (1xEV-DO, Rev. 0)         X         1.46         68.64         14.01         0.00         115.0         ± 9.6 %           AAB         Y         1.41         67.76         13.82         115.0         115.0           10404         CDMA2000 (1xEV-DO, Rev. A)         X         1.46         68.64         14.01         0.00         115.0         ± 9.6 %           AAB         Y         1.41         67.76         13.82         115.0         ± 9.6 %           AAB         Y         1.41         67.76         13.82         115.0         ± 9.6 %           AAB         Rate         Y         1.41         67.76         13.82         115.0         ± 9.6 %           AAB         Rate         Y         100.00         117.01         28.16         0.00         100.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3.4,7.8,9         Y         100.00         121.35         30.74         80.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           10416         EEE 802.11g WFF12.4 GHz (ERP-         X         4.55         66.83 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></td<>									1
Z         1.28         66.63         12.83         115.0           AAB         Y         1.46         66.63         12.83         115.0         ±9.6%           AAB         CDMA2000, RC3, S032, SCH0, Full         X         1.41         67.76         13.62         116.0           10406-         CDMA2000, RC3, S032, SCH0, Full         X         100.00         117.01         22.16         0.00         100.0         ±9.6%           AB         Rate         Y         100.00         118.84         29.10         100.0         ±9.6%           AB         CSG-FDMA, 1 RB, 10 MHz,         X         100.00         121.35         30.74         80.0         ±9.6%           AA         OPSK, UL Subframe=Z,3.4.7.8.9         Y         1.00.00         121.35         30.74         80.0         ±9.6%           AAA         Mbs, 9go cduty cycle)         Y         1.03         62.80         14.52         0.00         150.0         ±9.6%           AAA         Mbs, 9go cduty cycle)         Y         1.03         62.80         16.20         150.0         ±9.6%           AAA         OFDM, 6 Mbps, 93pc duty cycle)         Y         4.58         66.83         16.24         0.00         150.0		CDMA2000 (1xEV-DO, Rev. 0)					0.00		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				1.41	67.76	13.62		115.0	
10404- AAB         CDMA2000 (1xEV-D0, Rev. A)         X         1.46         68.64         14.01         0.00         115.0         ± 9.6 %           AAB         Y         1.41         67.76         13.62         115.0            C         1.28         66.63         12.83         61.66         117.01         28.16         0.00         100.0         ± 9.6 %           AAB         Rate         Y         100.00         118.84         29.10         100.0         ± 9.6 %           AAB         Rate         Y         100.00         118.84         29.10         100.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         121.35         30.74         60.0         50.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         121.35         30.74         60.0         50.0         ± 9.6 %           AAA         Mps, s9pc duty cycle)         Y         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           AAA         DEEE 802.11g WiF12.4 GHz (CRSS, 1         X         1.03         66.75         16.19         150.0         ± 9.6 %           AAA </td <td></td> <td></td> <td>Z</td> <td>1.28</td> <td>66.63</td> <td>12.83</td> <td></td> <td></td> <td></td>			Z	1.28	66.63	12.83			
Z         1.28         66.63         12.83         116.0           AAB         Rate         Y         100.00         117.01         28.16         0.00         100.0         ±9.6 %           AAB         Y         100.00         117.01         28.16         0.00         100.0         ±9.6 %           10410-         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X         100.00         121.33         30.74         86.0         ±9.6 %           AB         OPSK, UL Subirame=2,3.4,7.8,9)         Y         100.00         121.23         30.74         86.0         ±9.6 %           AA         Mbps, 99po duty cycle)         Y         100.00         121.23         30.74         80.0         ±9.6 %           AAA         Mbps, 99po duty cycle)         Y         10.03         62.80         14.30         150.0         ±9.6 %           AAA         Mbps, 99po duty cycle)         Y         4.59         66.75         16.19         150.0         ±9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0         ±9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0		CDMA2000 (1xEV-DO, Rev. A)				14.01	0.00	115.0	± 9.6 %
10406- AAB         CDMA2000, RC3, SO32, SCH0, Full         X         100.00         117.01         28.16         0.00         100.0         ± 9.6 %           AAB         Y         100.00         118.84         29.10         100.0         100.0           10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe-2,3,4,7,8,9)         X         100.00         121.23         30.04         80.0         ± 9.6 %           10415- AAB         QPSK, UL Subframe-2,3,4,7,8,9)         Y         100.00         121.23         30.61         80.0         ± 9.6 %           10415- AAA         Mpps, 99pc duty cycle)         Y         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           10415- AAA         Mpps, 99pc duty cycle)         Y         1.03         66.80         16.24         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mpps, 99pc duty cycle)         Y         4.58         66.65         16.19         150.0         ± 9.6 %           AAA         OFDM, 6 Mpps, 99pc duty cycle, Long preambule)         Y         4.59         66.75         16.19         150.0         ± 9.6 %           10418-         IEEE 802.11g WiF12.4 GHz (DSSS- AAA         Y         4.56         66.80         16.2									
Y         100.00         118.84         29.10         100.0           10410- AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         120.36         30.09         3.23         80.0         ± 9.6 %           AAB         QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         121.35         30.74         80.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         100.00         121.32         30.61         80.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         1.03         662.80         14.52         0.00         150.0         ± 9.6 %           10416-         IEEE 802.11g WiFi 2.4 GHz (ERP-         X         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           10417-         IEEE 802.11g WiFi 5 GHz (OFDM, 6         X         4.58         66.63         16.26         150.0         ± 9.6 %           70417-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         Y         4.58         66.66         160.6         150.0         ± 9.6 %           74         4.56         66.75         16.19         150.0         ± 9.6 %           74         4.58         66.80							0.00		± 9.6 %
International constraints         Z         69.57         113.89         28.32         100.0           AAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, AAB         V         100.00         121.35         30.09         3.23         80.0         ± 9.6 %           AAB         UPSK, UL Subframe=2,3,4,7,6,9         Y         100.00         121.35         30.74         80.0         120.36           10415-         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         1.03         62.40         14.30         150.0         150.0         ± 9.6 %           10416-         IEEE 802.11g WiFi 2.4 GHz (ERP-         X         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           10417-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6         X         4.58         66.66         16.06         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0         ± 9.6 %           AAA         IEEE 802.11g WiF1 2.4 GHz (DSSS-         X         4.56         66.68         16.25         0.00         15			Y	100.00	118.84	29.10		100.0	
10410- AAB         CFE-TDD (\$C-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)         Y         100.00         120.36         30.09         3.23         80.0         ± 9.6 %           10415- AAA         Mbps, 99pc duty cycle)         Y         100.00         121.22         30.61         80.0         14.52         0.00         150.0         ± 9.6 %           10415- AAA         Mbps, 99pc duty cycle)         Y         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         1.03         62.80         14.30         150.0         150.0           10416-         EEE 802.11g WiFi 2.4 GHz (ERP- V         X         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.675         16.19         150.0         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         4.59         66.675         16.19         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle, Long prembule)         Y         4.56         66.66         16.06         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle, S			_						<u> </u>
Z         100.00         121.22         30.61         60.0           AAA         Mbps, 9pc duty cycle)         Y         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           AAA         Mbps, 9pc duty cycle)         Y         1.03         62.80         14.30         150.0           10416         IEEE 802.11g WiFi 2.4 GHz (ERP-         X         4.58         66.83         16.24         0.00         150.0           10417-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6         X         4.58         66.66         16.06         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0         ± 9.6 %           10417-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.58         66.63         16.25         0.00         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle, Long         Y         4.58         66.98         16.25         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle, Short         Y         4.58         66.90         16.20         150.0         ± 9.6 %           AAA         FEE 802.11n (HT Greenfield, 7.2 Mbps,							3.23		± 9.6 %
Z         100.00         121.22         30.61         80.0           AAA         Mbps, 99pc duty cycle)         Y         1.03         66.00         14.52         0.00         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle)         Y         1.03         62.80         14.30         150.0           10416-         IEEE 802.11g WiFi 2.4 GHz (ERP-         X         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0         ± 9.6 %           10417-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6         X         4.58         66.63         18.24         0.00         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle,         Y         4.58         66.75         16.19         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle, Long         Y         4.58         66.93         16.25         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle, Short         Y         4.58         66.93         16.25         0.00         150.0         ± 9.6 %           AAA         IEEE 802.11g			Y	100.00	121.35	30.74		80.0	
10415- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)         X         1.03         63.00         14.52         0.00         150.0         ± 9.6 %           10416- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- CFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.58         66.83         16.24         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0         ± 9.6 %           10417-         IEEE 802.11a/h WiFi 2.4 GHz (OFDM, 6 AAA         X         4.58         66.66         16.06         150.0         ± 9.6 %           AAA         Mbps, 99pc duty cycle, Long preambule)         Y         4.56         66.90         16.25         0.00         150.0         ± 9.6 %           10418-         IEEE 802.11g WiFi 2.4 GHz (DSS- AAA         Y         4.58         66.90         16.25         0.00         150.0         ± 9.6 %           10419-         IEEE 802.11g WiFi 2.4 GHz (DSS- AAA         Y         4.58         66.90         16.25         0.00         150.0         ± 9.6 %           <			Z						<u>↓</u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				1.03		14.52	0.00		±9.6%
10416- AAA       IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)       X       4.58       66.83       16.24       0.00       150.0       ± 9.6 %         10417-       IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 AAA       X       4.55       66.66       16.06       150.0       ± 9.6 %         10417-       IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 AAA       X       4.58       66.75       16.19       150.0       ± 9.6 %         AAA       Mbps, 99pc duty cycle)       Y       4.59       66.75       16.19       150.0       ± 9.6 %         10418-       IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)       X       4.56       66.90       16.20       150.0       ± 9.6 %         10419-       IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA       X       4.56       66.83       16.25       0.00       150.0       ± 9.6 %         10419-       IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.56       66.83       16.21       150.0       ± 9.6 %         10422-       IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       Y       4.60       66.86       16.21       150.0       ± 9.6 %         AAA       BPSK)       Y       4.60       66.87       16.11       150.0       <									
AAA         OFDM, 6 Mbps, 99pc duty cycle)         N         N         No.0         10.1.*         0.00         10.0.0         13.0.0           10417-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6         X         4.55         66.66         16.06         150.0           10417-         IEEE 802.11a/h WiFi 5 GHz (OFDM, 6         X         4.58         66.68         16.06         150.0           10418-         IEEE 802.11a/h WiFi 2.4 GHz (DSSS-         X         4.56         66.66         16.06         150.0           10418-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.56         66.98         16.25         0.00         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 99pc duty cycle, Long         Y         4.58         66.98         16.20         150.0         ± 9.6 %           10419-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.58         66.80         16.08         150.0           10422-         IEEE 802.11n (HT Greenfield, 7.2 Mbps,         X         4.58         66.87         16.23         150.0         ± 9.6 %           AAA         PSK)         Y         4.60         66.86         16.21         150.0         ± 9.6 %           AAA         BPSK)         Y									
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$							0.00		± 9.6 %
10417- AAA       IEEE 802.11a/t WiF15 GHz (OFDM, 6 Mbps, 99pc duty cycle)       X       4.58       66.83       16.24       0.00       150.0       ± 9.6 %         IO418- AAA       IEEE 802.11g WiF12.4 GHz (DSSS- AAA       Z       4.55       66.66       16.06       150.0       ± 9.6 %         IO418- AAA       IEEE 802.11g WiF12.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)       Y       4.58       66.98       16.25       0.00       150.0       ± 9.6 %         IO419- AAA       IEEE 802.11g WiF12.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.58       66.90       16.20       150.0       ± 9.6 %         IO419- AAA       IEEE 802.11g WiF12.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.58       66.93       16.25       0.00       150.0       ± 9.6 %         IO422- BEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       Y       4.60       66.87       16.23       150.0       ± 9.6 %         AAA       BPSK)       Y       4.72       66.87       16.39       0.00       150.0       ± 9.6 %         AAA       BPSK)       Y       4.72       66.87       16.21       150.0       ± 9.6 %         AAA       BPSK)       Y       4.72       66.87       16.21 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
AAA         Mbps, 99pc duty cycle)         Y         4.59         66.75         16.19         150.0           I         Z         4.55         66.66         160.6         150.0         16.00           10418- AAA         IEEE 802.11g WiFI 2.4 GHz (DSSS- preambule)         Y         4.56         66.98         16.25         0.00         150.0         ± 9.6 %           10419- preambule)         Y         4.58         66.90         16.20         150.0         ± 9.6 %           10419- preambule)         Y         4.58         66.90         16.20         150.0         ± 9.6 %           10419- preambule)         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.58         66.93         16.25         0.00         150.0         ± 9.6 %           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.66         66.76         16.08         150.0         ± 9.6 %           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.72         66.87         16.23         150.0         ± 9.6 %           AAA         BPSK)         Y         4.89         67.19         16.35         150.0         ± 9.6 %           AAA         BPSK <td>40447</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	40447								
Image: Constraint of the constraint of the		Mbps, 99pc duty cycle)					0.00		± 9.6 %
10418- AAA       IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)       Y       4.56       66.98       16.25       0.00       150.0       ± 9.6 %         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA       Y       4.58       66.90       16.20       150.0       ± 9.6 %         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA       Z       4.53       66.80       16.08       150.0       ± 9.6 %         AAA       OFDM, 6 Mbps, 99pc duty cycle, Short preambule)       Y       4.60       66.86       16.21       150.0       ± 9.6 %         10422- AAA       IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       X       4.70       66.86       16.23       150.0       ± 9.6 %         10422- AAA       IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA       X       4.70       66.87       16.23       150.0       ± 9.6 %         10423- AAA       IEEE 802.11n (HT Greenfield, 43.3       X       4.87       67.26       16.39       0.00       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.89       67.19       16.35       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.89       67.71       16.11       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAA         OFDM, 6 Mbps, 99pc duty cycle, Long preambule)         Y         4.58         66.90         16.20         150.0           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.58         66.90         16.25         0.00         150.0           10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.58         66.93         16.25         0.00         150.0         ± 9.6 %           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.68         66.76         16.08         150.0         ± 9.6 %           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         X         4.70         66.94         16.27         0.00         150.0         ± 9.6 %           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         4.87         67.26         16.39         0.00         150.0         ± 9.6 %           10423- AAA         Mbps, 16-QAM)         Y         4.89         67.19         16.35         150.0         ± 9.6 %           AAA         Mbps, 64-QAM)         Y         4.89         67.19         16.35         150.0         ± 9.6 %           AAA         Mbps, 64-QAM) <t< td=""><td>40440</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	40440								
Image: Constraint of the constraint of the		OFDM, 6 Mbps, 99pc duty cycle, Long					0.00		± 9.6 %
10419- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         X         4.58         66.93         16.25         0.00         150.0         ± 9.6 %           AAA         Preambule)         Y         4.60         66.86         16.21         150.0         ± 9.6 %           I0422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)         X         4.70         66.94         16.27         0.00         150.0         ± 9.6 %           I0422- AAA         BPSK)         Y         4.70         66.87         16.23         150.0         ± 9.6 %           AAA         BPSK)         Y         4.72         66.87         16.23         150.0         ± 9.6 %           AAA         BPSK,         Y         4.86         67.71         16.11         150.0         ± 9.6 %           AAA         Mbps, 16-QAM)         Y         4.89         67.19         16.35         150.0         ± 9.6 %           AAA         Mbps, 64-QAM)         Y         4.84         67.09         16.22         150.0         ± 9.6 %           AAA         Mbps, 64-QAM)         Y         4.81         67.14         16.32         150.0         ± 9.6 %           AAA         Mbps, 64-QAM								150.0	
AAA         OFDM, 6 Mbps, 99pc duty cycle, Short preambule)         Y         4.60         66.86         16.21         150.0           10422- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.60         66.86         16.21         150.0           10423- AAA         IEEE 802.11n (HT Greenfield, 7.2 Mbps, AAA         Y         4.70         66.94         16.23         150.0           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         4.87         67.26         16.39         0.00         150.0         ± 9.6 %           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3         X         4.87         67.26         16.39         0.00         150.0         ± 9.6 %           4AA         Mbps, 16-QAM)         Y         4.89         67.19         16.35         150.0           10424- AAA         IEEE 802.11n (HT Greenfield, 72.2         X         4.79         67.21         16.36         0.00         150.0         ± 9.6 %           4AA         Mbps, 64-QAM)         Y         4.81         67.19         16.52         150.0           10424- AAA         IEEE 802.11n (HT Greenfield, 72.2         X         4.79         67.21         16.57         0.00         150.0         ± 9.6 %	10110								
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		OFDM, 6 Mbps, 99pc duty cycle, Short		4.58	66.93	16.25	0.00	150.0	± 9.6 %
10422- AAA       IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)       X       4.70       66.94       16.27       0.00       150.0       ± 9.6 %         AAA       BPSK)       Y       4.72       66.87       16.23       150.0         Z       4.68       66.77       16.11       150.0       ± 9.6 %         I0423- AAA       IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)       X       4.87       67.26       16.39       0.00       150.0       ± 9.6 %         AAA       Mbps, 16-QAM)       Y       4.89       67.19       16.35       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.89       67.19       16.35       150.0       ± 9.6 %         10424- AAA       IEEE 802.11n (HT Greenfield, 72.2 AAA       X       4.79       67.21       16.36       0.00       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.81       67.14       16.32       150.0       ± 9.6 %         AAA       BPSK)       Y       4.81       67.14       16.32       150.0       ± 9.6 %         AAA       BPSK)       Y       5.43       67.53       16.55       150.0       ± 9.6 %         AAA       BPSK)					66.86	16.21		150.0	
AAA         BPSK)         Y         4.72         66.87         16.23         150.0           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3 AAA         X         4.87         67.26         16.39         0.00         150.0         ± 9.6 %           AAA         Mbps, 16-QAM)         Y         4.89         67.19         16.35         150.0         ± 9.6 %           IEEE 802.11n (HT Greenfield, 72.2         X         4.87         67.21         16.36         0.00         150.0         ± 9.6 %           AAA         Mbps, 64-QAM)         Z         4.84         67.09         16.22         150.0           10424- AAA         IEEE 802.11n (HT Greenfield, 72.2         X         4.79         67.21         16.36         0.00         150.0         ± 9.6 %           10425- AAA         Mbps, 64-QAM)         Y         4.81         67.14         16.32         150.0           10425- AAA         BPSK)         X         5.41         67.57         16.57         0.00         150.0         ± 9.6 %           10425- AAA         IEEE 802.11n (HT Greenfield, 15 Mbps, AAA         X         5.41         67.53         16.55         150.0           10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, AAA         X <td></td> <td></td> <td></td> <td>4.56</td> <td>66.76</td> <td>16.08</td> <td></td> <td>150.0</td> <td></td>				4.56	66.76	16.08		150.0	
Z         4.68         66.77         16.11         150.0           10423- AAA         IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)         X         4.87         67.26         16.39         0.00         150.0         ± 9.6 %           IO424- AAA         IEEE 802.11n (HT Greenfield, 72.2 AAA         Y         4.89         67.19         16.35         150.0         150.0         ± 9.6 %           IO424- AAA         IEEE 802.11n (HT Greenfield, 72.2 AAA         X         4.79         67.21         16.36         0.00         150.0         ± 9.6 %           IO424- AAA         IEEE 802.11n (HT Greenfield, 72.2 AAA         X         4.79         67.21         16.36         0.00         150.0         ± 9.6 %           IO425- AAA         IEEE 802.11n (HT Greenfield, 15 Mbps, AAA         Y         4.81         67.14         16.32         150.0           IO425- AAA         IEEE 802.11n (HT Greenfield, 15 Mbps, AAA         X         5.41         67.53         16.55         150.0           IO426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, AAA         Y         5.43         67.53         16.55         150.0           IO426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, AAA         Y         5.43         67.55         16.55         150.0 <td></td> <td>IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)</td> <td></td> <td></td> <td></td> <td>_</td> <td>0.00</td> <td>150.0</td> <td>± 9.6 %</td>		IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)				_	0.00	150.0	± 9.6 %
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			_						
AAA       Mbps, 16-QAM)       Y       4.89       67.19       16.35       150.0       150.0         10424-       IEEE 802.11n (HT Greenfield, 72.2       X       4.79       67.21       16.36       0.00       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.81       67.14       16.32       150.0         10424-       IEEE 802.11n (HT Greenfield, 72.2       X       4.79       67.21       16.36       0.00       150.0       ± 9.6 %         AAA       Mbps, 64-QAM)       Y       4.81       67.14       16.32       150.0       ± 9.6 %         I0425-       IEEE 802.11n (HT Greenfield, 15 Mbps, AAA       S.41       67.57       16.57       0.00       150.0       ± 9.6 %         AAA       BPSK)       Y       5.43       67.53       16.55       150.0       ± 9.6 %         AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, X       S.41       67.60       16.55       150.0       ± 9.6 %         AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, A       S.41       67.60       16.58       0.00       150.0       ± 9.6 %         AAA       16-QAM)       Y       5.43       67.55       16.55       150.0       ± 9.6 % <td>40400</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>t</td> <td></td>	40400							t	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
10424- AAA       IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)       X       4.79       67.21       16.36       0.00       150.0       ± 9.6 %         Y       4.81       67.14       16.32       150.0       150.0       100.0       ± 9.6 %         10425- AAA       IEEE 802.11n (HT Greenfield, 15 Mbps, AAA       Y       4.81       67.57       16.57       0.00       150.0       ± 9.6 %         10425- AAA       IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)       X       5.41       67.57       16.57       0.00       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.53       16.55       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.53       16.55       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.60       16.55       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.60       16.58       0.00       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.55       16.55       150.0       ± 9.6 %         Quadratic Control       Y       5.43       67.55       16.55       150.0       ± 9.6 %		······································							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10424								
Z         4.76         67.03         16.19         150.0           10425- AAA         IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)         X         5.41         67.57         16.57         0.00         150.0         ± 9.6 %           V         5.43         67.53         16.55         150.0         ±         9.6 %           I0426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, AAA         X         5.41         67.53         16.55         150.0           V         5.43         67.60         16.42         150.0         ±         9.6 %           10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, AAA         X         5.41         67.60         16.58         0.00         150.0         ±         9.6 %           AAA         16-QAM)         Y         5.43         67.55         16.55         150.0							0.00		± 9.6 %
10425- AAA       IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)       X       5.41       67.57       16.57       0.00       150.0       ± 9.6 %         Y       5.43       67.53       16.55       150.0       ±       150.0       ±       9.6 %         I0426- AAA       IEEE 802.11n (HT Greenfield, 90 Mbps, AAA       X       5.41       67.60       16.58       0.00       150.0       ±       9.6 %         V       5.43       67.60       16.58       0.00       150.0       ±       9.6 %         AAA       16-QAM)       Y       5.43       67.55       16.55       150.0			-						
Y         5.43         67.53         16.55         150.0           Z         5.38         67.41         16.42         150.0           10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         X         5.41         67.60         16.58         0.00         150.0         ± 9.6 %							0.00		±9.6 %
IO426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         Z         5.38         67.41         16.42         150.0           Y         5.41         67.60         16.58         0.00         150.0         ± 9.6 %			† <sub>Y</sub>	5 43	67.53	16 55		150.0	
10426- AAA         IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)         X         5.41         67.60         16.58         0.00         150.0         ± 9.6 %           Y         5.43         67.55         16.55         150.0         ± 9.6 %									
Y 5.43 67.55 16.55 150.0							0.00		± 9.6 %
			†γ†	5.43	67 55	16.55		150.0	
		<u> </u>	z	5.39	67.45	16.44		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps,	X	5.42	67.57	16.56	0.00	150.0	± 9.6 %
AAA	64-QAM)		<u> </u>	07.55	40.55		4-0-	
		Y	5.44	67.52	16.53		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	Z X	5.39 4.28	67.42 70.86	16.41 18.16	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	4.16	70.00	17.68		150.0	
		Z	4.16	70.28	17.74		150.0	· · · =
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	×	4.25	67.36	16.22	0.00	150.0	±9.6 %
		Y	4.27	67.25	16.17		150.0	
		Z	4.21	67.12	16.00		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.56	67.24	16.30	0.00	150.0	± 9.6 %
		Y	4.58	67.16	16.26		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Z X	4.52 4.81	67.05 67.24	16.11 16.38	0.00	150.0 150.0	±9.6 %
7001		Y	4.82	67.17	16.34		150.0	
	1	Z	4.77	67.06	16.21		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.37	71.70	18.12	0.00	150.0	±9.6 %
		Y	4.21	70.66	17.58		150.0	
		Z	4.22	70.98	17.63		150.0	
10435- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.16	29.99	3.23	80.0	±9.6 %
		Y	100.00	121.16	30.65		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Z X	100.00 3.54	121.03 67.33	30.53 15.54	0.00	80.0 150.0	±9.6 %
<u>~~~</u>		Y	3.55	67.16	15.45		150.0	
	-	Ż	3.47	66.95	15.21		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.09	67.13	16.08	0.00	150.0	± 9.6 %
		Y	4.11	67.02	16.02		150.0	-
		Z	4.05	66.89	15.85		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.37	67.07	16.20	0.00	150.0	± 9.6 %
		Y	4.38	66.98	16.14		150.0	
		Z	4.33	66.86	16.00		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.56	67.00	16.23	0.00	150.0	± 9.6 %
		Y	4.58	66.92	16.18		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	4.53 3.43	66.82 67.50	16.05 15.16	0.00	150.0 150.0	±9.6 %
		Y	3.44	67.30	15.07		150.0	
		Z	3.35	67.05	14.79		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.27	68.12	16.72	0.00	150.0	±9.6 %
		Y	6.29	68.09	16.71	ļ	150.0	
		Z	6.25	68.00	16.60	0.00	150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)		3.82	65.46	15.94	0.00	150.0	± 9.6 %
		Y 7	3.84	65.40	15.89		150.0 150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.81 3.25	65.31 66.84	15.76 14.57	0.00	150.0	±9.6 %
		Y	3.28	66.73	14.56	1	150.0	· · ·
		Ż	3.18	66.43	14.21		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	Ť	4.38	65.30	15.60	0.00	150.0	± 9.6 %
		Y	4.32	64.89	15.43		150.0	
		Z	4.30	64.97	15.31		150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	0.89	67.56	15.74	0.00	150.0	± 9.6 %
		Y	0.88	66.86	15.25		150.0	· · · · · · · · · · · · · · · · · · ·
		Z	0.82	65.57	14.37		150.0	<u> </u>
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	126.36	32.88	3.29	80.0	± 9.6 %
		Y	100.00	126.53	33.18		80.0	
		Z	100.00	124.94	32.40		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.76	23.56	3.23	80.0	± 9.6 %
		Y	100.00	108.68	24.62		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	51.63 65.77	101.19 98.98	22.83 20.89	3.23	80.0 80.0	± 9.6 %
		Y	99.96	105.11	22.93		80.0	
		Z	7.71	79.43	16.41		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.03	31.63	3.23	80.0	± 9.6 %
		Y	100.00	124.44	32.05		80.0	
		Z	100.00	122.80	31.25		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.13	23.26	3.23	80.0	± 9.6 %
		Y	100.00	108.13	24.35		80.0	ļ
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	Z	20.88	91.24	20.28	0.00	80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	X Y	16.68 	85.79 93.52	17.59	3.23	80.0	± 9.6 %
		Z	5.33	93.52 75.54	15.12	<u> </u>	80.0	┣────
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.29	31.75	3.23	80.0 80.0	± 9.6 %
		Y	100.00	124.68	32.15		80.0	
		Z	100.00	123.04	31.36	·	80.0	
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.33	23.34	3.23	80.0	± 9.6 %
		Y	100.00	108.31	24.43		80.0	
		Ζ	25.75	93.57	20.91		80.0	
10469- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	17.39	86.19	17.69	3.23	80.0	± 9.6 %
	<u> </u>	Y	33.96	94.02	20.28		80.0	
		Z	5.39	75.68	15.16		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.32	31.76	3.23	80.0	±9.6 %
		Y	100.00	124.71	32.16		80.0	
10471-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-	Z	100.00	123.06	31.36		80.0	
AAB	QAM, UL Subframe=2,3,4,7,8,9)	X Y	100.00	106.26	23.31	3.23	80.0	± 9.6 %
		Z	25.54	108.25 93.45	24.40		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	16.97	85.92	20.86 17.60	3.23	80.0 80.0	±9.6 %
		Υ	33.74	93.91	20.24	1	80.0	
		Z	5.36	75.60	15.12		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.29	31.74	3.23	80.0	± 9.6 %
		Y	100.00	124.68	32.14		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	ZX	100.00 100.00	123.04 106.26	31.35 23.31	3.23	80.0 80.0	± 9.6 %
AAB	QAM, UL Subframe=2,3,4,7,8,9)	$\square$						
	<u> </u>	Y	100.00	108.26	24.40	L	80.0	
10475		Z	25.05	93.25	20.81		80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	16.57	85.71	17.55	3.23	80.0	± 9.6 %
		Y	32.88	93.67	20.18		80.0	
		Z	5.31	75.51	15.09		80.0	

