Calibration Laboratory of 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

Accreditation No.: SCS 0108

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Certificate No: D750V3-1161_Jul16

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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: 5047.2 / 06327 05-Apr-16 (No. 217-02292) Apr-17 Reference 20 dB Attenuator SN: 5047.2 / 06327 05-Apr-16 (No. 217-02293) Apr-17 Reference Probe EX3DV4 SN: 7349 15-Jun-16 (No. 217-02293) Apr-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. 217-02223) In house check: Oct-16 Power sensor HP 8481A SN: WM41092317 07-Oct-15 (No. 217-02223) In house check: Oct-16 Power sensor HP 8481A SN: 10972 15-Jun-15 (In house check Oct-15) In house check: Oct-16 Power sensor HP 8481A SN: 100972 15-Jun-15 (In house check Oct-15) <					
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	letwork Analyzer HP 8753E	Name	Laboratory Technician	Signature	

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

Certificate No: D750V3-1161_Jul16

Calibration Laboratory of

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





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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	· <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 ³ (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 ³ (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 ³ (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

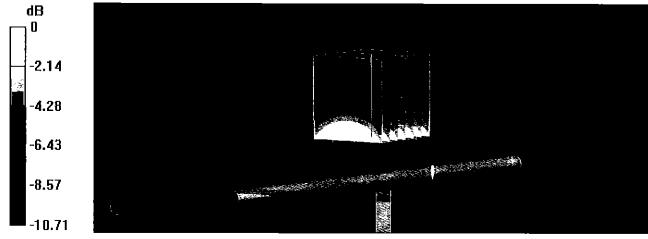
Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

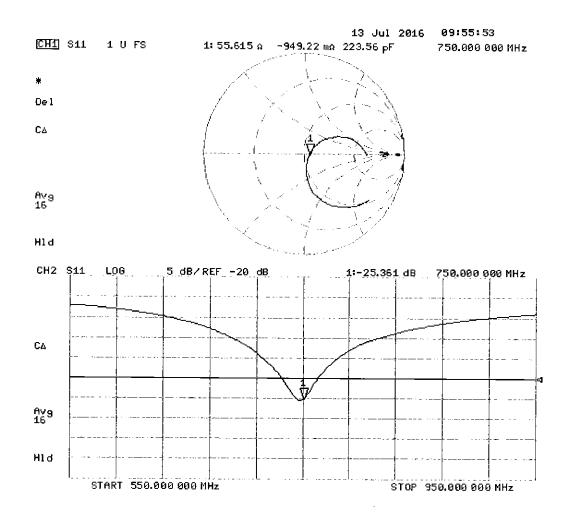
- Probe: EX3DV4 SN7349; ConvF(10.07, 10.07, 10.07); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

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

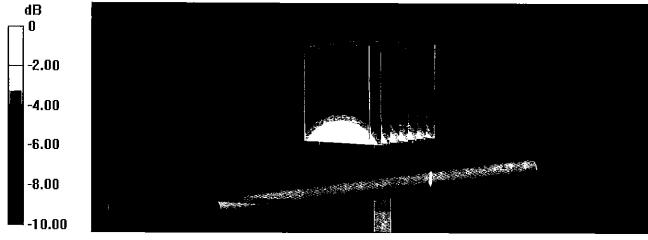
Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz; $\sigma = 0.99$ S/m; $\varepsilon_r = 55.1$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

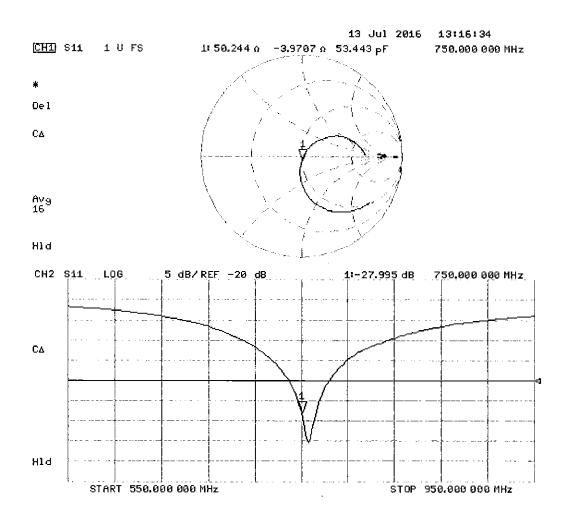
- Probe: EX3DV4 SN7349; ConvF(9.99, 9.99, 9.99); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

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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Certification of Calibration

Object

D750V3 – SN: 1161

Calibration procedure(s)

Procedure for Calibration Extension for SAR Dipoles.

Calibration date:

July 12, 2017

Description:

SAR Validation Dipole at 750 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/1/2017	Annual	6/1/2018	MY53401181
Agilent	8753ES	S-Parameter Network Analyzer	10/26/2016	Annual	10/26/2017	US39170118
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/8/2017	Annual	3/8/2018	1368
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/14/2017	Annual	6/14/2018	1334
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/10/2017	Annual	5/10/2018	1070
SPEAG	ES3DV3	SAR Probe	11/15/2016	Annual	11/15/2017	3334
SPEAG	ES3DV3	SAR Probe	3/14/2017	Annual	3/14/2018	3319
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1207364
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1339018
Anritsu	ML2495A	Power Meter	10/16/2015	Biennial	10/16/2017	941001
Agilent	N5182A	MXG Vector Signal Generator	2/28/2017	Annual	2/28/2018	MY47420800
Seekonk	NC-100	Torque Wrench	11/6/2015	Biennial	11/6/2017	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halbfoster	Test Engineer	BRODIE HALBFOSTER
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	ROK

Object:	Date Issued:	Dogo 1 of 4
D750V3 – SN: 1161	07/12/2017	Page 1 of 4

DIPOLE CALIBRATION EXTENSION

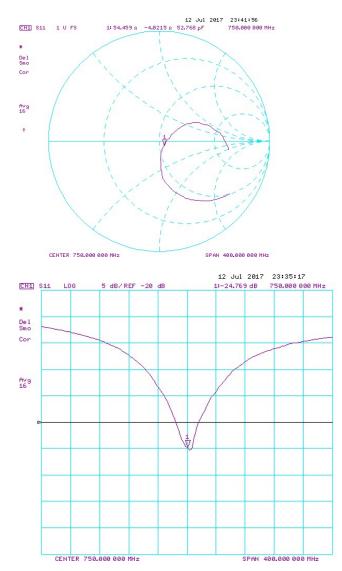
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

- 1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
- 2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
- 3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

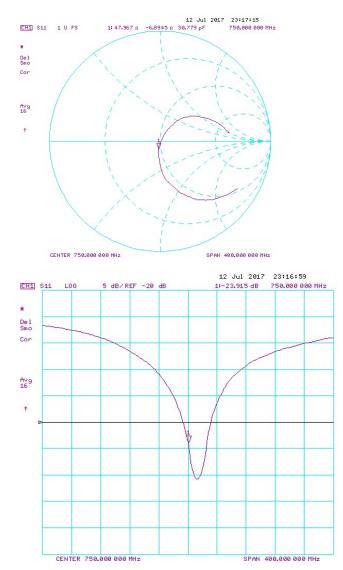
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	W/kg @ 23.0 dBm	dBm	(%)	W/кg @ 23.0 dBm	(10g) W/kg @ 23.0 dBm		Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Head (dB)	Deviation (%)	
7/13/2016	7/12/2017	1.033	1.63	1.65	0.98%	1.08	1.09	1.11%	55.6	54.5	1.1	-0.9	-4.0	3.1	-25.4	-24.8	2.40%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Body (1g) W/kg @ 23.0 dBm	Measured Body SAR (1g) W/kg @ 23.0 dBm	Deviation 1g (%)	Certificate SAR Target Body (10g) W/kg @ 23.0 dBm	Measured Body SAR (10g) W/kg @ 23.0 dBm	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
7/13/2016	7/12/2017	1.033	1.69	1.75	3.80%	1.11	1.17	5.79%	50.2	48.0	2.2	-4.0	-6.9	2.9	-28.0	-23.9	14.60%	PASS

Object:	Date Issued:	Page 2 of 4
D750V3 – SN: 1161	07/12/2017	Fage 2 01 4



Impedance & Return-Loss Measurement Plot for Head TSL

Object:	Date Issued:	Daga 2 of 4
D750V3 – SN: 1161	07/12/2017	Page 3 of 4



Impedance & Return-Loss Measurement Plot for Body TSL

Object:	Date Issued:	Dage 4 of 4
D750V3 – SN: 1161	07/12/2017	Page 4 of 4

Calibration Laborato Schmid & Partner Engineering AG ^{Zeughausstrasse 43, 8004} Zuri		BC MRA	 S Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service
Accredited by the Swiss Accredit The Swiss Accreditation Servic Multilateral Agreement for the	ce is one of the signato	ries to the EA	Accreditation No.: SCS 0108
Multilateral Agreement for the Client PC Test		on certificates	
	en l'alemant prese elle avil da del	Certifica	te No: D835V2-4d047_Jul16
CALIBRATION (CERTIFICAT		
Object	D835V2 - SN:4	d047 _{, medanan wasalar ang ang ang ang ang ang ang ang ang ang}	t englenne stor - entleren offeren i stan over bege station entleger månger entleger en fører et - per entlever
Calibration procedure(s)	QA CAL-05.v9 Calibration proc	edure for dipole validation kits	above 700 MHz
	n in de referenze de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la c		BNV 7/16/2016 Extended
Calibration date:	July 13, 2016		
	ted in the closed laborate	tional standards, which realize the physica probability are given on the following pages bry facility: environment temperature (22 ±	s and are part of the certificate.
Primary Standards	ID #	Cal Date (Certificate No.)	
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Scheduled Calibration
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 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 DAE4	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 #		
Power meter EPM-442A	SN: GB37480704	Check Date (in house)	Scheduled Check
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. 217-02222)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	07-Oct-15 (No. 217-02223)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	15-Jun-15 (in house check Jun-15) 18-Oct-01 (in house check Oct-15)	In house check: Oct-16 In house check: Oct-16
Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	Cliff-
This calibration certificate shall not	be reproduced except in	full without written approval of the laborato	lssued: July 13, 2016 ry.

Calibration Laboratory of

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





Schweizerischer Kalibrierdienst

S Service sulsse d'étalonnage С

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S 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

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%.