10477-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-	x	100.00	106.06	23.21	3.23	80.0	± 9.6 %
AAB	QAM, UL Subframe=2,3,4,7,8,9)						_	- 0.0 /2
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	108.07	24.32		80.0	
10478-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-	Z X	21.55 15.88	91.55	20.34	2.02	80.0	± 9.6 %
	QAM, UL Subframe=2,3,4,7,8,9)			85.28	17.42	3.23	80.0	±9.0 %
	· · · · · · · · · · · · · · · · · · ·	Y	31.78	93.29	20.08		80.0	
10479-		Z	5.24	75.37	15.04	0.00	80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	32.00	107.36	29.37	3.23	80.0	± 9.6 %
		Y	18.99	99.29	27.40		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Z X	12.66 47.75	<u>92.38</u> 105.02	25.03 26.48	3.23	80.0 80.0	± 9.6 %
		Ϋ́	24.72	96.66	24.62		80.0	
		Ż	13.49	88.05	21.90		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	28.58	96.95	23.95	3.23	80.0	± 9.6 %
		Ý	18.05	91.37	22.73		80.0	
		z	10.51	83.92	20,24		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	5.71	79.55	19.73	2.23	80.0	± 9.6 %
		Y	4.78	76.56	18.66		80.0	
		Ż	4.38	75.21	17.95		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	9.78	83.45	20.56	2.23	80.0	± 9.6 %
		Y	8.22	81.04	19.99		80.0	
		Z	6.44	77.35	18.36		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.43	81.23	19.83	2.23	80.0	± 9.6 %
		Y	7.40	79.37	19.42		80.0	
		Z	5.90	75.96	17.85		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.80	80.21	20.89	2.23	80.0	± 9.6 %
		Y	5.11	77.71	19.94		80.0	
		Z	4.76	76.58	19.36		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.61	73.61	17.94	2.23	80.0	± 9.6 %
		Y	4.33	72.22	17.38		80.0	
		Z	4.18	71.69	16.99		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.53	73.00	17.69	2.23	80.0	± 9.6 %
		Y	4.28	71.73	17.17		80.0	
-		Z	4.14	71.23	16.79		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.39	77.60	20.61	2.23	80.0	± 9.6 %
		Y	5.11	76.25	20.02		80.0	
		Z	4.84	75.34	19.57		80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.56	72.31	18.60	2.23	80.0	± 9.6 %
		Y	4.47	71.57	18.24		80.0	
		Z	4.37	71.22	17.97		80.0	
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.62	71.98	18.48	2.23	80.0	± 9.6 %
		Y	4.55	71.31	18.15		80.0	
		Z	4.45	70.98	17.90		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.18	74.83	19.69	2.23	80.0	± 9.6 %
		Y	5.06	74.01	19.29		80.0	<b> </b>
10.00		Z	4.86	73.38	18.95		80.0	10.0.4/
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.75	70.98	18.35	2.23	80.0	± 9.6 %
		Y	4.74	70.58	18.13	ļ	80.0	
		Z	4.65	70.27	17.90		80.0	1

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.80	70.77	18.28	2.23	80.0	± 9.6 %
		Y	4.79	70.40	18.07		80.0	<u> </u>
		Z	4.70	70.11	17.85		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.78	76.75	20.27	2.23	80.0	± 9.6 %
		Y	5.56	75.65	19.77		80.0	
		Z	5.31	74.90	19.40		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.82	71.47	18.58	2.23	80.0	± 9.6 %
		Y	4.80	71.03	18.33		80.0	
		Z	4.70	70.69	18.10		80.0	<u>†</u> −−
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.86	71.06	18.44	2.23	80.0	± 9.6 %
		Y	4.85	70.66	18.22		80.0	·
		Z	4.76	70.36	18.00		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.15	74.65	16.99	2.23	80.0	± 9.6 %
		Y	3.58	72.34	16.17		80.0	
		Z	3.23	70.88	15.35		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.56	65.93	12.36	2.23	80.0	± 9.6 %
		Y	2.58	65.70	12.37		80.0	<u> </u>
		Z	2.34	64.56	11.59		80.0	1
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.44	65.10	11.83	2.23	80.0	± 9.6 %
		Y	2.48	65.01	11.91		80.0	
		Z	2.26	63.91	11.14		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.42	78.56	20.59	2.23	80.0	± 9.6 %
		Y	4.99	76.71	19.84		80.0	
		Z	4.69	75.72	19.32		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	73.05	18.17	2.23	80.0	± 9.6 %
		Y	4.39	71.95	17.70		80.0	
_		Z	4.27	71.52	17.37		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	4.62	72.77	18.01	2.23	80.0	± 9.6 %
		Y	4.43	71.72	17.55		80.0	
		Z	4.31	71.31	17.23		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.31	77.36	20.51	2.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.05	76.06	19.94		80.0	
		Z	4.78	75.13	19.47		80.0	
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.53	72.20	18.54	2.23	80.0	± 9.6 %
		Y	4.45	71.49	18.19		80.0	
4000-		Z	4.35	71.12	17.92		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	71.87	18.42	2.23	80.0	± 9.6 %
	<u>+</u>	Y	4.52	71.23	18.11		80.0	1
40500		Z	4.42	70.89	17.84		80.0	
10506- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.73	76.57	20.19	2.23	80.0	± 9.6 %
		Y	5.52	75.52	19.71		80.0	
40507		Z	5.26	74.76	19.33		80.0	
10507- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.80	71.40	18.54	2.23	80.0	± 9.6 %
		Y	4.78	70.97	18.30		00.0	
			4.70	10.97 1	18.30	1	80.0	

10509- AAB 10510- AAB		Ϋ́						
AAB 10510-			4.84	70.60	<u>18.1</u> 9		80.0	
AAB 10510-		Ζ	4.74	70.29	17.96		80.0	
	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	х	5.72	74.32	19.33	2.23	80.0	± 9.6 %
		Y	5.59	73.58	18.97		80.0	
		Ζ	5.43	73.10	18.71		80.0	
	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	x	5.21	70.74	18.36	2.23	80.0	± 9.6 %
		Y	5.23	70.46	18.19		80.0	
10511	1 TE TOD (00 EDINA 4000 DD 45	Z	5.13	70.16	17.99		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.24	70.40	18.26	2.23	80.0	±9.6 %
		Y	5.25	70.15	_ 18.11		80.0	
		Z	5.17	69.88	17.92		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.23	76.40	19.98	2.23	80.0	±9.6 %
		Y	6.00	75.40	19.53		80.0	
		Z	5.76	74.74	19.21		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.14	71.15	18.52	2.23	80.0	±9.6 %
		Y	5.14	70.84	18.33		80.0	
		Z	5.04	70.49	18.11		80.0	· · · · · · · · · · · · · · · · · · ·
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.11	70.61	18.35	2.23	80.0	± 9.6 %
		Y	5.12	70.34	18.19		80.0	
		Z	5.04	70.04	17.98		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	63.16	14.56	0.00	150.0	± 9.6 %
		Y	0.99	62.95	14.34	.     .	150.0	
40540		Z	0.98	62.52	13.91		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.58	68.82	16.42	0.00	150.0	±9.6 %
		Y	0.57	67.74	15.66		150.0 150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z X	0.51 0.83	65.56 64.84	14.26 15.06	0.00	150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)					0.00		±9.0 %
		Y Z	0.83	64.47 63.67	14.7 <u>3</u> 14.07		150.0 150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.57	66.90	16.21	0.00	150.0	± 9.6 %
		Y	4.58	66.82	16.17		150.0	
		Z	4.54	66.73	16.04		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.75	67.14	16.34	0.00	150.0	±9.6 %
		Y	4.77	67.08	16.30		150.0	ļ <u> </u>
		Z	4.72	66.97	16.16		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mops, 99pc duty cycle)	X	4.61	67.10	16.26	0.00	150.0	±9.6 %
		Y	4.62	67.03	16.21	-	150.0	
10504		ZX	4.57	66.91	16.07	0.00	150.0 150.0	± 9.6 %
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)		4.54	67.09	16.24 16.19	0.00		I J.U 70
		Y Z	4.56	67.01	16.19		150.0 150.0	<u>├</u>
10500			4.50	66.89 67.18	16.05	0.00	150.0	± 9.6 %
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X Y	4.60	67.18	16.32	0.00	150.0	T 9.0 %
		Y Z	4.62	66.99	16.28	<u> </u>	150.0	