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	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 ³ (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 ³ (10 g) of Head TSL	condition				
SAR averaged over 10 cm ³ (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 ³ (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 ³ (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
----------------------------------	---------

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

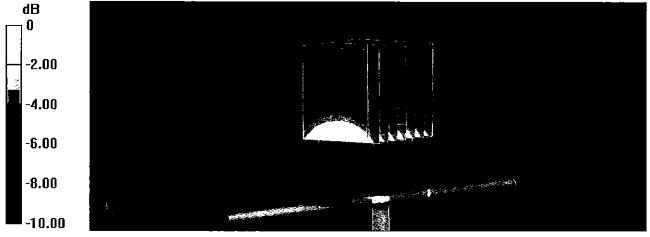
Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz; $\sigma = 0.94$ S/m; $\varepsilon_r = 40.6$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

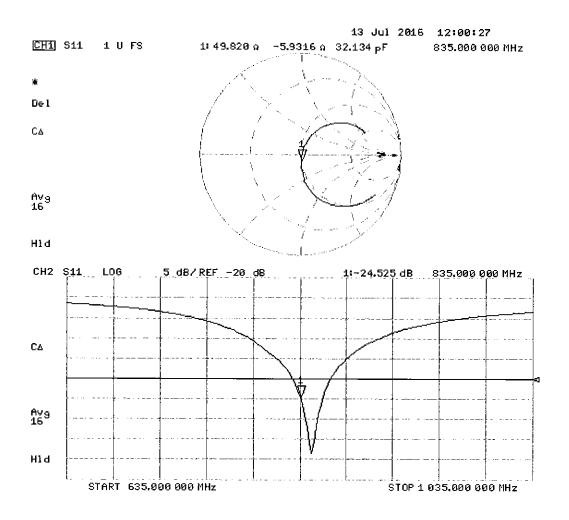
- Probe: EX3DV4 SN7349; ConvF(9.72, 9.72, 9.72); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

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

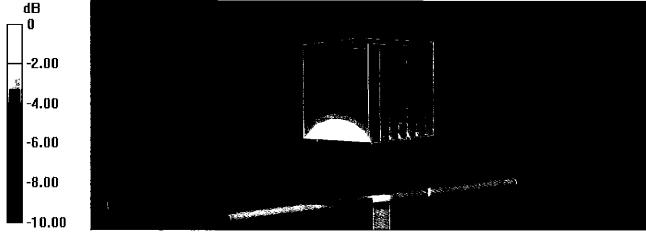
Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz; $\sigma = 1.01$ S/m; $\varepsilon_r = 54.9$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

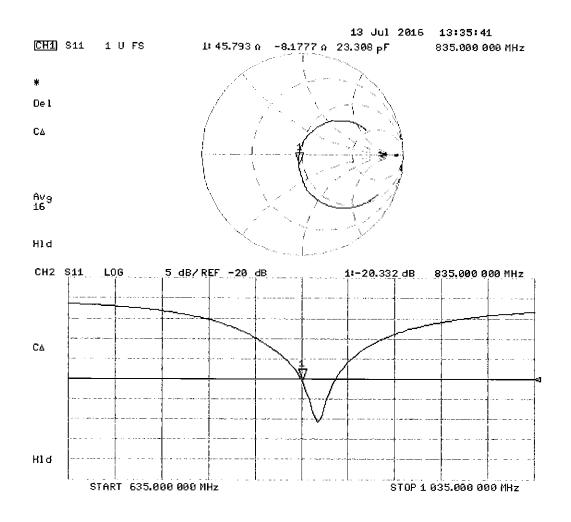
- Probe: EX3DV4 SN7349; ConvF(9.73, 9.73, 9.73); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

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





PCTEST ENGINEERING LABORATORY, INC. 7185 Oakland Mills Road, Columbia, MD 21046 USA Tel. +1.410.290.6652 / Fax +1.410.290.6654 http://www.pctest.com



Certification of Calibration

Object

D835V2 - SN: 4d047

July 13, 2017

Calibration procedure(s)

Procedure for Calibration Extension for SAR Dipoles.

Calibration date:

Description:

SAR Validation Dipole at 835 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/1/2017	Annual	6/1/2018	MY53401181
Agilent	8753ES	S-Parameter Network Analyzer	10/26/2016	Annual	10/26/2017	US39170118
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/8/2017	Annual	3/8/2018	1368
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/13/2017	Annual	3/13/2018	1415
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/10/2017	Annual	5/10/2018	1070
SPEAG	ES3DV3	SAR Probe	3/14/2017	Annual	3/14/2018	3209
SPEAG	ES3DV3	SAR Probe	3/14/2017	Annual	3/14/2018	3319
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1207364
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1339018
Anritsu	ML2495A	Power Meter	10/16/2015	Biennial	10/16/2017	941001
Agilent	N5182A	MXG Vector Signal Generator	2/28/2017	Annual	2/28/2018	MY47420800
Seekonk	NC-100	Torque Wrench	11/6/2015	Biennial	11/6/2017	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halbfoster	Test Engineer	BRODIE HALBFOSTER
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	ROK

Object:	Date Issued:	Dogo 1 of 4
D835V2 – SN: 4d047	07/13/2017	Page 1 of 4

DIPOLE CALIBRATION EXTENSION

Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

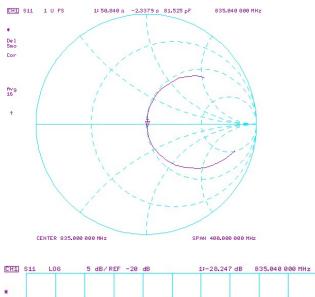
- 1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
- 2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
- 3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

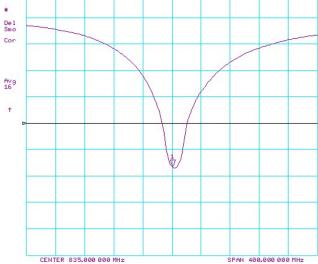
The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Head (1g) W/kg @ 23.0 dBm	Measured Head SAR (1g) W/kg @ 23.0 dBm		Certificate SAR Target Head (10g) W/kg @ 23.0 dBm	(10a) W//ka @	Deviation 10g (%)	Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Measured Return Loss Head (dB)	Deviation (%)	PASS/FAIL
7/13/2016	7/13/2017	0	1.83	1.95	6.79%	1.19	1.28	7.56%	49.8	50.8	1	-5.9	-2.3	3.6	-24.5	-28.2	-15.10%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Body (1g) W/kg @ 23.0 dBm	Measured Body SAR (1g) W/kg @ 23.0 dBm			(40-) M/A @	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
7/13/2016	7/13/2017	0	1.91	1.99	3.97%	1.25	1.31	4.97%	45.8	46.3	0.5	-8.2	-6.7	1.5	-20.3	-22.5	-10.80%	PASS

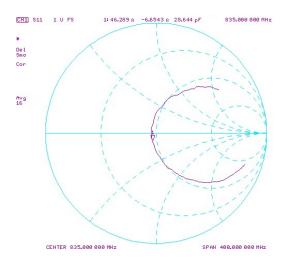
Object:	Date Issued:	Page 2 of 4
D835V2 – SN: 4d047	07/13/2017	Fage 2 01 4



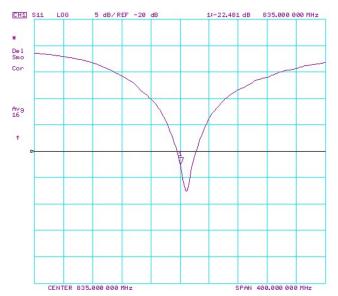




Object:	Date Issued:	Page 3 of 4
D835V2 – SN: 4d047	07/13/2017	Fage 5 01 4



Impedance & Return-Loss Measurement Plot for Body TSL



Object:	Date Issued:	Page 4 of 4
D835V2 – SN: 4d047	07/13/2017	Fage 4 01 4

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

Client

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

PC Test

Certificate No: D1900V2-5d148_Feb17

Object	D1900V2 - SN:5d	1148 · · · · · · · · · · · · · · · · · · ·	
Calibration procedure(s)		dure for dipole validation kits abo	ve 700 MHz
		철원인은 고려는 고성원인은 것은 것이다.	BN1- 03/06/2
Calibration date:	03/06/ February 09, 2017		
he measurements and the unce	rtainties with confidence p	onal standards, which realize the physical uni robability are given on the following pages an ry facility: environment temperature (22 ± 3)°C	d are part of the certificate.
Calibration Equipment used (M&	ΓE 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	31-Dec-16 (No. EX3-7349_Dec16)	Dec-17
	SN: 601	04-Jan-17 (No. DAE4-601_Jan17)	Jan-18
DAE4	ID #	Check Date (in house)	Scheduled Check
DAE4 Secondary Standards	ID # SN: GB37480704	Check Date (in house) 07-Oct-15 (in house check Oct-16)	Scheduled Check In house check: Oct-18
DAE4 Secondary Standards Power meter EPM-442A			
DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A	SN: GB37480704 SN: US37292783	07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	In house check: Oct-18 In house check: Oct-18
DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06	SN: GB37480704 SN: US37292783 SN: MY41092317	07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06	SN: GB37480704 SN: US37292783 SN: MY41092317 SN: 100972	07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16)	In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06 Network Analyzer HP 8753E	SN: GB37480704 SN: US37292783 SN: MY41092317 SN: 100972 SN: US37390585	07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 18-Oct-01 (in house check Oct-16)	In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-17
Approved by:	SN: GB37480704 SN: US37292783 SN: MY41092317 SN: 100972 SN: US37390585 Name	07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 18-Oct-01 (in house check Oct-16) Function	In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-17

Schweizerischer Kalibrierdienst

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

Accreditation No.: SCS 0108



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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

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
	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	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	40.7 ± 6 %	1.38 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	an na da da	

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.93 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	40.2 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.18 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	20.9 W/kg ± 16.5 % (k=2)

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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	54.1 ± 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 ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	10.1 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	40.9 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.33 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.5 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	54.1 Ω + 5.8 jΩ
Return Loss	- 23.3 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	48.3 Ω + 7.1 jΩ
Return Loss	- 22.6 dB

General Antenna Parameters and Design

	Electrical Delay (one direction)	1.199 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	March 11, 2011

DASY5 Validation Report for Head TSL

Date: 09.02.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d148

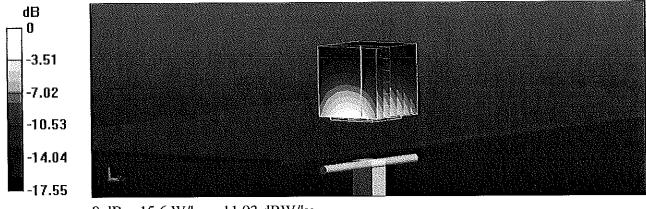
Communication System: UID 0 - CW; Frequency: 1900 MHz Medium parameters used: f = 1900 MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.7$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

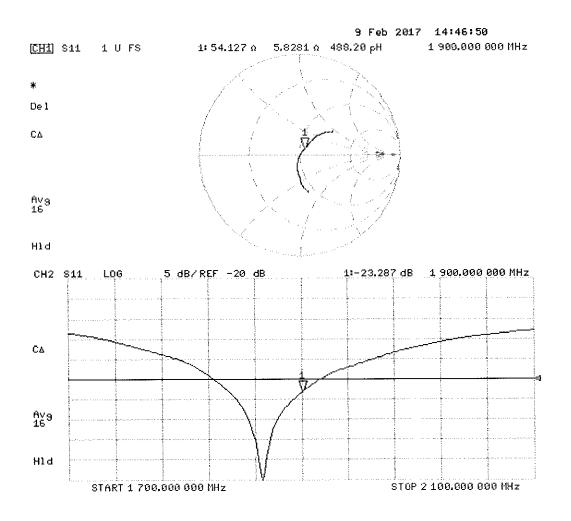
- Probe: EX3DV4 SN7349; ConvF(8.12, 8.12, 8.12); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.01.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 108.8 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 19.2 W/kg SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.18 W/kg Maximum value of SAR (measured) = 15.6 W/kg



0 dB = 15.6 W/kg = 11.93 dBW/kg



DASY5 Validation Report for Body TSL

Date: 09.02.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d148

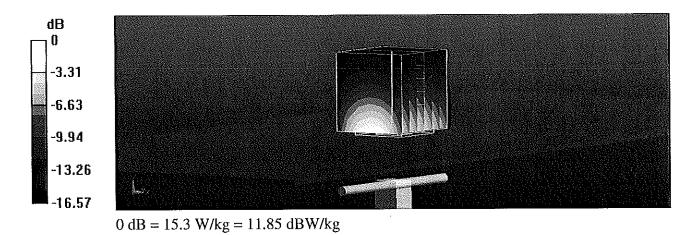
Communication System: UID 0 - CW; Frequency: 1900 MHz Medium parameters used: f = 1900 MHz; $\sigma = 1.5$ S/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

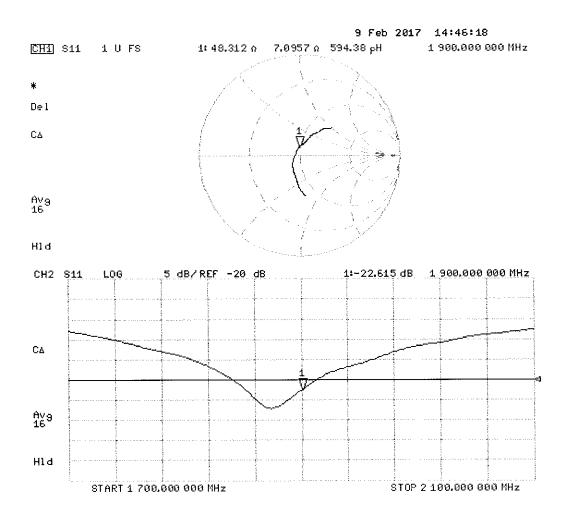
DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.03, 8.03, 8.03); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.01.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; 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 = 105.3 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 18.1 W/kg SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.33 W/kg Maximum value of SAR (measured) = 15.3 W/kg





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PC Test

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- S **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

Certificate No: D2450V2-719_Aug17

CALIBRATION CERTIFICATE D2450V2 - SN:719 Object Calibration procedure(s) QA CAL-05.v9 Calibration procedure for dipole validation kits above 700 MHz August 17, 2017 Calibration date: 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 04-Apr-17 (No. 217-02521/02522) Apr-18 Power sensor NRP-Z91 SN: 103244 04-Apr-17 (No. 217-02521) Apr-18 Power sensor NRP-Z91 SN: 103245 04-Apr-17 (No. 217-02522) Apr-18 Reference 20 dB Attenuator SN: 5058 (20k) 07-Apr-17 (No. 217-02528) Apr-18 Type-N mismatch combination SN: 5047.2 / 06327 07-Apr-17 (No. 217-02529) Apr-18 Reference Probe EX3DV4 SN: 7349 31-May-17 (No. EX3-7349_May17) May-18 DAE4 SN: 601 28-Mar-17 (No. DAE4-601_Mar17) Mar-18 Secondary Standards 1D # Check Date (in house) Scheduled Check SN: GB37480704 Power meter EPM-442A 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 SN: MY41092317 Power sensor HP 8481A 07-Oct-15 (in house check Oct-16) In house check: Oct-18 SN: 100972 **RF** generator R&S SMT-06 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: Michael Weber Laboratory Technician Katia Pokovic Approved by: Technical Manager Issued: August 17, 2017 This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D2450V2-719_Aug17

Calibration Laboratory of

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





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Glossarv:

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

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, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- 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	V52.10.0
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	37.8 ± 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 ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	51.9 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	· · · · · · · · · · · · · · · · · · ·
SAR measured	250 mW input power	6 15 W/kg

SAR measured	250 mW input power	6.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.3 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	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.9 ± 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 ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.8 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	50.1 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.00 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	23.7 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	55.7 Ω + 7.0 jΩ
Return Loss	- 21.4 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	51.4 Ω + 8.1 jΩ
Return Loss	- 21.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.150 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	September 10, 2002

DASY5 Validation Report for Head TSL

Date: 17.08.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 719

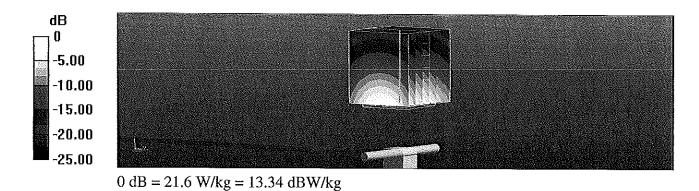
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz; $\sigma = 1.86$ S/m; $\epsilon_r = 37.8$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

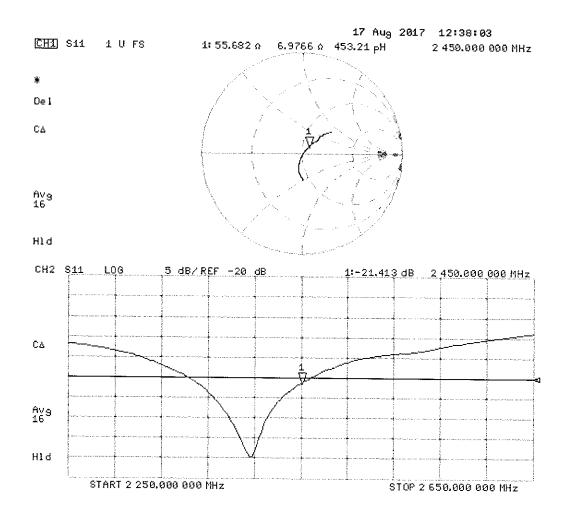
DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.12, 8.12, 8.12); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 112.8 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 26.9 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.15 W/kg Maximum value of SAR (measured) = 21.6 W/kg





DASY5 Validation Report for Body TSL

Date: 17.08.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 719

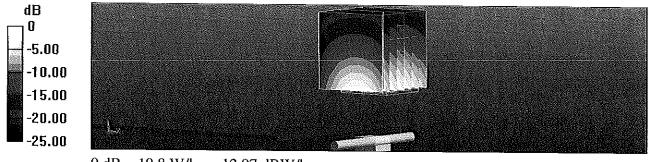
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz; $\sigma = 2.03$ S/m; $\varepsilon_r = 51.9$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

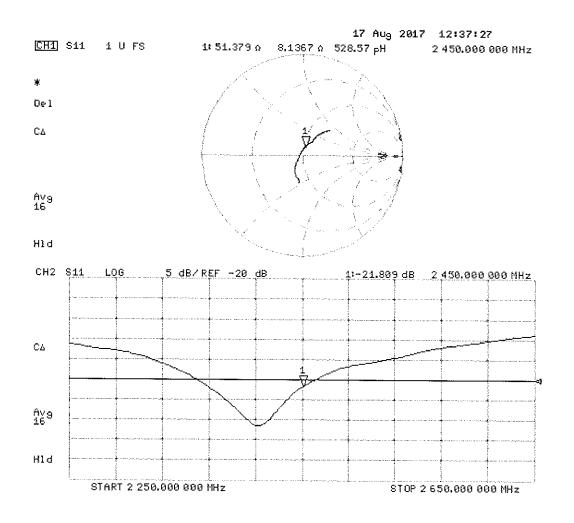
- Probe: EX3DV4 SN7349; ConvF(8.1, 8.1, 8.1); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 103.0 V/m; Power Drift = -0.07 dB Peak SAR (extrapolated) = 25.2 W/kg SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6 W/kg Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg



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Accreditation No.: SCS 0108

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Client PC Test

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Certificate No: ES3-3318_Sep17

CALIBRATION CERTIFICATE

Object	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		36/03/2017
Calibration date:	September 22, 2017		10 (-
This calibration certificate doc The measurements and the u	uments the traceability to national standards, which realize the physical units of mean ncertainties with confidence probability are given on the following pages and are par	asurements (SI). rt 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	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
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:	Jeton Kastrati	Laboratory Technician	OH-
	····· · · · ·		Je Gra
Approved by:	Katja Pokovic	Technical Manager	PORC
			1205
			Issued: September 22, 2017

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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	l 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
- b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- 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 & = 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 E²-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).

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Probe ES3DV3

SN:3318

Manufactured: Repaired: Calibrated:

January 10, 2012 September 18, 2017 September 22, 2017

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.02	1.12	0.98	± 10.1 %
DCP (mV) ^B	103.7	104.0	102.5	

Modulation Calibration Parameters

UID	Communication System Name		A	B dB√μV	C	D dB	VR mV	Unc ^t (k=2)
0	CW	x	0.0	0.0	1.0	0.00	183.4	±3.5 %
		Y	0.0	0.0	1.0		193.5	
		Z	0.0	0.0	1.0		183.0	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V⁻²	T2 ms.V⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	Т6
X	40.36	285.5	34.97	23.53	0.939	5.100	1.568	0.156	1.011
Y	40.15	284.7	34.96	25.8	1.330	5.092	1.283	0.265	1.008
Z	38.32	269.2	34.28	24.09	0.917	5.100	0.995	0.237	1.007

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%.

^A The uncertainties of Norm X,Y,Z do not affect the E² field uncertainty inside TSL (see Pages 5 and 6).

^BNumerical linearization parameter: uncertainty not required.

^E 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: ES3DV3 - SN:3318

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)	
750	41.9	0.89,	6.72	6.72	6.72	0.80	1.15	± 12.0 %	
835	41.5	0.90	6.42	6.42	6.42	0.71	1.26	± 12.0 %	
1750	40.1	1.37	5.50	5.50	5.50	0.49	1.50	± 12.0 %	
1900	40.0	1.40	5.31	5.31	5.31	0.65	1.29	± 12.0 %	
2300	39.5	1.67	4.96	4.96	4.96	0.72	1.27	± 12.0 %	
2450	39.2	1.80	4.71	4.71	4.71	0.77	1.26	± 12.0 %	
2600	39.0	1.96	4.58	4.58	4.58	0.75	1.32	± 12.0 %	

Calibration Parameter Determined in Head Tissue Simulating Media

^c 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.

¹ At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) 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 (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ⁶ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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.

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DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

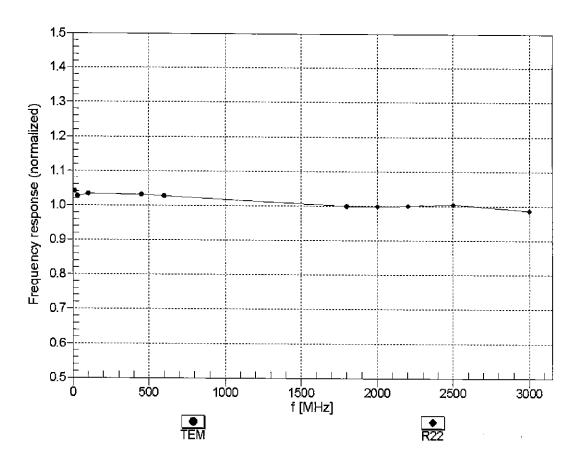
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.46	6.46	6.46	0.80	1.21	± 12.0 %
835	55.2	0.97	6.32	6.32	6.32	0.80	1.20	± 12.0 %
1750	53.4	1.49	5.18	5.18	5.18	0.65	1.36	± 12.0 %
1900	53.3	1.52	4.96	4.96	4.96	0.57	1.49	± 12.0 %
2300	52.9	1.81	4 .71	4.71	4.71	0.73	1.33	± 12.0 %
2450	52.7	1.95	4.55	4.55	4.55	0.80	1.12	± 12.0 %
2600	52.5	2.16	4.34	4.34	4.34	0.80	1.13	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

^C 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. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to

At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) 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 (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

^o 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.