				<b></b>		<u> </u>		
10523- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.48	67.04	16.17	0.00	150.0	± 9.6 %
<u> </u>		Y	4.49	66.05	40.44		450.0	
		Z		66.95	16.11		150.0	
10524-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	2 X	4.44 4.54	66.85	15.99		150.0	1.0.0.1/
AAA	Mbps, 99pc duly cycle)		4.54	67.10	16.29	0.00	150.0	± 9.6 %
		Y	4.56	67.02	16.24		150.0	
		Z	4.50	66.91	16.24		150.0	
10525-	IEEE 802.11ac WIFI (20MHz, MCS0,	X	4.51	66.14	15.88	0.00		1000
AAA	99pc duty cycle)		4.00	00.14	10.00	0.00	150.0	± 9.6 %
		Y	4.54	66.06	15.83		150.0	
	· · · · · · · · · · · · · · · · · · ·	z	4.49	65.96	15.70		150.0	
10526-	IEEE 802.11ac WIFI (20MHz, MCS1,	X	4.70	66.51	16.02	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)		4.70	00.01	10.02	0.00	130.0	1 3.0 %
		Y	4.71	66.43	15.97	<u> </u>	150.0	
		z	4.66	66.31	15.84		150.0	<u> </u>
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	4.62	66.47	15.97	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)			00.17	10.07	0.00	100.0	1 2 0.0 %
		Y	4.63	66.38	15.91		150.0	
		Z	4.58	66.26	15.78		150.0	
10528-	IEEE 802.11ac WiFi (20MHz, MCS3,	X	4.63	66.48	16.00	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							
		Y	4.65	66.40	15.95		150.0	
		Z	4.59	66.28	15.81		150.0	
10529-	IEEE 802.11ac WiFi (20MHz, MCS4,	X	4.63	66.48	16.00	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							-
		Y	4.65	66.40	15.95		150.0	
		Z	4.59	66.28	15.81		150.0	
10531-	IEEE 802.11ac WiFi (20MHz, MCS6,	X	4.62	66.59	16.01	0.00	150.0	±9.6 %
AAA	99pc duty cycle)							
		Y	4.64	66.51	15.96		150.0	
		Z	4.58	66.37	15.82		150.0	
10532-	IEEE 802.11ac WiFi (20MHz, MCS7,	X	4.48	66.44	15.94	0.00	150.0	±9.6 %
AAA	99pc duty cycle)							
		Y	4.50	66.35	15.89		150.0	
		Z	4.44	66.22	_ 15.74		150.0	
10533- <u>A</u> AA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.64	66.53	15.99	0.00	150.0	± 9.6 %
		Y	4.66	66.44	15.93		150.0	
		Z	4.60	66.33	15.80		150.0	
10534-	IEEE 802.11ac WiFi (40MHz, MCS0,	X	5.17	66.61	16.07	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)			·				
		Y	5.19	66.55	16.03	-	150.0	
		Z	5.14	66.44	15.91		150.0	
10535-	IEEE 802.11ac WiFi (40MHz, MCS1,	X	5.24	66.79	16.15	0.00	150.0	±9.6%
AAA	99pc duty cycle)							
		Y	5.26	66.73	16.11		150.0	_
		Z	5.21	66.63	16.00		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.73	16.10	0.00	150.0	± 9.6 %
		Y	5.12	66.67	16.06		150.0	
		Z	5.07	66.56	15.94	-	150.0	
10537-	IEEE 802.11ac WiFi (40MHz, MCS3,	X	5.17	66.71	16.09	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							
		Y	5.18	66.64	16.05	-	150.0	
		Z	5.13	66.53	15.93		150.0	
10538-	IEEE 802.11ac WiFi (40MHz, MCS4,	X	5.26	66.73	16.14	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							
		Y	5.27	66.68	16.11		150.0	
		Z	5.22	66.56	15.99	1	150.0	
10540-	IEEE 802.11ac WiFi (40MHz, MCS6,	X	5.19	66.75	16.17	0.00	150.0	± 9.6 %
	99pc duty cycle)	1						_ 0.0 /0
AAA	sahe data cherel							
		Y	5.20	66.69	16.13		150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	TX	5.16	66.61	16.09	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)				10.05	0.00	100.0	1 9.0 %
		Y	5.17	66.55	16.05		150.0	
		Z	5.13	66.44	15.93		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.32	66.69	16.14	0.00	150.0	± 9.6 %
		Y	5.33	66.63	16.11		150.0	
		Z	5.28	66.53	15.99		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.39	66.73	16.19	0.00	150.0	± 9.6 %
		Y	5.41	66.68	16.16		150.0	
40544		Z	5.36	66.57	16.04		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.48	66.73	16.07	0.00	150.0	±9.6 %
		Y	5.49	66.67	16.03		150.0	
10545-		Z	5.45	66.58	15.92		150.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duly cycle)	X	5.68	67.16	16.23	0.00	150.0	±9.6 %
		Y	5.70	67.11	16.20		150.0	
10540		Z	5.65	67.00	16.09		150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.55	66.94	16.14	0.00	150.0	±9.6 %
		Y	5.56	66.89	16.11		150.0	
40575		Z	5.52	66.78	15.99		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.62	66.98	16.15	0.00	150.0	± 9.6 %
		Y	5.64	66.93	16.12		150.0	
		Z	5.59	66.82	_16.00		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.89	67.99	16.62	0.00	150.0	± 9.6 %
		Y	5.92	67.98	16.62		150.0	
		Z	5.84	67.76	16.45		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.96	16.16	0.00	150.0	± 9.6 %
		Y	5.59	66.90	16.12		150.0	
		Z	5.55	66.81	16.02		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	Х	5.58	67.00	16.14	0.00	150.0	± 9.6 %
		Y	5.59	66.94	16.10		150.0	
		Z	5.55	66.84	15.99		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.49	66.79	16.04	0.00	150.0	± 9.6 %
		Y	5.51	66.73	16.00		150.0	
		Z	5.46	66.64	15.90		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.83	16.09	0.00	150.0	± 9.6 %
		Y	5.59	66.78	16.06		150.0	
		Z	5.55	66.68	15.95		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duly cycle)	X	5.89	67.10	16.16	0.00	150.0	±9.6 %
		Y	5.90	67.05	16.13		150.0	
		Z	5.87	66.95	16.03		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.02	67.41	16.29	0.00	150.0	±9.6 %
		Y	6.04	67.36	16.27		150.0	
		Z	5.99	67.26	16.16		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.04	67.45	16.31	0.00	150.0	± 9.6 %
		Y	6.06	67.41	16.28		150.0	
		Z	6.01	67.30	16.17		150.0	
10557- AAA	IEEE 1602.11ac WIFi (160MHz, MCS3, 99pc duty cycle)	X	6.01	67.35	16.28	0.00	150.0	± 9.6 %
		Y	6.02	67.31	16.25		150.0	
		Z	5.98	67.20	16.14		150.0	