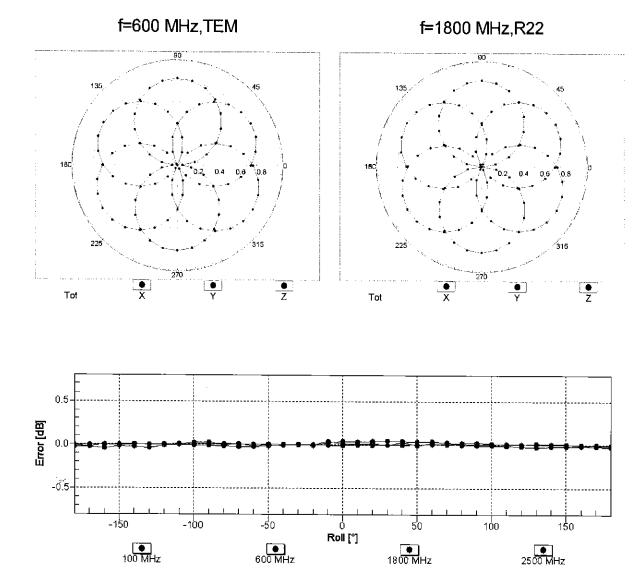
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

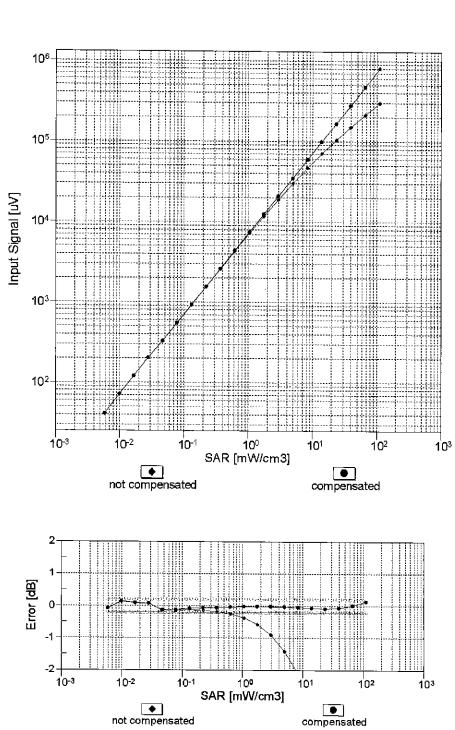
Certificate No: ES3-3318_Sep17

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

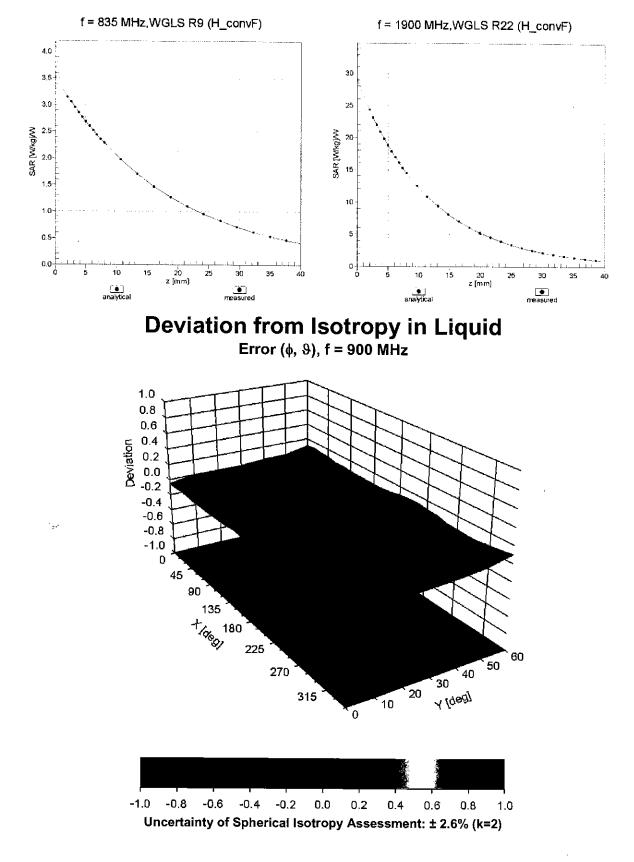
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)

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

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Conversion Factor Assessment

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	80.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	
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

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Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	Ċ	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	183.4	± 3.5 %
		Y	0.00	0.00	1.00		193.5	
10010-		Z	0.00	0.00	1.00		183.0	
CAA	SAR Validation (Square, 100ms, 10ms)	X	100.00	113.13	27.11	10.00	25.0	± 9.6 %
		Y	56.27	106.32	26.04		25.0	
10011-	UMTS-FDD (WCDMA)	Z X	48.42	102.92	24.36		25.0	
CAB			2.66	86.53	24.90	0.00	150.0	± 9.6 %
		Y	1.68	77.14	20.67		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	1.29	72.20 68.78	18.01	0.44	150.0	
CAB	Mbps)				18.94	0.41	150.0	± 9.6 %
		<u>Y</u>	1.42	67.66	17.93		150.0	
10013-		<u>Z</u>	1.34	66.38	16.88		150.0	
CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.02	68.02	18.09	1.46	150.0	± 9.6 %
		Y	5.02	67.88	17.89		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z	4.94	67.70	17.67		150.0	
DAC		X	100.00	121.76	31.97	9.39	50.0	±9.6 %
		Y	100.00	121.57	32.33		50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z	100.00	120.24	31.25		50.0	
DAC		×	100.00	121.43	31.86	9.57	50.0	± 9.6 %
		<u> Y</u>	100.00	121.34	32.26		50.0	
10024-	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z	100.00	119.95	31.15	0.50	50.0	
DAC		X	100.00	120.99	30.63	6.56	60.0	±9.6%
		Y	100.00	119.61	30.34		60.0	
10025-	EDGE-FDD (TDMA, 8PSK, TN 0)	Z	100.00	118.45	29.44		60.0	
DAC		X	27.34	129.78	51.29	12.57	50.0	± 9.6 %
		Y_	16.72	108.51	42.49		50.0	
10026-	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Z X	41.36	141.52	54.29	0.50	50.0	
DAC			51.1 1	136.85	47.83	9.56	60.0	±9.6 %
		<u> </u>	25.23	114.58	40.30		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	Z X	34.77	125.06	43.92	4.00	60.0	
DAC			100.00	123.21	30.86	4.80	80.0	±9.6 %
<u> </u>		Y	<u> 100.0</u> 0	120.40	29.90		80.0	
10000		<u>Z</u>	100.00	119.24	29.05		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	×	100.00	127.88	32.20	3.55	100.0	±9.6 %
		Y	100.00	123.11	30.36		100.0	
10029-		Z	100.00	121.73	29.45		100.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	16.47	106.41	37.26	7.80	80.0	±9.6 %
		Y	13.16	98.31	33.75		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.79 100.00	100.84 120.38	34.87 29.87	5.30	80.0 70.0	± 9.6 %
CAA								
		Y	100.00	118.42	29.28		70.0	
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Z	100.00 100.00	117.17	28.39	1.00	70.0	
CAA				140.58	36.01	1.88	100.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	129.80	31.70		100.0	
		Z	100.00	126.35	29.95		100.0	

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10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	168.14	46.04	1.17	100.0	± 9.6 %
CAA		<u> </u>					┣	
		Y	100.00	146.16	37.32		100.0	
40000		Z	100.00	139.03	34.08		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	100.00	128.00	34.78	5.30	70.0	± 9.6 %
		Y	100.00	125.47	33.78		70.0	
		Z	100.00	124.94	33.27		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	х	100.00	127.76	32.85	1.88	100.0	±9.6 %
		Y	100.00	124.38	31.40	-	100.0	
		Z	100.00	122.39	30.30	<u> </u>	100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	100.00	129.00	32.88	1.17	100.0	± 9.6 %
		Y	100.00	125.22	31.24		100.0	
		Z	42.89	111.69	27.45		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	х	100.00	128.35	34.94	5.30	70.0	± 9.6 %
		Y	100.00	125.78	33.93	<u> </u>	70.0	
		Ż	100.00	125.27	33.42	<u> </u>	70.0	†
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	100.00	127.83	32.85	1.88	100.0	± 9.6 %
		Y	100.00	124.40	31.38		100.0	<u> </u>
		Z	100.00	122.41	30.28	t	100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	х	100.00	129.90	33.29	1.17	100.0	± 9.6 %
		Y	100.00	126.04	31.61		100.0	
	· · · · · · · · · · · · · · · · · · ·	z	46.73	113.50	28.05	<u> </u>	100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	100.00	131.54	33.19	0.00	150.0	± 9.6 %
		Y	52.05	119.24	29.67		150.0	
		Z	3.76	82.84	19.15		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	118.03	29.44	7.78	50.0	± 9.6 %
		Y	100.00	117.44	29.54		50.0	
		Z	100.00	116.07	28.52		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	105.46	9.85	0.00	150.0	± 9.6 %
		Y	0.03	60.00	39.49		150.0	
		Z	0.02	60.00	28.89		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	100.00	123.25	33.96	13.80	25.0	± 9.6 %
		Υ	100.00	123.00	34.45		25.0	
-		ź	100.00	123.00	33.38		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	100.00	121.02	31.95	10.79	40.0	±9.6 %
		Y	100.00	121.43	32.63		40.0	
		Ż	100.00	119.80	31.36	<u> </u>	40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	100.00	126.02	35.11	9.03	50.0	± 9.6 %
		Y	69.75	118.57	33.24		50.0	t
		Ż	100.00	124.37	34.25		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.73	93.83	32.07	6.55	100.0	± 9.6 %
		Y Z	8.94 8.70	89.89 90.23	29.98		100.0	
10059-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	$\frac{z}{x}$			30.24	0.04	100.0	1000
CAB	Mbps)		1.70	72.06	20.55	0.61	110.0	± 9.6 %
-		Ϋ́Υ	1.64	70.58	19.34		110.0	
10060-		Z	1.50	68.77	18.10		110.0	
CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	Х	100.00	148.21	40.90	1.30	110.0	± 9.6 %
		Y	100.00	141.35	37.99		_ 110.0	_
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10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	100.00	146.12	41.94	2.04	110.0	± 9.6 %
		Y	100.00	141.22	39.79	· · · · · · · · · · · · · · · · · · ·	110.0	
		Z	. 39.08	124.31	35.57		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.78	67.89	17.44	0.49	100.0	±9.6 %
		Y	4.76	67.70	17.22		100.0	
		Z	4.68	67.49	16.96		100.0	
10063- _CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.81	68.05	17.58	0.72	100.0	± 9.6 %
		Y	4.79	67.86	17.35		100.0	
40004		Z	4.71	67.65	17.10		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.07	68.24	17.76	0.86	100.0	±9.6 %
		Y	5.05	68.06	17.55		100.0	
10065-		Z	4.97	67.86	17.30		100.0	
CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.97	68.22	17.93	1.21	100.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.96	68.06	17.72		100.0	
10066-		Z	4.87	67.84	17.47		100.0	
CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.00	68.29	18.13	1.46	100.0	± 9.6 %
		Y	5.00	68.14	17.92		100.0	
10067-		Z	4.91	67.92	17.68		100.0	
CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.32	68.56	18.62	2.04	100.0	±9.6 %
		Y	5.32	68.43	18.41		100.0	
40000		Z	5.23	68.26	18.21		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.38	68.60	18.85	2.55	100.0	± 9.6 %
		Y	5.39	68.49	18.65		100.0	
		Z	5.29	68.30	18.45		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.45	68.63	19.05	2.67	100.0	± 9.6 %
		Y	5.47	68.52	18.85		100.0	
		Z	5.37	68.35	18.66		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.14	68.16	18.43	1.99	100.0	±9.6 %
		Y	5.15	68.05	18.24		100.0	
		Z	5.06	67.88	18.03		100.0	
10072- CAB	EEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.16	68.64	18.75	2.30	100.0	±9.6 %
		Y	5.17	68.53	18.56		100.0	
		<u>Z</u>	5.08	68.32	18.34		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.27	68.97	19.18	2.83	100.0	± 9.6 %
		Y	5.29	68.88	18.98		100.0	
		Z	5.19	68.68	18.77		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.29	68.99	19.39	3.30	100.0	±9.6 %
·	· · · · · · · · · · · · · · · · · · ·	Y	5.33	68.94	19.20		100.0	
		Z	5.23	68.74	19.00		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.36	69.20	19.76	3.82	90.0	±9.6 %
		Y	5.42	69.18	19.58		90.0	
		Z	5.30	68.95	19.38		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.40	69.06	19.93	4.15	90.0	±9.6 %
		Y	5.47	69.07	19.76		90.0	
		Z	5.35	68.86	19.58		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.44	69.18	20.05	4.30	90.0	± 9.6 %
		Y	5.51	69.19	19.88		90.0	
		Z	5.40	68.99	19.71	· ·	90.0	

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10081- CAB	CDMA2000 (1xRTT, RC3)	x	100.00	135.94	34.03	0.00	150.0	± 9.6 %
		Y	4.36	89.76	21.79		150.0	
		Z	1.23	72.30	14.98		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	1.46	62.74	7.36	4.77	80.0	± 9.6 %
		Y	1.67	63.13	7.83	-	80.0	
		Z	1.40	62.09	6.92		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	121.01	30.66	6.56	60.0	±9.6 %
		Y	100.00	119.66	30.39		60.0	
		Z	100.00	118.49	29.48		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.68	75.81	20.12	0.00	150.0	± 9.6 %
		Y	2.34	73.02	18.58		150.0	
		Z	2.07	70.78	17.18		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	×	2.65	75.95	20.19	0.00	150.0	±9.6%
		Y	2.30	73.06	18.61		150.0	
		Z	2.03	70.77	17.19		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	51.37	136.92	47.83	9.56	60,0	± 9.6 %
		Y	25.26	114.55	40.28		60.0	
		Z	34.93	125.12	43.92		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.91	75.35	19.66	0.00	150.0	± 9.6 %
		Y	3.58	73.57	18.67		150.0	
		Z	3.29	72.01	17.75		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.50	69.80	17.58	0.00	150.0	± 9.6 %
		Y	3.39	69.08	17.05		150.0	_
		Z	3.27	68.42	16.53		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.58	69.60	17.56	0.00	150.0	± 9.6 %
		Y -	3.49	68.97	17.09		150.0	
		Z	3.37	68.35	16.58		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	10.46	84.85	24.49	3.98	65.0	± 9.6 %
		Υ	9.76	82.69	23.44		65.0	
		Z	9.49	82.61	23.35	_	65.0	
10104- [*] CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.62	79.80	23.37	3.98	65.0	± 9.6 %
		Y	8.54	78.80	22.69		65.0	-
		Z	8.26	78.63	22.58		65.0	•
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.48	79.41	23.51	3.98	65.0	± 9.6 %
		Y	<u>7</u> .84	77.04	22.24		65.0	
10100		<u>Z</u>	7.95	77.81	22.54	L	65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.42	74.91	19.71	0.00	150.0	± 9.6 %
		Y	3.13	73.04	18.65		150.0	
		Z	2.86	71.41	17.66		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.19	70.21	17.75	0.00	150.0	± 9.6 %
		Y	3.07	69.34	17.14		150.0	
10115		Z _	2.93	68.52	16.50		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.94	75.32	19.95	0.00	150.0	±9.6 %
		Υ	2.62	72.92	18.60		150.0	
		Z	2.34	70.98	17.41	· · ·	150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	3.13	72.86	18.80	0.00	150.0	±9.6 %
		Y	2.95	74.50	47.00	ŀ	-	
		T	2.90	71.56	17.99		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.29	70.03	17.69	0.00	150.0	± 9.6 %
		Y	3.18	69.26	17.13	_	150.0	
		Z	3.05	68.50	16.53		150.0	· · · · · · · · · · · · · · · · · · ·
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	3.26	72,71	18.75	0.00	150.0	± 9.6 %
		Y	3.09	71.55	18.02		150.0	
		Z	2.86	70.17	17.07		150.0	
10114- <u>C</u> AB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.20	68.15	17.23	0.00	150.0	± 9.6 %
		Y	5.17	67.92	17.01		150.0	
		Z	5.08	67.68	16.75		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.45	68.16	17.22	0.00	150.0	± 9.6 %
		Y	5.42	67.95	17.02		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.33	67.74	16.77		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.30	68.36	17.26	0.00	150.0	± 9.6 %
		Y 7	5.26	68.13	17.04		150.0	
		Z	5.17	67.89	16.78		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.18	68.04	17.19	0.00	150.0	± 9.6 %
		Y	5.14	67.83	16.98		150.0	
		Z	5.07	67.63	16.74		150.0	<u> </u>
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.54	68.41	17.35	0.00	150.0	± 9.6 %
		Y	5.51	68.19	17.14		150.0	·
		Z	5.41	67.95	16.89		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.29	68.34	17.26	0.00	150.0	± 9.6 %
		Y	5.25	68.12	17.04		150.0	
		Z	5.16	67.88	16.78		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.61	69.64	17.49	0.00	150.0	± 9.6 %
		Y	3.52	68.99	17.00		150.0	
		Z	3.39	68.38	16.51		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.73	69.64	17.59	0.00	150.0	± 9.6 %
		Y	3.64	69.06	17.15		150.0	
		Z	3.51	68.48	16.66		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	3.10	78.13	20.64	0.00	150.0	±9.6 %
		Y	2.57	74.51	18.81		150.0	
		Z	2.18	71.67	17.19		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	3.55	76.59	19.53	0.00	150.0	± 9.6 %
		Y	3.13	74.18	18.27		150.0	
		Z	2.68	71.54	16.74		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.79	71.64	16.81	0.00	150.0	± 9.6 %
		Y	2.50	69.67	15.66		150.0	
		Z	2.26	68.10	14.57		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	3.29	79.35	17.65	0.00	150.0	± 9.6 %
<u> </u>		Y	1.58	69.65	_ 13.52		150.0	
		Z	1.10	65.19	10.91		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	10.51	86.51	18.78	0.00	150.0	±9.6 %
		×	2.34	69.06	12.29		150.0	
		Z	1.46	64.05	9.40		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	100.00	112.53	25.58	0.00	150.0	± 9.6 %
		Y	3.94	74.93	14.77		150.0	
		Z	1.65	65.37	10.17	_	150.0	

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10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	x	3.20	70.28	17.80	0.00	150.0	± 9.6 %
		Y	3.08	69.42	17,19		150.0	
		Ż	2.94	68.59	16.55		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.30	70.10	17.74	0.00	150.0	± 9.6 %
		Y	3.19	69.33	17.18		150.0	
		Z	3.06	68.56	16.57		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	12.94	90.52	26.60	3.98	65.0	± 9.6 %
		Y	11.63	87.44	25.23		65.0	·
		Z	11.21	87.22	25.07		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.51	80.82	23.41	3.98	65.0	± 9.6 %
		Y	8.31	79.48	22.59		65.0	
		Ζ	8.01	79.28	22.44		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	9.02	81.90	24.19	3.98	65.0	±9.6 %
		Υ	8.86	80.67	23.43		65.0	
		Z	8.54	80.43	23.26		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	3.03	75.93	20.26	0.00	150.0	± 9.6 %
		Y	2.70	73.52	18.93		150.0	
		Z	2.40	71.40	17.66		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	3.14	72.90	18.83	0.00	150.0	± 9.6 %
		Y	2.95	71.60	18.01		150.0	
		Z	2.72	70.14	17.02		150.0	
10156- <u>CAE</u>	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	3.42	81.12	21.46	0.00	150.0	± 9.6 %
		Y	2.60	76.04	19.11		150.0	
		Z	2.06	72.15	17.02		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	3.03	74.63	17.79	0.00	150.0	± 9.6 %
		Y	2.53	71.54	16.20		150.0	
		Z	2.15	69.02	14.66		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.27	72.81	18.82	0.00	150.0	± 9.6 %
		Y	3.10	71.66	18.08		150.0	
		Z	2.87	70.26	17.13		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	3.21	75.21	18.07	0.00	150.0	± 9.6 %
		Y	2.69	72.18	16.53		150.0	
		Z	2.25	69.45	14.90		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.31	73.32	19.12	0.00	150.0	± 9.6 %
		Ý	3.09	71.84	18.22		150.0	
10101		Z	2.86	70.49	17.35		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.21	70.26	17.75	0.00	150.0	± 9.6 %
		Y	3.10	69.43	17.16		150.0	
40402		Z	2.95	68.59	16.50		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.33	70.39	17.83	0.00	150.0	±9.6 %
		Y	3.21	69.59	17.26		150.0	
40400		Z	3.06	68.78	16.62		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.94	73.38	21.77	3.01	150.0	± 9.6 %
		Y	3.79	72.11	20.84		150.0	· .
		Z	3.50	70.74	19.96		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	5.65	79.78	23.51	3.01	150.0	±9.6 %
		Y	5.10	77.08	22.03		150.0	
· · · ·		Z	4.43	74.72	20.82		150.0	

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10168-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	6.73	83.76	25.44	3.01	150.0	± 9.6 %
CAE	64-QAM)							
		Y	6.02	80.78	23.93		150.0	
10100		Z	5.04	77.58	22.39		150.0	
10169- <u>C</u> AD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.37	73.36	21.96	3.01	150.0	± 9.6 %
		Y	3.23	71.75	20.78		150.0	
		Z	2.89	69.73	19.58		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	6.39	86.84	27.07	3.01	150.0	± 9.6 %
		Y	5.38	82.06	24.76		150.0	
		Z	4.13	77.19	22.57		150.0	
10171- AA <u>D</u>	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.69	79.68	23.25	3.01	150.0	±9.6 %
	<u> </u>	Y	4.06	75.75	21.17		150.0	
		Z	3.35	72.68	19.64		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	100.00	146.59	45.53	6.02	65.0	± 9.6 %
		Y	40.14	123.32	38.78		65.0	
		Z	46.23	127.51	39.93		65.0	·
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	100.00	136.26	40.09	6.02	65.0	± 9.6 %
		Y	100.00	132.71	38.54		65.0	
		Z	100.00	133.96	38.85		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	100.00	133.98	38.85	6.02	65.0	±9.6 %
		Y	100.00	130.96	37.56		65.0	
		Z	100.00	131.78	37.67		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.32	73.00	21.69	3.01	150.0	±9.6 %
		Y	3.19	71.38	20.50		150.0	
		Z	2.86	69.46	19.35		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	6.41	86.88	27.08	3.01	150.0	±9.6 %
		Y	5.39	82.10	24.78		150.0	
		Z	4.14	77.22	22.58		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.35	73.17	21.78	3.01	150.0	±9.6 %
		Y	3.21	71.55	20.60		150.0	
		Z	2.88	69.58	19.42		150.0	
10178- CAE	*LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	Х	6.32	86.56	26.94	3.01	150.0	± 9.6 %
		Y	5.33	81.82	24.65		150.0	
		Z	4.11	77.04	22.49		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.51	83.28	25.09	3.01	150.0	± 9.6 %
		Y	4.67	78.80	22.85		150.0	
		Z	3.72	74.89	21.01		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	4.68	79.60	23.20	3.01	150.0	± 9.6 %
		Y	4.04	75.67	21.12		150.0	
		Z	3.35	72.63	19.61		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.35	73.15	21.78	3.01	150.0	± 9.6 %
		Y	3.21	71.53	20.59		150.0	
<u> </u>		Z	2.87	69.57	19.42		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	6.31	86.52	26.93	3.01	150.0	±9.6 %
		Υ Υ	5.32	81.78	24.63		150.0	
		Z	4.10	77.02	22.48		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.66	79.56	23.19	3.01	150.0	± 9.6 %
		Y	4.04	75.64	21.10		450.0	
		ĭ	4.04	1 73.04	I ZI.IU I		150.0	