AAA         99pc duty cycle)         Y         6.00				<u> </u>	<u> </u>				
V         6.02         67.48         16.35         150.0           10560         IEEE 1602.11ac WiFi (160MHz, MCS6, X         6.02         67.36         16.34         0.00         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.02         67.36         16.34         0.00         150.0         ± 9.63           10561         IEEE 1602.11ac WiFi (160MHz, MCS7, X         5.97         67.34         16.36         0.00         150.0         ± 9.63           10562         IEEE 1602.11ac WiFi (160MHz, MCS8, X         5.94         67.19         16.22         150.0         ± 9.63           10563         IEEE 1602.11ac WiFi (160MHz, MCS8, X         6.10         67.72         16.55         10.00         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.34         156.0         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.42         67.71         16.55         10.00         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.42         67.71         16.40         0.46         150.0         ± 9.63           AAA         99pc duly cycle)         Y         4.62         66.87	10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.06	67.52	16.38	0.00	150.0	± 9.6 %
10560         IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)         X         6.05         67.36         16.23         150.0         190.0           10560         16.84         0.00         150.0         150.0         150.0         150.0         150.0           10561         IEEE 1602.11ac WiFI (160MHz, MCS7, 99pc duty cycle)         Y         5.99         67.34         16.36         0.00         150.0         150.0           10561         IEEE 1602.11ac WiFI (160MHz, MCS8, 99pc duty cycle)         Y         5.99         67.31         16.36         0.00         150.0         150.0           10562         IEEE 1602.11ac WiFI (160MHz, MCS8, 99pc duty cycle)         Y         6.12         67.71         16.55         0.00         150.0           10563-         IEEE 1602.11ac WiFI (160MHz, MCS9, 99pc duty cycle)         Y         6.34         68.04         16.67         0.00         150.0         150.0           10563-         IEEE 802.11g WiFI 2.4 GHz (DSSS- X         X         6.34         68.04         16.67         0.00         150.0         2.9.67           10564-         IEEE 802.11g WiFI 2.4 GHz (DSSS- X         X         4.30         66.87         16.24         150.0         16.50         16.50         16.50         16.50         16.50<	-		Y	6.07	67 48	16.35	<u> </u>	150.0	<u> </u>
10560- AAA         B9pc duty cycle)         Y         6.05         67.36         16.34         0.00         150.0         ± 9.61           AAA         B9pc duty cycle)         Y         6.07         67.32         16.31         150.0         ±         9.60         150.0         ±         9.60         150.0         ±         150.0         ±         150.0         ±         150.0         ±         50.0         ±	_								
V         6.07         67.32         16.31         150.0           10561         IEEE 1602, 11ac WiFI (160MHz, MCS7, X         5.97         67.34         16.36         0.00         150.0         ± 9.61           AMA         99pc duly cycle)         Y         5.99         67.30         16.34         150.0         ± 9.61           10662         IEEE 1602, 11ac WiFI (160MHz, MCS8, X         6.10         67.72         16.55         0.00         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.12         67.71         16.55         150.0         150.0         ± 9.63           10563         IEEE 1602, 11ac WiFI (160MHz, MCS9, X         6.34         68.04         16.67         0.00         150.0         ± 9.63           AAA         99pc duly cycle)         Y         6.40         68.13         16.72         150.0         ± 9.63           AAA         99pc duly cycle)         Y         4.90         67.01         16.40         0.46         150.0         ± 9.63           AAA         99pc duly cycle)         Y         5.13         67.46         16.71         160.0         ± 9.63           AAA         OFDM, 12 M MFI 2.4 GHz (DSSS-         Z         5.10 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td><td></td><td>± 9.6 %</td></t<>							0.00		± 9.6 %
Internal         Z         6.02         67.21         16.20         150.0           AVA         99pc duty cycle)         Y         5.97         67.34         16.36         0.00         ±9.61           AVA         99pc duty cycle)         Y         5.99         67.30         16.32         150.0         ±9.61           AVA         99pc duty cycle)         Y         5.94         67.19         16.55         150.0         ±9.63           AAA         99pc duty cycle)         Y         6.12         67.71         16.55         150.0         ±9.63           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ±9.63           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ±9.63           AAA         99pc duty cycle)         Y         4.80         66.07         16.40         0.46         150.0         ±9.63           AAA         0FDM, 9 Mips, 9pc duty cycle)         Y         4.89         66.87         16.24         150.0         ±9.63           AAA         0FDM, 12 Mips, 9pc duty cycle)         Y         5.13         67.46         16.71         16.46 <td< td=""><td></td><td></td><td>Y</td><td>6.07</td><td>67 32</td><td>16.31</td><td></td><td>150.0</td><td><u> </u></td></td<>			Y	6.07	67 32	16.31		150.0	<u> </u>
10561.         HEEE 1602.11ac WiFI (160MHz, MCS7.         X         5.97         67.34         16.36         0.00         150.0         ± 9.6 's           AAA         99pc duty cycle)         Y         5.99         67.30         16.34         150.0         ± 9.6 's           AAA         99pc duty cycle)         Y         5.99         67.72         16.55         150.0         ± 9.6 's           AAA         99pc duty cycle)         Y         6.12         67.71         16.55         150.0         ± 9.6 's           I0563.         IEEE 1602.11ac WIFI (160MHz, MCS9, X         6.34         68.04         16.67         0.00         150.0         ± 9.6 's           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ± 9.6 's           AAA         067.01         16.40         0.46         150.0         ± 9.6 's           AAA         0.070.1         9.6 's         16.63         16.00         ± 9.6 's           AAA         0.070.1         16.40         0.46         150.0         ± 9.6 's           AAA         0.070.1         16.40         16.50         ± 9.6 's         16.50         ± 9.6 's           AAA         0.76									
AAA         99pc duty cycle)         Y         5.89         67.30         16.34         150.0           0552         1EEE 1602.11ac WiFi (160MHz, MCS8, AAA         99pc duty cycle)         Y         6.10         67.72         16.55         0.00         150.0         ±9.6 1           AAA         99pc duty cycle)         Y         6.12         67.71         16.55         150.0         ±9.6 1           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ±9.6 1           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ±9.6 1           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ±9.6 1           AAA         OFDM, 9 Mbps, 99pc duty cycle)         Y         4.90         67.01         16.40         0.46         150.0         ±9.6 1           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.13         67.40         16.51         150.0         ±9.6 1           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.13         67.40         16.51         150.0         ±9.6 1           AAA         OFDM, 18	10561-	IEEE 1602 11ac WiEi (160MHz_MCS7					0.00		+06%
10562- 3AA         IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duly cycle)         Z         5.94         67.19         16.22         150.0           AAA         99pc duly cycle)         Y         6.10         67.72         16.55         16.40         150.0         ± 9.6 1           AAA         99pc duly cycle)         Y         6.12         67.71         16.55         16.40         0.00         150.0         ± 9.6 1           AAA         99pc duly cycle)         Y         6.40         66.13         16.72         160.0         ± 9.6 1           AAA         99pc duly cycle)         Y         6.40         66.13         16.72         160.0         ± 9.6 1           10564-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.90         67.01         16.40         0.46         150.0         ± 9.6 1           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.13         67.46         16.71         0.46         150.0         ± 9.6 1           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.30         16.58         150.0         ± 9.6 1           10566-         IEEE 802.11g WiF12.4 GHz (DSSS-         X         5.10         67.30         16.58         150.0							0.00		1 9.0 %
10562.         IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duly cycle)         X         6.10         67.72         16.55         0.00         150.0         ±9.6 §           10563- 99pc duly cycle)         Y         6.12         67.71         16.56         150.0         ±9.6 §           10563- 99pc duly cycle)         Y         6.34         66.04         16.67         0.00         150.0         ±9.6 §           10564- 10564- 10564- 07564         IEEE 802.11g WiFi 2.4 GHz (DSSS- CPDM, 9 Mbps, 99pc duty cycle)         Y         6.30         66.38         16.38         150.0         ±9.6 §           AAA         OFDM, 9 Mbps, 99pc duty cycle)         Y         4.93         66.39         16.38         150.0         ±9.6 §           OS65- 10565- 10565- 10565- 10565- 10566- 1656         16.51         150.0         ±9.6 §           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.56         150.0         ±9.6 §           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.16         67.40         16.51         150.0         ±9.6 §           AAA         OFDM, 14 Mbps, 98pc duty cycle)         Y         5.01         67.							<b> </b>		ļ
AAA         99pc duly cycle)         Y         6.12         67.71         16.55         156.0           10563- AAA         IEEE 1602.11ac WIFI (160MHz, MCS9, AAA         X         6.34         68.04         16.67         0.00         150.0         ± 9.6           10564- AAA         99pc duly cycle)         Y         6.40         68.13         16.72         160.0         ± 9.6           AAA         99pc duly cycle)         Y         6.40         68.13         16.72         150.0         ± 9.6           AAA         OFDM, 9 Mps, 99pc duly cycle)         Y         4.93         66.38         150.0         ± 9.6           AAA         OFDM, 9 Mps, 99pc duly cycle)         Y         4.93         66.37         16.67         150.0         ± 9.6           10565-         IEEE 802.11g WiF12.4 GHz (DSSS-         X         5.13         67.36         16.56         150.0         ± 9.6           10566-         IEEE 802.11g WiF12.4 GHz (DSSS-         X         4.97         67.31         16.53         0.46         150.0         ± 9.6           10566-         IEEE 802.11g WiF12.4 GHz (DSSS-         X         4.97         67.31         16.53         150.0         ± 9.6           10567-         IEEE 802.11g WiF12.4 G	10562						0.00		
Z         6.06         67.55         16.40         150.0           AAA         99pc duty cycle)         Y         6.34         68.04         16.67         0.00         150.0         ± 9.6 9           AAA         99pc duty cycle)         Y         6.40         68.13         16.72         150.0         ± 9.6 9           10564-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.90         67.01         16.47         150.0         ± 9.6 9           AA         OFDM, 9 Mpps, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0         ± 9.6 9           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.89         150.0         ± 9.6 9           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.89         150.0         ± 9.6 9           AAA         OFDM, 18 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.89         150.0         ± 9.6 9           AAA         OFDM, 18 Mbps, 99pc duty cycle)         Y         4.99         67.26         16.51         150.0         ± 9.6 9           AAA         OFDM, 16 Mbps, 99pc duty cycle)         Y         4.94         <							0.00		± 9.6 %
10563- AAA         IEEE 1602.11ac WIFI (160MHz, MCS9, 99pc duty cycle)         X         6.34         68.04         16.67         0.00         150.0         ± 9.6 9           10564- AAA         IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)         Y         6.26         67.76         16.40         0.46         150.0         ± 9.6 9           10565- AAA         OFDM, 9 Mbps, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0         ± 9.6 9           10565- AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0         ± 9.6 9           10565- AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.69         165.00         ± 9.6 9           10566-         IEEE 802.11g WIFI 2.4 GHz (DSSS- AAA         Z         5.16         67.40         16.53         14.53         0.46         150.0         ± 9.6 9           10567-         IEEE 802.11g WIFI 2.4 GHz (DSSS- AAA         Z         4.94         67.26         16.51         150.0         ± 9.6 9           10567-         IEEE 802.11g WIFI 2.4 GHz (DSSS- AAA         Z         4.96         67.51         16.82         150.0         ± 9.6 9         50.0         50.0         50.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ļ</td>									ļ
AAA         99pc duly cycle)         Y         6.40         68.13         16.72         150.0           10564-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.90         67.01         16.47         16.00         ± 9.63           AAA         OFDM, 9 Mbps, 99pc duly cycle)         Y         4.93         66.98         16.38         150.0           I0565-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         5.13         67.46         16.24         150.0         ± 9.63           AAA         OFDM, 12 Mbps, 99pc duly cycle)         Y         5.15         67.40         16.69         150.0         ± 9.63           10566-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         5.13         67.40         16.59         150.0           10566-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.97         67.31         16.53         0.46         150.0         ± 9.63           10567-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.97         67.51         16.81         150.0         ± 9.63           AAA         OFDM, 24 Mbps, 99pc duly cycle)         Y         5.01         67.69         16.88         0.46         150.0         ± 9.63           AAA         OFDM, 36 Mbps, 99pc	40500								
Z         6.26         67.76         16.47         150.0           AAA         DFDM, 9 Mops, 99pc duty cycle)         Y         4.90         67.01         16.40         0.46         150.0         ± 9.6 %           AAA         OFDM, 9 Mops, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0           10565-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         5.13         67.46         16.71         0.46         150.0           AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.69         150.0         ± 9.6 %           10566-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.97         67.31         16.53         0.46         150.0         ± 9.6 %           10567-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X         4.97         67.31         16.53         0.46         150.0         ± 9.6 %           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         4.99         67.69         16.82         150.0         ± 9.6 %           AAA         OFDM, 34 Mbps, 99pc duty cycle)         Y         5.01         67.10         16.32         0.46         150.0         ± 9.6 %           AAA         OFDM, 36 Mb							0.00		± 9.6 %
10564- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)         Y         4.90         67.01         16.40         0.46         150.0         ± 9.6 9           10565- AAA         OFDM, 9 Mbps, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0           10565- AAA         OFDM, 12 Mbps, 99pc duty cycle)         X         5.13         67.46         16.24         150.0           10566- AAA         OFDM, 12 Mbps, 99pc duty cycle)         X         5.15         67.40         16.69         150.0           10566- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         4.97         67.31         16.53         0.46         150.0         ± 9.6 9           10567- I0567- I0567- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         5.00         67.69         16.87         150.0         ± 9.6 9           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         5.01         67.59         16.82         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.59         16.82         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.51         16.71         150.0 <td></td> <td></td> <td>Y</td> <td></td> <td>68.13</td> <td>16.72</td> <td></td> <td>150.0</td> <td></td>			Y		68.13	16.72		150.0	
10564- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- CFDM, 9 Mbps, 99pc duty cycle)         Y         4.93         66.98         16.38         150.0           10565- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         5.13         67.46         16.71         0.46         150.0           10565- AAA         OFDM, 12 Mbps, 99pc duty cycle)         X         5.13         67.46         16.71         0.46         150.0           10566- AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.56         150.0           10566- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         4.99         67.26         16.51         150.0           10567-         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         5.00         67.69         16.88         0.46         150.0         ± 9.6 %           10567-         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         5.01         67.59         16.82         150.0         ± 9.6 %           10568-         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         5.01         67.59         16.82         150.0         ± 9.6 %           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.51         16.71         150.0         150.0 <td></td> <td></td> <td></td> <td>6.26</td> <td>67.76</td> <td>16.47</td> <td></td> <td></td> <td></td>				6.26	67.76	16.47			
Y         4.93         66.88         16.38         150.0           10565- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)         X         5.13         67.46         16.71         0.46         150.0         ±9.65           I0566- AAA         OFDM, 12 Mbps, 99pc duty cycle)         Y         5.15         67.40         16.69         150.0         ±9.65           I0566- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Z         5.10         67.30         16.56         150.0         ±9.65           AAA         OFDM, 18 Mbps, 99pc duty cycle)         Y         4.99         67.26         16.51         150.0         ±9.65           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         5.00         67.69         16.88         0.46         150.0         ±9.65           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         5.01         67.51         16.71         150.0         ±9.65           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.89         67.10         16.32         0.46         150.0         ±9.65           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.61         16.71         150.0         ±9.65			Х	4.90			0.46		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	4.93	66.98	16.38	1	150.0	
10565- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)         X         5.13         67.46         16.71         0.46         150.0         ± 9.6 9           10566- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         5.15         67.40         16.56         150.0           10566- AAA         OFDM, 18 Mbps, 99pc duty cycle)         Y         4.97         67.31         16.53         0.46         150.0         ± 9.6 9           AAA         OFDM, 18 Mbps, 99pc duty cycle)         Y         4.99         67.26         16.51         150.0         ± 9.6 9           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         4.94         67.15         16.37         150.0         ± 9.6 9           AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y         5.01         67.59         16.82         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.51         16.71         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.10         16.33         150.0         ± 9.6 9           AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.96         67.66         16.87									·
Y         5.15         67.40         16.69         150.0           10566- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)         X         4.97         67.31         16.53         0.46         150.0         ± 9.6 9           10567- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         4.97         67.31         16.53         0.46         150.0         ± 9.6 9           10567- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         5.00         67.69         16.88         0.46         150.0         ± 9.6 9           0FDM, 24 Mbps, 99pc duty cycle)         Y         5.01         67.59         16.82         150.0         ± 9.6 9           0FDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.51         16.71         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.10         16.32         0.46         150.0         ± 9.6 9           AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.92         67.61         16.77         150.0         ± 9.6 9           AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.92         67.61         16.71         150.0         ± 9.6 9							0.46		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			TY	5.15	67.40	16.69		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
Y         4.99 $67.26$ $16.51$ $150.0$ 10567-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X $5.00$ $67.69$ $16.88$ $0.46$ $150.0$ $\pm 9.6$ AAA         OFDM, 24 Mbps, 99pc duty cycle)         Y $5.01$ $67.69$ $16.82$ $150.0$ $\pm 9.6$ 10568-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X $4.96$ $67.10$ $16.32$ $0.46$ $150.0$ $\pm 9.6$ 10568-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X $4.96$ $67.10$ $16.32$ $0.46$ $150.0$ $\pm 9.6$ AAA         OFDM, 36 Mbps, 99pc duty cycle)         X $4.96$ $67.79$ $16.95$ $0.46$ $150.0$ $\pm 9.6$ AAA         OFDM, 48 Mbps, 99pc duty cycle)         X $4.96$ $67.66$ $16.87$ $150.0$ 10569-         IEEE 802.11g WiFi 2.4 GHz (DSSS-         X $4.99$ $67.63$ $16.87$ $150.0$ 10570-         IEEE 802.11g WiFi 2.4 GHz (DSSS, 1         X $4.99$ $67.63$ $16.87$ $150.0$							0.46		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	4 99	67.26	16.51		150.0	
10567- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)         X         5.00         67.69         16.88         0.46         150.0         ± 9.6 9           10568- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- CFDM, 36 Mbps, 99pc duty cycle)         Y         5.01         67.59         16.82         150.0           10568- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         4.89         67.10         16.32         0.46         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.10         16.33         150.0         ± 9.6 9           I0569- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         4.96         67.66         16.87         150.0         ± 9.6 9           AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.96         67.66         16.87         150.0         ± 9.6 9           AAA         OFDM, 54 Mbps, 99pc duty cycle)         Y         4.96         67.66         16.87         150.0         ± 9.6 9           AAA         OFDM, 54 Mbps, 99pc duty cycle)         Y         5.00         67.54         16.82         150.0         ± 9.6 9           AAA         OFDM, 54 Mbps, 90pc duty cycle)         Y         1.30         <									
Y         5.01         67.59         16.82         150.0           10568- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)         X         4.89         67.10         16.32         0.46         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.10         16.33         150.0         ± 9.6 9           10569- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         4.92         67.66         16.17         150.0         ± 9.6 9           10569- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         4.96         67.66         16.87         150.0         ± 9.6 9           10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         4.99         67.63         16.87         0.46         150.0         ± 9.6 9           10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS, 1         X         4.99         67.63         16.87         0.46         150.0         ± 9.6 9           10571- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.30         65.56         15.99         0.46         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.33         66.18         16.09		IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 990c duty cycle)					0.46		± 9.6 %
Z         4.96         67.51         18.71         150.0           10568- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)         Y         4.89         67.10         16.32         0.46         150.0         ± 9.6 9           AAA         OFDM, 36 Mbps, 99pc duty cycle)         Y         4.92         67.10         16.33         150.0           I0569- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         Y         4.96         67.66         16.87         150.0           10570- AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.96         67.66         16.87         150.0           10570- AAA         OFDM, 54 Mbps, 99pc duty cycle)         Y         4.96         67.63         16.87         0.46         150.0         ± 9.6 9           10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- AAA         X         4.99         67.63         16.87         0.46         150.0         ± 9.6 9           10571- AAA         Mbps, 99pc duty cycle)         Y         5.00         67.54         16.82         150.0         105.0           10571- AAA         Mbps, 90pc duty cycle)         Y         1.30         65.56         15.99         0.46         130.0         ± 9.6 9           AAA			Y	5.01	67.59	16.82		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			_						
Y         4.92         67.10         16.33         150.0           10569- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)         X         4.96         67.79         16.95         0.46         150.0 $\pm 9.6$ 9           AAA         OFDM, 48 Mbps, 99pc duty cycle)         Y         4.96         67.66         16.87         150.0           10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)         X         4.99         67.63         16.87         0.46         150.0 $\pm 9.6$ 9           10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)         Y         5.00         67.54         16.82         150.0 $\pm 9.6$ 9           10571- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 X         X         1.30         65.56         15.99         0.46         130.0 $\pm 9.6$ 9           AAA         Mbps, 90pc duty cycle)         Y         1.32         65.34         15.77         130.0           10572- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 AAA         X         1.33         66.18         16.36         0.46         130.0 $\pm 9.6$ 9           10572- AAA         Mbps, 90pc duty cycle)         Y         1.33         65.88         16.09 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.46</td> <td></td> <td>± 9.6 %</td>							0.46		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	4 92	67 10	16 33		150.0	·
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-								
Y4.9667.6616.87150.010570- AAAIEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)X4.9967.6316.870.46150.0 $\pm 9.6 9$ Y5.0067.5416.82150.0 $\pm 9.6 9$ I0571- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)X1.3065.5615.990.46130.0 $\pm 9.6 9$ 10571- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)X1.3065.5615.990.46130.0 $\pm 9.6 9$ 10572- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)Y1.3366.1816.360.46130.0 $\pm 9.6 9$ 10572- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)X1.3365.8816.09130.0 $\pm 9.6 9$ 10573- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 AAAX3.0089.0224.010.46130.0 $\pm 9.6 9$ 10573- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 AAAX3.0089.0224.010.46130.0 $\pm 9.6 9$ 10573- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 AAAX3.0089.0224.010.46130.0 $\pm 9.6 9$ 10574- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 11 AAAX1.5272.3519.330.46130.0 $\pm 9.6 9$ 10574- AAAIEEE 802.11b WiFi 2.4 GHz (DSSS, 11 AAAX1.5272.3519.330.46130.0 $\pm $							0.46		± 9.6 %
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				4 96	67.66	16.87		150.0	
10570- AAA         IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)         X         4.99         67.63         16.87         0.46         150.0         ± 9.6 9           AAA         Y         5.00         67.54         16.82         150.0         ± 9.6 9           Z         4.95         67.46         16.71         150.0         ± 9.6 9           I0571- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)         X         1.30         65.56         15.99         0.46         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.32         65.34         15.77         130.0           US72- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.33         66.18         16.36         0.46         130.0         ± 9.6 9           0572- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.33         65.88         16.09         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.33         65.88         16.09         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.31         65.33         15.63         130.0         ± 9.6 9           AAA						10 -0			
Y       5.00 $67.54$ $16.82$ $150.0$ 10571- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       X $1.30$ $65.56$ $15.99$ $0.46$ $130.0$ $\pm 9.6 9$ AAA       Mbps, 90pc duty cycle)       Y $1.32$ $65.34$ $15.77$ $130.0$ 2       1.29 $64.82$ $15.32$ $130.0$ $\pm 9.6 9$ 10572- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       X $1.33$ $66.18$ $16.36$ $0.46$ $130.0$ $\pm 9.6 9$ AAA       Mbps, 90pc duty cycle)       Y $1.33$ $65.88$ $16.09$ $130.0$ $\pm 9.6 9$ AAA       Mbps, 90pc duty cycle)       Y $1.33$ $65.88$ $16.09$ $130.0$ $\pm 9.6 9$ AAA       Mbps, 90pc duty cycle)       Y $2.35$ $84.15$ $22.16$ $130.0$ 10573- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5       X $3.00$ $89.02$ $24.01$ $0.46$ $130.0$ $\pm 9.6 9$ 10574- AAA       Mbps, 90pc duty cycle)       Y $2.35$ $84.15$ $22.16$ $130.0$							0.46		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.00	67.54	16.82		150.0	L
10571- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       X       1.30       65.56       15.99       0.46       130.0       ± 9.6 9         AAA       Y       1.32       65.34       15.77       130.0       ± 9.6 9         Z       1.29       64.82       15.32       130.0       ± 9.6 9         10572- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       X       1.33       66.18       16.36       0.46       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.33       65.88       16.09       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.33       65.88       16.09       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.33       65.88       16.09       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.33       65.88       16.09       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.33       65.88       16.09       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       2.35       84.15       22.16       130.0       ± 9.6 9									
Y         1.32         65.34         15.77         130.0           10572- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)         X         1.33         66.18         16.36         0.46         130.0         ± 9.6 %           Y         1.33         65.88         16.09         130.0         ± 9.6 %           Z         1.31         65.33         15.63         130.0         ± 9.6 %           AAA         Mbps, 90pc duty cycle)         Y         2.35         84.15         22.16         130.0         ± 9.6 %           AAA         Mbps, 90pc duty cycle)         Y         2.35         84.15         22.16         130.0         ± 9.6 %           10574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 %           AAA         Mbps, 90pc duty cycle)         Y         1.47         71.09         18.58         130.0							0.46		± 9.6 %
Z         1.29         64.82         15.32         130.0           10572- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)         X         1.33         66.18         16.36         0.46         130.0         ± 9.6 9           Y         1.33         65.88         16.09         130.0         ± 9.6 9           Z         1.31         65.33         15.63         130.0         ± 9.6 9           Z         1.31         65.33         15.63         130.0         ± 9.6 9           Z         1.31         65.33         15.63         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         X         3.00         89.02         24.01         0.46         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         2.35         84.15         22.16         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.62         77.82         19.61         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.47         71.09         18.58         130.0         ± 9.6 9			† <sub>₹</sub> †	1.32	65.34	15.77		130.0	
10572- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       X       1.33       66.18       16.36       0.46       130.0       ± 9.6 9         Y       1.33       65.88       16.09       130.0       ± 9.6 9         Z       1.31       65.33       15.63       130.0       ± 9.6 9         I0573- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)       X       3.00       89.02       24.01       0.46       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       2.35       84.15       22.16       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       2.35       84.15       22.16       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.62       77.82       19.61       130.0       ± 9.6 9         AAA       Mbps, 90pc duty cycle)       Y       1.47       71.09       18.58       130.0       ± 9.6 9									
Y         1.33         65.88         16.09         130.0           10573- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)         X         3.00         89.02         24.01         0.46         130.0         ± 9.6 9           Y         2.35         84.15         22.16         130.0         ± 9.6 9           Z         1.62         77.82         19.61         130.0         ± 9.6 9           L0574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 9           AAA         Mbps, 90pc duty cycle)         Y         1.47         71.09         18.58         130.0		IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)					0.46		± 9.6 %
Z         1.31         65.33         15.63         130.0           10573- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)         X         3.00         89.02         24.01         0.46         130.0         ± 9.6 %           Y         2.35         84.15         22.16         130.0         ± 9.6 %           Z         1.62         77.82         19.61         130.0         ± 9.6 %           10574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 %           AAA         Mbps, 90pc duty cycle)         Y         1.47         71.09         18.58         130.0			† <sub>Y</sub> †	1.33	65.88	16.09		130.0	
10573- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)       X       3.00       89.02       24.01       0.46       130.0       ± 9.6 %         Y       2.35       84.15       22.16       130.0       ± 9.6 %         Z       1.62       77.82       19.61       130.0       ± 9.6 %         10574- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)       X       1.52       72.35       19.33       0.46       130.0       ± 9.6 %         AAA       Mbps, 90pc duty cycle)       Y       1.47       71.09       18.58       130.0									
Y         2.35         84.15         22.16         130.0           Z         1.62         77.82         19.61         130.0           10574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 %							0.46		± 9.6 %
Z         1.62         77.82         19.61         130.0           10574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 %           Y         1.47         71.09         18.58         130.0         ± 9.6 %			$\uparrow \uparrow \uparrow$	2.35	84 15	22.16		130.0	
10574- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)         X         1.52         72.35         19.33         0.46         130.0         ± 9.6 %           Y         1.47         71.09         18.58         130.0         ± 9.6 %									
Y 1.47 71.09 18.58 130.0							0.46		± 9.6 %
	////		+ + +	4 47	74.00	40.70		4.000	
Z 1.40 69.97 17.87 130.0		<u> </u>		<u>1.47</u> 1.40					