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10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.36	73.20	21.80	3.01	150.0	±9.6 %
		Y	3.22	71.58	20.61		150.0	
		Z	2.88	69.61	19.44		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	6.35	86.64	26.98	3.01	150.0	±9.6 %
		Y	5.35	81.89	24.68		150.0	
		Z	4.12	77.10	22.52		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	x	4.70	79.67	23.24	3.01	150.0	± 9.6 %
		Y	4.06	75.73	21.14		150.0	
		Z	3.36	72.68	19.63		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	х	3.37	73.27	21.88	3.01	150.0	± 9.6 %
<u> </u>		Y	3.23	71.66	20.69		150.0	
		Z	2,89	69.68	19.51		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	6.67	87.77	27.49	3.01	150.0	± 9.6 %
		Y	5.59	82.87	25.16		150.0	
		Z	4.25	77.76	22.89		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.86	80.38	23.61	3.01	150.0	± 9.6 %
		Y	4.18	76.34	21.49		150.0	
		Ζ	3.43	73.12	19.92		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	х	4.60	67.78	17.00	0.00	150.0	± 9.6 %
		Y	4.56	67.53	16.75		150.0	
		Z	4.48	67.31	16.48		150.0	· · · · · · · · · · · · · · · · · · ·
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	х	4.76	68.05	17.13	0.00	150.0	± 9.6 %
		Y	4.72	67.80	16.88		150.0	
		Z	4.63	67.57	16.61		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.80	68.07	17.14	0.00	150.0	± 9.6 %
		Y	4.75	67.82	16.90		150.0	
		Ζ	4.67	67.59	16.62		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	х	4.59	67.81	17.01	0.00	150.0	± 9.6 %
		Y	4.55	67.56	16.76		150.0	
		Z	4.47	67.33	16.48		150.0	
10197- [*] CAB	EEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	х	4.77	68.06	17.13	0.00	150.0	±9.6 %
		Y	4.73	67.81	16.89		150.0	
		Z	4.64	67.58	16.62		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	х	4.79	68.08	17.15	0.00	150.0	± 9.6 %
		Y	4.75	67.83	16.90		150.0	
		Ζ	4.66	67.60	16.63		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.55	67.87	16.99	0.00	150.0	± 9.6 %
		Y	4.51	67.61	16.74		150.0	
		Z	4.43	67.37	16.45		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.76	68.02	17.12	0.00	150.0	± 9.6 %
		Y	4.72	67.77	16.87		150.0	· · ·
		Z	4.63	67.54	16.60		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.80	67.99	17.12	0.00	150.0	± 9.6 %
		Y	4.76	67.75	16.88		150.0	
		Z	4.68	67.53	16.61	-	150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	Х	5.15	68.03	17.18	0.00	150.0	± 9.6 %
UND	2. 2							
		Y	5.11	67.81	16.96		150.0	

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10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	x	5.44	68.23	17.28	0.00	150.0	± 9.6 %
CAB	QAM)	Y	5.40	68.03		0.00		- <u> </u>
		Z	5.32		17.07		150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-	X	5.20	67.81 68.15	16.83 17.16	0.00	150.0 150.0	± 9.6 %
CAB	QAM)	Y-	5.16	67.93	16.05			
					16.95		150.0	
10225-		Z	5.08	67.72	16.70		150.0	
CAB	UMTS-FDD (HSPA+)	X	3.00	68.59	16.83	0.00	150.0	± 9.6 %
		Y	2.92	67.92	16.31		150.0	
		Z	2.80	67.25	15.70		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	136.47	40.23	6.02	65.0	± 9.6 %
		Υ	100.00	132.93	38.68		65.0	
		Z	100.00	134.18	38.99	······································	65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	100.00	133.67	38.75	6.02	65.0	± 9.6 %
CAA	64-QAM)			-				
	+	Y	100.00	130.47	37.37		65.0	
		Z	100.00	131.50	37.57		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	100.00	146.91	45.69	6.02	65.0	± 9.6 %
		Y	100.00	142.38	43.59		65.0	
		Z	62.29	133.89	41.59		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	100.00	136.23	40.09	6.02	65.0	±9.6 %
		Y	100.00	132.70	38.54		65.0	
••		z	100.00	133.95	38.85			
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	100.00	133.55	38.67	6.02	65.0 65.0	± 9.6 %
		- .	400.00	100.00				
	<u> </u>	Y	100.00	130.33	37.27		65.0	
40004		Z	100.00	131.37	37.48		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	100.00	146.76	45.58	6.02	65.0	±9.6 %
		Y	98.12	141.81	43.38		65.0	
		Z	54.79	131.03	40.79		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	100.00	136.25	40.10	6.02	65.0	± 9.6 %
		Y	100.00	132.72	38.55		65.0	
		Ż	100.00	133.96	38.86		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	100.00	133.57	38.68	6.02	65.0	± 9.6 %
		Y	100.00	120.25	27.20		05.0	
		Z		130.35	37.28		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	100.00 100.00	131.40 146.41	37.49 45.37	6.02	65.0 65.0	± 9.6 %
			05 70	120.00	40.40	·	05.0	
		. Y	85.73	138.62	42.48		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Z X	<u>49.48</u> 100.00	128.58 136.27	40.03 40.10	6.02	65.0 65.0	± 9.6 %
0/10		Y	100.00	120 70	20.55		05.0	
			100.00	132.73	38.55		65.0	
10000		Z	100.00	133.98	38.86		65.0	<u>،</u>
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	100.00	133.50	38.65	6.02	65.0	±9.6 %
		Y	100.00	130.29	37.26		65.0	
		Z	100.00	<u>1</u> 31.33	37.46		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	100.00	146.81	45.60	6.02	65.0	± 9.6 %
		Y	99.93	142.23	43.48		65.0	
		z	55.78	131.45	40.90		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	100.00	136.27	40.90	6.02	65.0	± 9.6 %
		<u>, ,</u>	100.00	400 70				
		Y	100.00	132.73	38.5 <u>5</u>		65.0	
	1	Z	100.00	133.98	38.86		65.0	

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10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	100.00	133.60	38.69	6.02	65.0	± 9.6 %
		Y	100.00	130.37	37.29	· · -	65.0	
		Z	100.00	131.42	37.50		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	100.00	146.82	45.60	6.02	65.0	± 9.6 %
		Y	99.77	142.20	43.47		65.0	
		Z	55.59	131.39	40.89		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	17.87	100.55	33.28	6.98	65.0	± 9.6 %
		Y	15.07	94.94	30.80		65.0	
10010		Z	13.77	93.88	30.45		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	17.67	100.29	33.12	6.98	65.0	± 9.6 %
	·	Y	12.29	90.51	29.15		65.0	
10243-		Z	12.81	92.35	29.83		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	11.06	91.58	31.22	6.98	65.0	± 9.6 %
		Y	8.79	84.63	27.92		65.0	
10044		Z	9.16	86.51	28.72		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	15.61	90.37	23.65	3.98	65.0	± 9.6 %
		Y	11.28	84.18	21.28		65.0	
10245-		Z	8.72	80.34	19.49		65.0	
CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	13.68	88.02	22.81	3.98	65.0	± 9.6 %
		Y	10.35	82.60	20.65		65.0	
40040		Z	8.13	79.04	18.94		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	25.39	101.46	27.34	3.98	65.0	± 9.6 %
		Y	<u>15.7</u> 1	92.64	24.44		65.0	
		<u>Z</u>	12.87	89.62	23.18		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	9.04	82.99	22.10	3.98	65.0	±9.6%
		Y	8.34	80.70	21.02		65.0	
		<u>z</u>	7.61	79.49	20.32		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.42	81.37	21.47	3.98	65.0 ·	± 9.6 %
		Y	7.88	79.34	20.47		65.0	
		Z	7.23	78.25	19.81		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	×	33.71	108.55	30.66	3.98	65.0	± 9.6 %
		Y	20.64	98.74	27.50		65.0	
40050		Z		96.85	26.70		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	10.08	85.96	25.19	3.98	65.0	± 9.6 %
		Y	9.64	84.09	24.21		65.0	
40054		Z	9.09	83.41	23.82		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	8.74	81.98	23.31	3.98	65.0	± 9.6 %
		Y	8.42	80.36	22.40	<u>`</u> `	65.0	
40050		Z	8.02	79.93	22.11		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	20.41	100.95	29.84	3.98	65.0	± 9.6 %
_	<u> </u>	Y	15.89	94.95	27.60		65.0	
10050		Z	15.09	94.44	27.31		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.27	80.12	23.07	3.98	65.0	± 9.6 %
		Y	8.11	78.88	22.29		65.0	
10071		Ζ	7.82	78.68	22.13		65.0	-
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	8.73	81.09	23.75	3.98	65.0	± 9.6 %
		Y	8.60	79.94	23.01		65.0	
		Z	8.29	79.69	22.83		65.0	<u> </u>

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10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	12.08	89.56	26.46	3.98	65.0	± 9.6 %
CAD	QPSK)						00.0	10.0 /0
		Υ	11.00	86.69	25.13		65.0	
10050		Z	10.61	86.49	24.98		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.73	81.73	19.44	3.98	65.0	± 9.6 %
		Y	7.42	76.93	17.43		65.0	
100		Z	5.73	73.50	15.63		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.33	79.13	18.36	3.98	65.0	± 9.6 %
<u>-</u>		Υ	6.73	75.21	16.63		65.0	
400-0		Z	5.32	72.16	14.95		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	12.04	87.95	22.05	3.98	65.0	± 9.6 %
		Y	8.85	82.44	20.00		65.0	
	· · · · · · · · · · · · · · · · · · ·	Z	<u>7.1</u> 1	79.43	18.57		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	9.53	84.22	23.26	3.98	65.0	±9.6 %
		Y	8.90	82.06	22.20		65.0	
		Z	8.25	81.09	21.63		65.0	[
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	9.20	83.27	22.90	3.98	65.0	± 9.6 %
		Y	8.68	81.32	21.91		65.0	· · ·
		Z	8.06	80.39	21.35		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	23.02	102.54	29.52	3.98	65.0	± 9.6 %
		Y	16.54	95.31	26.97		65.0	
		Z	15.22	94,17	26.42		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	10.05	85.86	25.14	3.98	65.0	± 9.6 %
		Y	9.60	83.99	24.15		65.0	
		z	9.05	83.31	23.76	·	65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.72	81.95	23.30	3.98	65.0	±9.6 %
		Y	8.40	80.33	22.40		65.0	
		Z	8.01	79.90	22.40		65.0	·
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	19.99	100.52	29.68	3.98	65.0	± 9.6 %
		Y	15.61	94.59	27.46		65.0	
		z	14.84	94.09	27.18		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.51	80.83	23.42	3.98	65.0	± 9.6 %
		Y	8.31	79.48	22.60		65.0	<u> -</u>
		Z	8.01	79.48	22.60		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	9.02	81.88	22.45	3.98	65.0	± 9.6 %
	······································	Y	8.86	80.66	23.42		65.0	
		z	8.53	80.41	23.25		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	12.89	90.43	26.57	3.98	65.0	± 9.6 %
		Y	11.59	87.37	25.20		65.0	
		Z	11.17	87.15	25.04		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.65	79.35	23.27	3.98	65.0	± 9.6 %
		Y Z	8.60 8.34	78.47 78.33	22.65 22.54		65.0 65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	X				2.00		
CAD	MHz, 64-QAM)		8.50	78.69	23.04	3.98	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	8.49	77.91	22.46		65.0	
40070		Z	8.23	77.77	22.36		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	9.87	83.32	24.17	3.98	65.0	± 9.6 %
		Y	9.54	<u>81.8</u> 2	23.34		65.0	
	1	Z	9.23	81.64	23.20		65.0	

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10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.93	69.92	17.28	0.00	150.0	± 9.6 %
		Y	2.80	68.92	16.59		150.0	
		Z	2.67	68.10	15.90		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	2.65	78.26	21.12	0.00	150.0	± 9.6 %
		Y	2.15	74.09	18.99		150.0	
_		Z	1.84	71.24	17.33		150.0	
10277- CAA	PHS (QPSK)	X	3.36	65.20	9.94	9.03	50.0	± 9.6 %
		Y	3.89	66.16	10.82		50.0	
		Z	3.28	64.75	9.58		50.0	-
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	9.68	82.05	19.91	9.03	50.0	± 9.6 %
		Y	8.39	79.03	18.95		50.0	
		Z	7.49	77.63	17.92		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	9.79	82.20	20.01	9.03	50.0	± 9.6 %
		Y	8.47	79.14	19.03		50.0	
40000		Z	7.60	77.79	18.03		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	100.00	128.73	31.86	0.00	150.0	± 9.6 %
		Y	5.46	88.02	21.05		150.0	
		Z	1.91	73.76	15.51		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	100.00	135.73	33.92	0.00	150.0	± 9.6 %
		Y	3.79	87.86	21.18		150.0	
		Z	1.18	71.73	14.72		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	100.00	142.87	36.94	0.00	150.0	± 9.6 %
		Y	100.00	136.51	34.18		150.0	
		Z	5.31	92.64	22.43		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	100.00	147.53	39.13	0.00	150.0	± 9.6 %
		Y	100.00	141.37	36.44		150.0	
		Z	100.00	134.56	33.36		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	51.26	114.86	33.17	9.03	50.0	± 9.6 %
		Y	27.72	102.36	29.45		50.0	
		Z	34.06	106.19	30.27		50.0	
10297- [*] AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.44	75.06	19.80	0.00	150.0	±9.6 %
		Y	3.15	73.19	18.73		150.0	
		Z	2.87	71.52	17.73		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	4.53	85.32	21.43	0.00	150.0	± 9.6 %
		Y	2.49	75.98	17.66		150.0	
		Z	1.68	70.19	14.73		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	×	35.97	105.52	25.86	0.00	150.0	± 9.6 %
		Y	5.66	80.41	18.09		150.0	
400.00		Z	2.55	70.20	13.62		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.08	71.93	14.32	0.00	150.0	± 9.6 %
		Y	2.13	67.03	_ 11.85		150.0	
10001		Z	1.63	64.24	10.02		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	×	5.45	69.13	19.39	4.17	80.0	± 9.6 %
		Y	5.47	68.97	19.13		80.0	
(0.0.0		Z	5.25	68.28	18.65		80.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	Х	5.78	69.10	19.80	4.96	80.0	± 9.6 %
		Y	5.77	68.75	19.42		80.0	
		Z	5.66	68.63	19.27		80.0	

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10303- 	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.58	68.98	19.73	4.96	80.0	± 9.6 %
		Y	5.58	68.66	19.35		80.0	<u> </u>
		Z	5.46	68.50	19.18		80.0	<u> </u>
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.34	68.67	19.12	4.17	80.0	± 9.6 %
		Y	5.33	68.32	18.76		80.0	
		Ż	5.21	68.15	18.55		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	6.61	77.30	24.10	6.02	50.0	± 9.6 %
		Y -	7.10	78.07	24.03		50.0	
		Z	6.42	76.34	23.21		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.68	70.99	21.21	6.02	50.0	±9.6 %
		Y	6.11	72.92	22.11		50.0	
40007		Z	<u>5</u> .54	70.33	20.52		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	5.65	71.36	21.23	6.02	50.0	± 9.6 %
<u>-</u>		Υ	6.19	73.69	22.31		50.0	
10000		Z	5.79	72.63	21.74		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.01	73.91	22.77	6.02	50.0	± 9.6 %
		ΙY	6.30	74.37	22.65		50.0	
		Z	5.88	73.25	22.07		50.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.73	71.20	21.36	6.02	50.0	± 9.6 %
		Y	6.16	73.11	22.25		50.0	
		Z	5.58	70.50	20.65		50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.67	71.20	21.24	6.02	50.0	± 9.6 %
		Y	6.15	73.31	22.23		50.0	
		Z	5.52	70.51	20.54		50.0	-
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.80	73.58	19.01	0.00	150.0	± 9.6 %
		Y	3.53	72.03	18.12		150.0	
		Z	3.24	70.56	17.24		150.0	<u> </u>
10313- AAA	iDEN 1:3	X	59.05	112.13	29.07	6.99	70.0	± 9.6 %
		Y	21.12	95.82	24.56		70.0	
		Z	18.22	93.85	23.73		70.0	÷
10314- AAA		X	100.00	130.93	37.14	10.00	30.0	±9.6 %
		Ŷ	75.09	122.91	34.76		30.0	
		Z	51.44	117.42	33.31		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.34	68.63	18.94	0.17	150.0	± 9.6 %
		Y	1.29	67.42	17.86		150.0	
		Z	1.21	66.04	16.71		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	67.89	17.21	0.17	150.0	±9.6 %
		Y	4.64	67.66	16.96		150.0	[]
		Z	4.56	67.44	16.70		150.0	[]
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	67.89	17.21	0.17	150.0	± 9.6 %
		Y	4.64	67.66	16.96		150.0	
		Z	4.56	<u>6</u> 7.44	16.70		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.74	68.13	17.15	0.00	150.0	± 9.6 %
		Y	4.69	67.85	16.88		150.0	[
		Z	4.60	67.62	16.61		150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM,	X	5.46	68.11	17.20	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)							
		Y	5.42	67.87	16.96		150.0	

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10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	X	5.70	68.27	17.13	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)	+						
		Y	5.67	68.08	16.93		150.0	
10.100		<u>Z</u>	5.59	67.90	16.71		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	100.00	128.73	31.86	0.00	115.0	± 9.6 %
		Y -	5.46	88.02	21.05		115.0	
		Z	1.91	73.76	15.51		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	100.00	128.73	31.86	0.00	115.0	± 9.6 %
		Y	5.46	88.02	21.05		115.0	
		Z	1.91	73.76	15.51		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	125.52	31.82	0.00	100.0	± 9.6 %
		ΓY	100.00	122.74	30.63		100.0	
		Z	100.00	121.04	29.50		100.0	
10410- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	131.41	34.92	3.23	80.0	±9.6 %
		Y	100.00	126.46	32.79	-	80.0	
		Ż	100.00	125.69	32.11	·	80.0	·
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.18	66.83	17.95	0.00	150.0	± 9.6 %
7444		Y		05.00	40.00		450.0	
			1.13	65.66	16.89		150.0	
10416-		Z	1.08	64.56	15.83		150.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.60	67.79	17.08	0.00	150.0	± 9.6 %
		Y	4.56	67.54	16.83		150.0	
		<u>Z</u>	4.48	67.32	16.55		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.60	67.79	17.08	0.00	150.0	±9.6 %
		Y	4.56	67.54	16.83		150.0	
		Z	4.48	67.32	16.55	· · ·	150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.60	68.04	17.15	0.00	150.0	± 9.6 %
		Y	4.56	67.77	16.89		150.0	
		Z	4.48	67.54	16.61		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.61	67.95	17.12	0.00	150.0	± 9.6 %
		Y	4.57	67.69	16.87		150.0	
		Z	4.49	67.46	16.60	<u> </u>	150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.72	67.88	17.10	0.00	150.0	± 9.6 %
		Y	4.68	67.64	16.86		150.0	
		Z	4.60	67.42	16.59		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.86	68.17	17.20	0.00	150.0	± 9.6 %
		Y	4.82	67.92	16.96		150.0	
		Z	4.73	67.70	16.69		150.0	
10424-	IEEE 802.11n (HT Greenfield, 72.2	X	4.79	68.14	17.19	0.00	150.0	± 9.6 %
AAA	Mbps, 64-QAM)	Ŷ	4.75	67.89	16.94	0.00		1 9.0 70
		Z	4.66			<u> </u>	150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	<u>4.66</u> 5.41	67.66 68.25	<u>16.67</u> 17.27	0.00	150.0 150.0	± 9.6 %
		Y	5.37	68.04	17.06	<u> </u>	450.0	
							150.0	
10426-	IEEE 802.11n (HT Greenfield, 90 Mbps,	Z	5.28	67.83	16.82		150.0	
AAA	16-QAM)	X	5.44	68.38	17.34	0.00	150.0	± 9.6 %
		Y	5.40	68.16	17,12		150.0	
		Z	5.31	67.93	16.86		150.0	

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10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.41	68.20	17.24	0.00	150.0	± 9.6 %
		Y	5.37	67.99	17.02		150.0	
		Ż	5.27	67.73	16.76		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	x	4.68	74.13	19.83	0.00	150.0	± 9.6 %
		Y	4.66	73.98	19.65		150.0	
		Z	4.33	72.57	18.70		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.30	68.76	17.23	0.00	150.0	± 9.6 %
		Y	4.24	68.39	16.91		150.0	
		Z	4.13	68.04	16.54		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.58	68.36	17.21	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.53	68.06	16.94		150.0	
10433-		Z	4.43	67.79	16.63		150.0	
AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.81	68.17	17.21	0.00	150.0	± 9.6 %
	·	Y	4.77	67.92	16.96		150.0	
10434-	MI COMA (BS Test Medial 4, 04 DECLIN	Z	4.68	67.69	16.69		150.0	
10434- <u>A</u> AA	W-CDMA (BS Test Model 1, 64 DPCH)	X	5.03	75.87	20.06	0.00	150.0	±9.6 %
		Y	4.99	75.61	19.83		150.0	
10435-		Z	4.49	73.69	18.66		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	131.13	34.80	3.23	80.0	± 9.6 %
		Y	100.00	126.21	32.67		80.0	
		<u>Z</u>	100.00	125.44	31.99		80.0	_
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.69	69.53	16.77	0.00	150.0	± 9.6 %
		Y	3.58	68.87	16.29		150.0	
		Z	<u>3.4</u> 2	68.21	15.70		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.15	68.58	17.12	0.00	150.0	±9.6 %
		Y	4.09	68.20	16.80		150.0	
		Z	3.99	67.84	16.42		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.41	68.22	17.14	0.00	150.0	± 9.6 %
		Y	4.36	67.92	16.86		150.0	
		Z	4.27	67.63	16.54		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.60	67.99	17.10	0.00	150.0	±9.6 %
		Y_	4.55	67.72	16.84		150.0	
		Z	4.47	67.48	16.56	_	150.0	
10451- <u>AAA</u>	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.62	69.93	16.40	0.00	150.0	± 9.6 %
		Y	3.47	69.09	15.83		150.0	
10175		Z	3.27	68.23	15.13		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.36	68.84	17.42	0.00	150.0	± 9.6 %
		<u> </u>	6.32	68.67	17.24	L	150.0	
40457		Z	6.23	68.46	17.01		150.0	
10457 - AAA	UMTS-FDD (DC-HSDPA)	X	3.88	66.43	16.81	0.00	150.0	± 9.6 %
		<u> </u>	3.85	66.20	16.55		150.0	
10150		Z	3.80	66.01	16.28		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	4.65	75.19	19.34	0.00	150.0	± 9.6 %
		Y	4.52	74.56	18.92		150.0	
		Z	4.04	72.55	17.67		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.15	69.96	18.79	0.00	150.0	± 9.6 %
		Y	5.22	70.24	18.85		150.0	- · · ·
		Z	4.92	69.20	18.07		150.0	