40575		1 1						
10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.71	66.88	16.50	0.46	130.0	± 9.6 %
		Y	4.74	66.84	16.48		130.0	
		Z	4.74	66.75	16.34	<u> </u>	130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.74	67.05	16.56	0.46	130.0	± 9.6 %
AAA	OFDM, 9 Mbps, 90pc duty cycle)					0.40		± 9.0 %
		Y	4.76	66.99	16.53		130.0	
·		Z	4.72	66.90	16.40		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duly cycle)	X	4.94	67.33	16.73	0.46	130.0	± 9.6 %
		Y	4.97	67.28	16.70		130.0	
		Z	4.92	67.18	16.57		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.84	67.50	16.83	0.46	130.0	± 9.6 %
		Y	4.86	67.41	16.77		130.0	
	-	Z	4.81	67.33	16.66		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.61	66.80	16.16	0.46	130.0	± 9.6 %
		Y	4.64	66.81	16.17		130.0	
		z	4.59	66.65	16.00		130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.66	66.83	16.18	0.46	130.0	± 9.6 %
AAA	OFDM, 36 Mbps, 90pc duty cycle)					0.40		1 0.0 70
		Y	4.69	66.85	16.20		130.0	
		Z	4.63	66.69	16.02		_ 130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.74	67.55	16.78	0.46	130.0	± 9.6 %
		Y	4.76	67.46	16.72		130.0	
	<u> </u>	Z	4.72	67.37	16.61		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.55	66.56	15.94	0.46	130.0	± 9.6 %
		Y	4.59	66.61	15.99		130.0	
		Ż	4.53	66.42	15.79		130.0	
10583- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4,71	66.88	16.50	0.46	130.0	± 9.6 %
		Y	4.74	66.84	16.48		130.0	
		z	4.70	66.75	16.34		130.0	
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.74	67.05	16.56	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)					0.70		1 5.0 %
		Y	4.76	66.99	16.53		130.0	
		Z	4.72	66.90	16.40	0.40	130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.94	67.33	16.73	0.46	130.0	±9.6 %
		Y	4.97	67.28	16.70		130.0	
		Z	4.92	67.18	16.57		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.84	67.50	16.83	0.46	130.0	±9.6 %
		Y	4.86	67.41	16.77		130.0	
		Z	4.81	67.33	16.66		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.61	66.80	16.16	0.46	130.0	± 9.6 %
		Y	4.64	66.81	16.17		130.0	
		Z	4.59	66.65	16.00		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.66	66.83	16.18	0.46	130.0	± 9.6 %
		Y	4.69	66.85	16.20		130.0	
		Z	4.63	66.69	16.02		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.74	67.55	16.78	0.46	130.0	±9.6 %
		Y	4.76	67.46	16.72		130.0	
		z	4.72	67.37	16.61		130.0	
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.55	66.56	15.94	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)	+	1 50	00.01	45.00		400.0	
		Y Z	4.59	66.61	15.99	·	130.0	
		1 / 1	4.53	66.42	15.79	1	130.0	

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10591-	IEEE 802.11n (HT Mixed, 20MHz,		4.86	66.94	16.59	0.46	130.0	± 9.6 %
AAA	MCS0, 90pc duty cycle)	Y	4.00	00.00	40.57		400.0	
		Z	<u>4.89</u> 4.85	66.89 66.81	16.57 16.45		130.0 130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.02	67.27	16.45	0.46	130.0	± 9.6 %
AAA	MCS1, 90pc duty cycle)		0.02	07.27	10.72	0.40	130.0	1 5.0 %
,		Υ	5.04	67.22	16.70		130.0	
		Z	4.99	67.14	16.58		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.94	67.19	16.61	0.46	130.0	± 9.6 %
AAA	MCS2, 90pc duty cycle)							
		Y	4.97	67.15	16.59		130.0	
		Z	4.92	67.04	16.46		130.0	
10594-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.99	67.35	16.76	0.46	130.0	± 9.6 %
AAA	MCS3, 90pc duty cycle)	v	E 00	07.00	40.70		400.0	
		Y Z	5.02 4.97	67.29	16.73		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	×	4.97	67.21 67.31	16.61 16.66	0.46	130.0 130.0	± 9.6 %
AAA	MCS4, 90pc duty cycle)		4.30	07.51	10.00	0.40	130.0	19.0%
		Y	4.99	67.26	16.63		130.0	
		Z	4.94	67.16	16.51	_	130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.90	67.31	16.66	0.46	130.0	± 9.6 %
AAA	MCS5, 90pc duty cycle)							
		Y	4.93	67.27	16.64		130.0	
		Z	4.88	67.16	16.51		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.85	67.21	16.55	0.46	130.0	±9.6%
AAA	MCS6, 90pc duty cycle)	_   _						
		<u>Y</u>	4.88	67.18	16.53		130.0	
10598-	IFFE 902 445 (UT Minod 20MUs	Z	4.83	67.06	16.39	0.40	130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.83	67.44	16.81	0.46	130.0	± 9.6 %
		Y	4.85	67.37	16.76		130.0	
		Z	4.81	67.28	16.64		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.54	67.49	16.81	0.46	130.0	± 9.6 %
		Y	5.55	67.44	16.79		130.0	
·		Z	5.52	67.38	16.69		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.68	67.94	17.01	0.46	130.0	± 9.6 %
		Y	5.71	67.95	17.02		130.0	
		Z	5.66	67.81	16.87		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.56	67.67	16.89	0,46	130.0	± 9.6 %
7001		Y	5.59	67.66	16.88		130.0	
		Z	5.54	67.54	16.75		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.66	67.70	16.82	0.46	130.0	± 9.6 %
		Y	5.69	67.70	16.83		130.0	┝──────┃
		Z	5.64	67.59	16.70		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.74	67.99	17.10	0.46	130.0	± 9.6 %
1001		Y	5.76	67.96	17.08		130.0	├──`───┨
		- T	5.70	67.87	16.97		130.0	├───-┦
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz,	X	5.54	67.46	16.82	0.46	130.0	± 9.6 %
	MCS5, 90pc duty cycle)	Y	5.56	67.41	16.80		120.0	┢━────┥
<u> </u>	<u> </u>	Z	5.53	67.41	16.80		130.0 130.0	
10605-	IEEE 802.11n (HT Mixed, 40MHz,	- <u>2</u> X	5.66	67.81	17.00	0.46	130.0	±9.6 %
AAA	MCS6, 90pc duty cycle)					0.40		T 0.0 %
	<u> </u>	Y	5.69	67.81	17.00		130.0	
40000		Z	5.64	67.69	16.87	0.10	130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.40	67.14	16.52	0.46	130.0	±9.6 %
		Y	5.44	67.18	16.55		130.0	
	I	Z	5.38	67.01	16.39		130.0	

AAA         90pc duty cycle)           10608- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10609- AAA         IEEE 802.11ac WiFi (2 AAA           90pc duty cycle)         10610- AAA           10611- AAA         IEEE 802.11ac WiFi (2 AAA           90pc duty cycle)         10611- AAA           10611- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10611- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10613- AAA         IEEE 802.11ac WiFi (2 AAA           90pc duty cycle)         10613- AAA           10614- AAA         IEEE 802.11ac WiFi (2 AAA           90pc duty cycle)         10615- AAA           10615- AAA         IEEE 802.11ac WiFi (2 AAA           90pc duty cycle)         10616- AAA           10616- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10617- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10618- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10619- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10620- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10621- AAA         IEEE 802.11ac WiFi (2 90pc duty cycle)           10622- 1EEE 802.11ac WiFi (2 AAA	IFI (20MHz, MCS0,		4.70	66.24	16.21	0.46	130.0	± 9.6 %
10608- AAA       IEEE 802.11ac WiFi (2 90pc duty cycle)         10609- AAA       90pc duty cycle)         10610- AAA       IEEE 802.11ac WiFi (2 AAA         10611- AAA       90pc duty cycle)         10611- AAA       IEEE 802.11ac WiFi (2 AAA         10611- AAA       90pc duty cycle)         10612- AAA       IEEE 802.11ac WiFi (2 AAA         10613- AAA       90pc duty cycle)         10613- AAA       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)       -         10614- AAA       90pc duty cycle)         10615- IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)         10616- AAA         90pc duty cycle)         10616- AAA         90pc duty cycle)         10616- AAA         90pc duty cycle)         10617- AAA         90pc duty cycle)         10618- 10618- AAA         90pc duty cycle)         10618- 10619- AAA         90pc duty cycle)         10619- AAA         90pc duty cycle)         10620- AAA         90pc duty cycle)         10621- IEEE 802.11ac WiFi (4 AAA         90pc duty cycle)         10622- IEEE 802.11ac WiFi (4 AAA	in 1 (2014) 12, 14000,		4.70	00.24	10.21	0.40	130.0	±9.0 %
AAA       90pc duty cycle)         10609-       IEEE 802.11ac WiFi (2 90pc duty cycle)         10610-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Υ	4.72	66.17	16.17	ł	130.0	
AAA       90pc duty cycle)         10609-       IEEE 802.11ac WiFi (2 90pc duty cycle)         10610-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Z	4.67	66.09	16.05		130.0	
AAA       90pc duty cycle)         10610-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10613-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10614-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10615-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10620- <td< td=""><td>iFi (20MHz, MCS1,</td><td>X</td><td>4.88</td><td>66.64</td><td>16.37</td><td>0.46</td><td>130.0</td><td>± 9.6 %</td></td<>	iFi (20MHz, MCS1,	X	4.88	66.64	16.37	0.46	130.0	± 9.6 %
AAA       90pc duty cycle)         10610-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10613-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10614-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10615-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10620- <td< td=""><td></td><td>Y</td><td>4.90</td><td>66.57</td><td>16.33</td><td></td><td>130.0</td><td></td></td<>		Y	4.90	66.57	16.33		130.0	
AAA       90pc duty cycle)         10610-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10613-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10614-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10615-       IEEE 802.11ac WiFi (2         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10620- <td< td=""><td></td><td>Z</td><td>4.85</td><td>66.48</td><td>16.21</td><td></td><td>130.0</td><td></td></td<>		Z	4.85	66.48	16.21		130.0	
AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)	iFi (20MHz, MCS2,	X	4.77	66.49	16.22	0.46	130.0	± 9.6 %
AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Y	4.80	66.44	16.18		130.0	
AAA       90pc duty cycle)         10611-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Z	4.74	66.32	16.05		130.0	
AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10614-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10616-       IEEE 802.11ac WiFi (2000)         10617-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10619-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10622-       IEEE 802.11ac WiFi (2000)	IFI (20MHz, MCS3,	X	4.82	66.65	16.38	0.46	130.0	± 9.6 %
AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10614-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10616-       IEEE 802.11ac WiFi (2000)         10617-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10619-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10622-       IEEE 802.11ac WiFi (2000)		Y	4.84	66.58	16.33		130.0	
AAA       90pc duty cycle)         10612-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10613-       IEEE 802.11ac WiFi (2000)         10614-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10615-       IEEE 802.11ac WiFi (2000)         10616-       IEEE 802.11ac WiFi (2000)         10617-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10619-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10622-       IEEE 802.11ac WiFi (2000)		Z	4.79	66.48	16.21	0.40	130.0	
AAA       90pc duty cycle)         10613-       IEEE 802.11ac WiFi (2 90pc duty cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)	IFI (20MH2, MCS4,	X	4.74	66.46	16.23	0.46	130.0	±9.6 %
AAA       90pc duty cycle)         10613-       IEEE 802.11ac WiFi (2 90pc duty cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Y	4.76	66.40	16.19		130.0	
AAA       90pc duly cycle)         10613-       IEEE 802.11ac WiFi (2 90pc duly cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Z	4.71	66.29	16.06	0.40	130.0	
AAA       90pc duly cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)	uru (2010112, MUSO,	X	4.75	66.62	16.27	0.46	130.0	± 9.6 %
AAA       90pc duly cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)		Y	4.78	66.57	16.24		130.0	
AAA       90pc duly cycle)         10614-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)	IEI /20MH- MCCC	ZX	4.72	66.44 66.51	16.10 16.16	0.46	130.0 130.0	1000
AAA       90pc duty cycle)         10615-       IEEE 802.11ac WiFi (2 AAA         90pc duty cycle)						0.46		± 9.6 %
AAA       90pc duty cycle)         10615-       IEEE 802.11ac WiFi (2000)         10616-       IEEE 802.11ac WiFi (2000)         10616-       IEEE 802.11ac WiFi (2000)         10617-       IEEE 802.11ac WiFi (2000)         10617-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10618-       IEEE 802.11ac WiFi (2000)         10619-       IEEE 802.11ac WiFi (2000)         10619-       IEEE 802.11ac WiFi (2000)         10620-       IEEE 802.11ac WiFi (2000)         10621-       IEEE 802.11ac WiFi (2000)         10622-       IEEE 802.11ac WiFi (2000)		Y Z	4.78	66.47	16.14		130.0	
10615-       IEEE 802.11ac WiFi (2 90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10620-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10621-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10621-       IEEE 802.11ac WiFi (4 90pc duty cycle)         10622-       IEEE 802.11ac WiFi (4 90pc duty cycle)	iFi (20MHz, MCS7,	X	4.72 4.70	66.33 66.68	15.99 16.38	0.46	130.0 130.0	± 9.6 %
AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10617-         10617-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10618-         10618-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10619-         10619-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10620-         10620-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10620-         10621-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10621-         10622-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10622-		Y	4.72	66.60	16.33	_	130.0	
AAA       90pc duty cycle)         10616-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10617-         10617-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10618-         10618-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10619-         10619-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10620-         10620-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10620-         10621-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10621-         10622-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10622-		Z	4.67	66.50	16.20		130.0	
10616-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10620-         10620-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10621-         10621-       IEEE 802.11ac WiFi (4         90pc duty cycle)       10622-         10622-       IEEE 802.11ac WiFi (4	iFi (20MHz, MCS8,	X	4.74	66.30	16.01	0.46	130.0	± 9.6 %
AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10620-       IEEE 802.11ac WiFi (4         90pc duty cycle)		Y	4.77	66.27	16.00		130.0	
AAA       90pc duty cycle)         10617-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10618-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10619-       IEEE 802.11ac WiFi (4         AAA       90pc duty cycle)         10620-       IEEE 802.11ac WiFi (4         90pc duty cycle)		Z	4.71	66.14	15.85		130.0	
AAA         90pc duty cycle)           10618-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10619-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10622-         IEEE 802.11ac WiFi (4 90pc duty cycle)	iFi (40MHz, MCS0,	X	5.35	66.72	16.41	0.46	130.0	± 9.6 %
AAA         90pc duty cycle)           10618-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10619-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10622-         IEEE 802.11ac WiFi (4 90pc duty cycle)		Y	5.37	66.67	16.37		130.0	
AAA         90pc duty cycle)           10618-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10619-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10622-         IEEE 802.11ac WiFi (4 90pc duty cycle)		Z	5.32	66.58	16.26		130.0	
AAA         90pc duty cycle)           10619-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10620-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10621-         IEEE 802.11ac WiFi (4 90pc duty cycle)           10622-         IEEE 802.11ac WiFi (4 90pc duty cycle)	iFi (40MHz, MCS1,	X	5.42	66.91	16.47	0.46	130.0	± 9.6 %
AAA 90pc duty cycle) 10619- AAA 90pc duty cycle) 10620- 10620- 10620- 10621- 10621- 10621- 10621- 10622- 1072		Y	<u> </u>	66.86	16.44		130.0	
AAA 90pc duty cycle) 10619- AAA 90pc duty cycle) 10620- 10620- 10620- 10621- 10621- 10621- 10621- 10622- 1072- 1		Z	5.39	66.77	16.33		130.0	
AAA 90pc duty cycle) 10620- AAA 90pc duty cycle) 10621- 10621- AAA 90pc duty cycle) 10622- 10620- 10600- 1060	iFi (40MHz, MCS2,	X	5.30	66.90	16.49	0.46	130.0	± 9.6 %
AAA 90pc duty cycle) 10620- AAA 90pc duty cycle) 10621- 10621- 10621- AAA 90pc duty cycle) 10622- 10620- 10600- 1060		Y	5.32	66.84	16.45		130.0	
AAA 90pc duty cycle) 10620- AAA 90pc duty cycle) 10621- 10621- AAA 90pc duty cycle) 10622- 10620- 10600- 1060		Z	5.27	66.75	16.34		130.0	
AAA 90pc duly cycle) 10621- AAA 90pc duly cycle) 10622- 1072-	iFi (40MHz, MCS3,	X	5.32	66.73	16.34	0.46	130.0	± 9.6 %
AAA 90pc duly cycle) 10621- AAA 90pc duly cycle) 10622- 1072-		Y	5.35	66.70	16.32		130.0	
AAA 90pc duly cycle) 10621- AAA 90pc duly cycle) 10622- 1072-		Z	5.29	66.57	16.19	0.10	130.0	
AAA 90pc duty cycle) 10622- IEEE 802.11ac WiFi (4	IFI (40MHz, MCS4,	X	5.41	66.76	16.40	0.46	130.0	±9.6 %
AAA 90pc duty cycle) 10622- IEEE 802.11ac WiFi (4		Y	5.44	66.74	16.38	·	130.0	
AAA 90pc duty cycle) 10622- IEEE 802.11ac WiFi (4		Z	5.38	66.61	16.26	0.40	130.0	+0.0.0/
	IFT (40MHZ, MCS5,	X	5.41	66.88	16.58	0.46	130.0	± 9.6 %
		Y	5.42	66.80	16.52		130.0	ļ
		Z	5.38	66.73	16.43	0.40	130.0	1000
AAA 90pc duty cycle)	IFI (40MHZ, MCS6,	X	5.43	67.06	16.66	0.46	130.0	± 9.6 %
		Y Z	5.44 5.40	66.99 66.90	16.61 16.51		130.0 130.0	

10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.30	66.57	16.29	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)			00.57	10.29	0.40	130.0	19.0 %
		Y	5.32	66.54	16.28		130.0	
10001		Z	5.27	66.44	16.15	0.40	130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duly cycle)	X	5.49	66.77	16.45	0.46	130.0	± 9.6 %
		Y	5.51	66.74	16.43		130.0	
		Z	5.47	66.64	16.32		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duly cycle)	X	5.87	67.79	17.01	0.46	130.0	± 9.6 %
		Y	5.91	67.80	17.02		130.0	
		Z	5.82	67.59	16.84		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.64	66.77	16.36	0.46	130.0	± 9.6 %
		Y	5.66	66.73	16.33		130.0	
		Z	5.62	66.65	16.23		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duly cycle)	X	5.89	67.37	16.62	0.46	130.0	± 9.6 %
		Y	5.91	67.33	16.60		130.0	
		Z	5.87	67.23	16.49		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duly cycle)	X	5.68	66.88	16.31	0.46	130.0	± 9.6 %
		Y	5.70	66.87	16.31		130.0	
_		Z	5.65	66.74	16.18		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.76	66.96	16.35	0.46	130.0	± 9.6 %
		Y	5.79	66.97	16.35		130.0	
		Z	5.73	66.80	16.20		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duly cycle)	X	6.24	68.57	17.15	0.46	130.0	± 9.6 %
		Y	6.29	68.63	17.19		130.0	
		Z	6.18	68.33	16.97		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.10	68.25	17.18	0.46	130.0	± 9.6 %
		Y	6.12	68.20	17.14		130.0	
		Z	6.05	68.04	17.01		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.86	67.41	16.78	0.46	130.0	± 9.6 %
		Y	5.86	67.33	16.72		130.0	
		Z	5.83	67.27	16.64		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.74	67.02	16.41	0.46	130.0	± 9.6 %
		Y	5.75	66.98	16.39		130.0	
		Z	5.71	66.88	16.28		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.72	67.05	16.48	0.46	130.0	± 9.6 %
		Y	5.74	67.00	16.45	· ·	130.0	<b> </b>
		Z	5.69	66.91	16.35		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.61	66.41	15.90	0.46	130.0	± 9.6 %
		Y	5.64	66.44	15.93	·	130.0	
		Z	5.58	66.28	15.78		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	x	6.06	67.15	16.45	0.46	130.0	± 9.6 %
		Y	6.07	67.11	16.43		130.0	
		Z	6.04	67.02	16.33		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duly cycle)	X	6.22	67.54	16.63	0.46	130.0	± 9.6 %
		Y	6.24	67.51	16.62		130.0	
		Z	6.19	67.41	16.51		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.22	67.51	16.59	0.46	130.0	± 9.6 %
		Y	6.23	67.48	16.58		130.0	
		Ż	6.19	67.38	16.47			

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duly cycle)	X	6.19	67.46	16.61	0.46	130.0	± 9.6 %
		T Y	6.21	67.42	16.59		130.0	
		Ż	6.17	67.32	16.48		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.20	67.48	16.56	0.46	130.0	± 9.6 %
		Y	6.22	67.47	16.57		130.0	
		Z	6.17	67.34	16.43		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.24	67.37	16.53	0.46	130.0	± 9.6 %
		TY	6.26	67.35	16.53		130.0	
		Z	6.22	67.26	16.42		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.28	67.61	16.82	0.46	130.0	± 9.6 %
		Y	6.29	67.56	16.78		130.0	
		Z	6.25	67.48	16.69		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.12	67.31	16.57	0.46	130.0	± 9.6 %
		Y	6.14	67.30	16.57		130.0	
		Z	6.10	67.19	16.44		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	x	6.29	67.82	16.84	0.46	130.0	± 9.6 %
		Y	6.32	67.84	16.86		130.0	
		Z	6.25	67.65	16.70		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.66	68.51	17.14	0.46	130.0	± 9.6 %
		Y	6.74	68.70	17.25		130.0	
		Z	6.55	68.17	16.92		130.0	-
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	72.47	137.59	44.83	9.30	60.0	± 9.6 %
		Y	100.00	145.17	47.03		60.0	
		Z	40.65	122.83	40.68		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	65.20	136.16	44.66	9.30	60.0	± 9.6 %
	·	Y	100.00	146.33	47.53		60.0	
		Z	38.60	122.56	40.77		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.71	63.70	10.92	0.00	150.0	± 9.6 %
		Y	0.71	63.27	10.71		150.0	
		Z	0.67	62.68	10.14		150.0	

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

# APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container.
- Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle. 3) The complex admittance with respect to the probe aperture was measured
- The complex relative permittivity ε can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_{r}\varepsilon_{0}}{\left[\ln(b/a)\right]^{2}} \int_{a}^{b} \int_{a}^{b} \int_{0}^{\pi} \cos\phi' \frac{\exp\left[-j\omega r(\mu_{0}\varepsilon_{r}'\varepsilon_{0})^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

where *Y* is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively,  $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos \phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

		omposi	tion of tr	ie lissu	e Equiva	ient wat	ter			
Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450	2450
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredients (% by weight)										
Bactericide			0.1	0.1						
DGBE					47	31	44.92	29.44		26.7
HEC	See pages	Saa maaa 2	1	1					Saa maaa 4	
NaCl	2-3	See page 2	1.45	0.94	0.4	0.2	0.18	0.39	See page 4	0.1
Sucrose			57	44.9					]	
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2

Table D-I Composition of the Tissue Equivalent Matter

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### 2 Composition / Information on ingredients

## Figure D-1 Composition of 750 MHz Head and Body Tissue Equivalent Matter

**Note:** 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test

Item Name	Body Tissue Simulating Liquid (MSL750V2)	
Product No.	SL AAM 075 AA (Batch: 150518-2)	
Manufacturer	SPEAG	

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

### Setup Validation

Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters** 

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

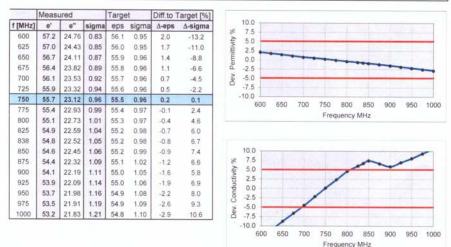
### Test Condition

©

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.	
TSL Temperature	22°C	
Test Date	20-Apr-16	
Operator	WM	

#### Additional Information

TSL Density 1.212 g/cm<sup>3</sup> TSL Heat-capacity 3.006 kJ/(kg\*K)



## Figure D-2 750MHz Body Tissue Equivalent Matter

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### Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HSL750V2)	
Product No.	SL AAH 075 AB (Batch: 160322-2)	
Manufacturer	SPEAG	

### **Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

### Setup Validation

Validation results were within  $\pm$  2.5% towards the target values of Methanol.

### **Target Parameters**

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

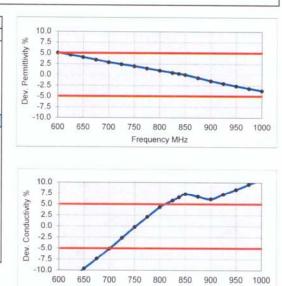
### **Test Condition**

Ambient	Environment temperatur $(22 \pm 3)^{\circ}$ C and humidity < 70%.
TSL Temperature	
Test Date	23-Mar-16
Operator	WM

### Additional Information

Advance of			Inverse
TSL Heat-capacity	2.701	kJ/(kg*K)	
TSL Density		g/cm <sup>3</sup>	





Frequency MHz

### Figure D-3 750MHz Head Tissue Equivalent Matter

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3 Composition / Info	rmation on in	ngredients
The Item is composed of the	he following ingre	dients:
Water	50 - 73 %	
Non-ionic detergents	25 - 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0 - 2%	
Preservative	0.05 - 0.1%	6 Preventol-D7
Safety relevant ingredients		
CAS-No. 55965-84-9	< 0.1 %	aqueous preparation, containing 5-chloro-2-methyl-3(2H)- isothiazolone and 2-methyyl-3(2H)-isothiazolone
CAS-No. 9005-64-5	<50 %	polyoxyethylenesorbitan monolaurate
	guidelines, the pr	oduct is not a dangerous mixture and therefore not required to be

# Figure D-4 Composition of 2.4 GHz Head Tissue Equivalent Matter

**Note:** 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Item N Produc Manuf Measu	t No.				10 011			HBBL1900-3800V3)
Manuf			SL A	AH 10	SAP.		160330-1	
		r	SPEA		AB	coatcu;	100330-1	
				s mea	sured	using c	alibrated	DAK probe.
Setup								
			vere w	ithin ±	2.5%	towards	the targe	t values of Methanol.
Target								
				fined i	n the	IEEE 15	28 and IE	C 62209 compliance standards.
Test C	onditi	ion						
Ambie				onmer	nt tem	peratur	(22 ± 3)°(	and humidity < 70%.
TSL Te		ature	22°C	1.22				20
Test D				ar-16				
Operat	or		WM	_		_		
Additi		nform						
ISL D				g/cm				
SL H	eat-car Measu		3.389	Target		Diff to T	arout IN 7	
(MHz)	e'	e <sup>n</sup>	sigma		sigma		A-sigma	10.0
1900	40.7	12.3	1.3	40.0	1.4	1.7	-6.9	# 75
1950	40.5	12.5	1.4	40.0	1.4	1.2	-3.3	
2000	40.3	12.6	1.4	40.0	1.4	0.8	0.1	50 25 00
2050	40,1	12.7	1.5	39.9	1.4	0.6	0.5	0.0 mm
2100	39.9 39.8	12.9	1.5	39.8 39.7	1.5	0.3	0.9	2.5
2200	39.6	13.0	1.6	39.7	1.6	-0.2	1.2	-5.0
2250	39.4	13.1	1.0	39.6	1.6	-0.2	2.0	-7.5
2300	39.2	13.3	1.7	39.5	1.7	-0.6	2.4	-10.0 1900 2100 2300 2500 2700 2900 3100 3300 3500 3700 3900
2350	39.1	13.5	1.8	39.4	1.7	-0.8	2.9	Frequency MHz
2400	38.9	13.6	1.8	39.3	1.8	-1.0	3.4	Fradmanck were
2450	38,7	13.7	1.9	39.2	1.8	-1.2	4.0	
2500 2550	38.5 38.3	13.8 13.9	1.9	39.1 39.1	1.9	-1.5	3.9	
2600	38.3	13.9	2.0	39.1	2.0	-1.9	3.5	10.0
2650	37.9	14.2	2.1	38.9	2.0	-2.6	3.8	# 7.5
2700	37.8	14.3	2.2	38.9	2.1	-2.8	3.9	
2750	37.5	14.4	2.2	38.8	2.1	-3.3	3.6	25 00 
2800	37.4	14.5	2.3	38.8	2.2	-3.6	3.6	8 -2.5
2850	37.2	14.6 14.7	2.3 2.4	38.7 38.6	2.2	-3.9	3.7	§ -50
2950	36.8	14.8	24	38.6	2.3	-4.5	3.0	a
3000	36.6	14.9	25	38.5	2.4	-4.8	3.6	-10.0
3050	36.4	15.0	2.5	38.4	2.5	-5.2	3.8	1900 2100 2300 2500 2700 2900 3100 3300 3500 3700 3900
3100	38.2	15.1	2.6	38.4	2.5	-5,6	3.8	Frequency MHz
3150 3200	36.1	15.2	2.7	38.3 38.3	2.6	-5.9	4.0	Lindonsh up a
3250	35.9	15.2	2.8	38.3	2.0	-6.2	3.9	
3300	35.5	15.3	2.8	38.2	2.7	-6.9	4.0	
3350	35.4	15.4	2.9	38.1	2.8	-7.2	4.2	
3400	35.2	15.5	2.9	38.0	2.8	-7.5	4.1	
3450	35.0	15.5	3.0	38.0	2.9	-7.8	4.2	
3500 3550	34.9	15.6	3.0	37.9	2.9	-8.1	4.2	
3550	34.7	15.6 15.7	3.1 3.1	37.9 37.8	3.0 3.0	-8.4 -8.7	4.2	
3650	34.0	15.8	3.1	37.8	3.0	-9.0	4.4	
3700	34.2	15.8	3.3	37.7	3.1	-9.3	4.5	
3750	34.1	15.9	3.3	37.6	3.2	-9.5	4.4	
3800	33.9	15.9	3.4	37.6	3.2	-9.9	4.7	
3850	33.7	16.0	3.4	37.5	3.3	-10.1	4.7	

Figure D-5 2.4 GHz Head Tissue Equivalent Matter

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# APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

SAR	FREQ.		PROBE	PROBE			COND.	PERM.	CI	<b>W VALIDATIO</b>	N	MC	DD. VALIDATIO	N
SYSTEM	[MHz]	DATE	SN	TYPE	PROBE C	AL. POINT	(7)	(cr)	SENSITIVITY	PROBE	PROBE	MOD.	DUTY	PAR
#	[IVIHZ]		SIN	ITPE			(σ)	(ɛr)	SENSITIVIT	LINEARITY	ISOTROPY	TYPE	FACTOR	PAR
G	750	9/30/2016	3287	ES3DV3	750	Head	0.881	41.020	PASS	PASS	PASS	N/A	N/A	N/A
K	835	5/23/2016	7409	EX3DV4	835	Head	0.903	41.145	PASS	PASS	PASS	GMSK	PASS	N/A
E	835	4/26/2016	7406	EX3DV4	835	Head	0.932	41.589	PASS	PASS	PASS	GMSK	PASS	N/A
1	1750	3/2/2017	3213	ES3DV3	1750	Head	1.361	38.630	PASS	PASS	PASS	N/A	N/A	N/A
Н	1900	3/13/2017	3318	ES3DV3	1900	Head	1.441	39.998	PASS	PASS	PASS	GMSK	PASS	N/A
G	2450	9/28/2016	3287	ES3DV3	2450	Head	1.875	37.737	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
1	750	3/7/2017	3213	ES3DV3	750	Body	0.955	56.554	PASS	PASS	PASS	N/A	N/A	N/A
Н	835	3/2/2017	3318	ES3DV3	835	Body	0.982	53.900	PASS	PASS	PASS	GMSK	PASS	N/A
D	835	2/2/2017	3288	ES3DV3	835	Body	0.993	53.541	PASS	PASS	PASS	GMSK	PASS	N/A
1	1750	3/2/2017	3213	ES3DV3	1750	Body	1.482	53.362	PASS	PASS	PASS	N/A	N/A	N/A
Н	1900	3/15/2017	3318	ES3DV3	1900	Body	1.556	52.524	PASS	PASS	PASS	GMSK	PASS	N/A
E	2450	4/27/2016	7406	EX3DV4	2450	Body	2.016	51.629	PASS	PASS	PASS	OFDM/TDD	PASS	PASS

Table E-I SAR System Validation Summary

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

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