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10460- AAA	UMTS-FDD (WCDMA, AMR)	x	3.37	95.81	29.07	0.00	150.0	± 9.6 %
		Y	1.74	81.67	23.23	——·	150.0	
		Z	1.21	74.42	19.58		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	143.01	40.15	3.29	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	134.90	36.63		80.0	_
		Z	100.00	132.97	35.44		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	119.25	28.85	3.23	80.0	± 9.6 %
		Y	100.00	113.20	26.37		80.0	
		Z	100.00	110.00	24.63		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	100.00	113.75	26.28	3.23	80.0	± 9.6 %
		Y	100.00	108.57	24.18		80.0	
		Z	100.00	105.07	22.33		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	141.23	39.11	3.23	80.0	±9.6 %
		Y	100.00	132.81	35.48		80.0	
		Z	100.00	130.60	34.16		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	118.41	28.46	3.23	80.0	± 9.6 %
		Y	100.00	112.48	26.02		80.0	
		Z	100.00	109.28	24.29		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	112.90	25.90	3.23	80.0	±9.6 %
		_ Y	100.00	107.89	23.87		80.0	
		Z	100.00	104.43	22.04		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	141.61	39.28	3.23	80.0	±9.6 %
		Y	100.00	133.15	35.63		80.0	
		Ζ	100.00	130.94	34.31		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	118.75	28.61	3.23	80.0	± 9.6 %
		Y	100.00	112.75	26.15		80.0	
		Z	100.00	109.56	24.42		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.98	25.93	3.23	80.0	± 9.6 %
		Y	100.00	107.94	23.89		80.0	
		Z	100.00	104.47	22.05		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	141.70	39.31	3.23	80.0	± 9.6 %
		Y	100.00	133.21	35.65		80.0	
		Ζ	100.00	130.98	34.32		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	118.69	28.58	3.23	80.0	± 9.6 %
		Y	100.00	112.69	26.12		80.0	
40470		_Z	100.00	109.48	24.38		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	112.90	25.89	3.23	80,0	±9.6 %
		Y	100.00	107.86	23.85		80.0	
10170		_ Z_	100.00	104.38	22.01		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	141.67	39.29	3.23	80.0	±9.6 %
		Υ	100.00	133.18	35.63	_	80.0	
(0)		Z	100.00	130.96	34.31		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	118.71	28.58	3.23	80.0	± 9.6 %
		Y	100.00	112.70	26.12		80.0	
		Z	100.00	109.49	24.38		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	112.93	25.90	3.23	80.0	± 9.6 %
		Y	100.00	107.88	23.85		80.0	
		Z						

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10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	118.43	28.45	3.23	80.0	± 9.6 %
		Y	100.00	112.46	26.00		80.0	
		Z	100.00	109.24	24.26		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.82	25.85	3.23	80.0	± 9.6 %
		Y	100.00	107.79	23.82		80.0	
		Z	100.00	104.31	21.98		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	132.85	37.00	3.23	80.0	± 9.6 %
		Y	100.00	128.47	35.00		80.0	
		Z	100.00	127.00	34.04		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	120.16	30.90	3.23	80.0	± 9.6 %
		Ý	100.00	116.69	29.36		80.0	
		Z	100.00	114.91	28.26		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	117.70	29.67	3.23	80.0	± 9.6 %
		Y	100.00	114.39	28.21		80.0	
		Z	100.00	112.46	27.04		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.13	31.51	2.23	80.0	±9.6 %
		Y	54.92	111.25	28.42		80.0	
		Ζ	13.32	91.56	22.86		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	116.38	29.36	2.23	80.0	± 9.6 %
		Y	100.00	113.46	28.01		80.0	
		Ζ	11.26	84.75	19.89		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	115.90	29.19	2.23	80.0	± 9.6 %
		Y	50.77	104.49	25.86		80.0	
		Z	8.43	80.95	18.67		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	65.25	120.82	33.02	2.23	80.0	± 9.6 %
		Y	24.29	103.39	28.10		80.0	
		Z	11.52	91.94	24.54		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	10.69	87.70	22.97	2.23	80.0	±9.6 %
		Y	8.09	82.63	21.00		80.0	
		Ζ	5.71	77.63	18.94		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.28	85.21	22.13	2.23	80.0	±9.6 %
		Y	7.33	80.85	20.36		80.0	
		Z	5.35	76.37	18.44	-	80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	11.48	93.02	26.74	2.23	80.0	± 9.6 %
							80.0	···· -
		Y	9.12	87.88	24.67			1
					24.67 22.96			
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Z X	9.12 6.88 6.05	87.88 83.40 78.94	24.67 22.96 21.72	2.23	80.0 80.0	± 9.6 %
		Z X Y	6.88	83.40	22.96	2.23	80.0	± 9.6 %
	16-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y	6.88 6.05	83.40 78.94 77.30	22.96 21.72 20.79	2.23	80.0 80.0 80.0	± 9.6 %
		Z X Y Z X	6.88 6.05 5.74	83.40 78.94 77.30 75.13 78.02	22.96 21.72	2.23	80.0 80.0	± 9.6 %
AAC	16-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y	6.88 6.05 5.74 4.98 5.92 5.66	83.40 78.94 77.30 75.13 78.02 76.55	22.96 21.72 20.79 19.74 21.35 20.49		80.0 80.0 80.0 80.0 80.0 80.0	
AAC 10490- AAC 10491-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X Y Z X	6.88 6.05 5.74 4.98 5.92	83.40 78.94 77.30 75.13 78.02	22.96 21.72 20.79 19.74 21.35		80.0 80.0 80.0 80.0 80.0	
AAC 10490- AAC	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y Z	6.88 6.05 5.74 4.98 5.92 5.66 4.96	83.40 78.94 77.30 75.13 78.02 76.55 74.57	22.96 21.72 20.79 19.74 21.35 20.49 19.51 23.55	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
AAC 10490- AAC 10491-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X Z X Y Z X Y	6.88 6.05 5.74 4.98 5.92 5.66 4.96 7.36 6.73	83.40 78.94 77.30 75.13 78.02 76.55 74.57 83.03 80.60	22.96 21.72 20.79 19.74 21.35 20.49 19.51 23.55 22.34	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
AAC 10490- AAC 10491-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X Y Z X Y Z X	6.88 6.05 5.74 4.98 5.92 5.66 4.96 7.36	83.40 78.94 77.30 75.13 78.02 76.55 74.57 83.03	22.96 21.72 20.79 19.74 21.35 20.49 19.51 23.55	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
AAC 10490- AAC 10491- AAC 10492-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y Z X Y Z	6.88 6.05 5.74 4.98 5.92 5.66 4.96 7.36 6.73 5.73	83.40 78.94 77.30 75.13 78.02 76.55 74.57 83.03 80.60 78.11	22.96 21.72 20.79 19.74 21.35 20.49 19.51 23.55 22.34 21.25	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %

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10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	E 40	74 45	20.20	0.00	00.0	
AAC	64-QAM, UL Subframe=2,3,4,7,8,9)		5.40	74.45	20.32	2.23	80.0	± 9.6 %
		Y	5.32	73.63	19.73		80.0	
40404		Z	4.88	72.39	_ 19.05		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.17	86.80	24.72	2.23	80.0	± 9.6 %
		Y	8.03	83.58	23.27	_	80.0	
		Z	6.60	80.52	22.02		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.52	75.46	20.81	2.23	80.0	± 9.6 %
		Y	5.42	74.52	20.17		80.0	
		Z	4.93	73.12	19.44		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.45	74.64	20.50	2.23	80.0	± 9.6 %
		Y	5.38	73.84	19.92		80.0	
-		Z	4.93	72.57	19.24		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	115.27	27.88	2.23	80.0	± 9.6 %
		Y	25.28	96.48	22.93		80.0	
		Z	5.87	78.71	17.31		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	x	2.96	68.45	12.76	2.23	80.0	± 9.6 %
		Y	2.21	64.78	11.01		80.0	
		Ζ	1.67	62.18	9.40		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.39	65.91	11.50	2.23	80.0	±9.6 %
		Y	1.96	63.35	10.16		80.0	
		Z	1.55	61.26	8.77		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	21.96	103.85	29.24	2.23	80.0	± 9.6 %
		Y	13.48	94.40	26.05		80.0	
		Z	8.53	87.25	23.57		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	8.02	83.54	22.29	2.23	80.0	±9.6%
		Y	6.90	80.32	20.86		80.0	
		Z	5.43	76.80	19.30		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	7.77	82.58	21.87	2.23	80.0	± 9.6 %
·	2×	Y	6.74	79.56	20.50		80.0	
		Z	5.37	76.23	19.00		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	11.17	92.54	26.57	2.23	80.0	±9.6 %
		Y	8.90	87.45	24.51		80.0	
<u> </u>		Z	6.74	83.07	22.83	•	80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	6.00	78.78	21.64	2.23	80.0	±9.6%
		Y	5.69	77.13	20.71		80.0	
		Z	4.94	74.99	19.66		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.88	77.87	21.28	2.23	80.0	± 9.6 %
	<u> </u>	Ý	5.62	76.40	20.42		80.0	
10500		Z	4.93	74.45	19.44		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.03	86.51	24.60	2.23	80.0	±9.6 %
	<u>+</u>	<u>Y</u>	7.91	83.32	23.16		80.0	
40507		Z	6.52	80.31	21.93		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.50	75.38	20.77	2.23	80.0	± 9.6 %
			F 00	74.44				└── <u></u>
		Y	5.39	74.44	20.13		80.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.43	74.55	20.45	2.23	80.0	±9.6 %
		Y	5.35	73.74	19.86		80.0	
		Z	4.91	72.49	19.19		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.27	80.16	22.31	2,23	80.0	± 9.6 %
<u> </u>		Y	6.86	78.46	21.40		80.0	
		Z	6.07	76.60	20.55		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.60	73.37	20.04	2.23	80.0	±9.6 %
		Y	<u>5</u> .56	72.76	19.56		80.0	
		Z	5.19	71.77	19.01		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.57	72.82	19.83	2.23	80.0	± 9.6 %
		×	5.55	72.29	19.39		80.0	
		Ž	5.21	71.39	18.87		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.90	84.26	23.64	2.23	80.0	± 9.6 %
	Y 8.02 81.72	22.45		80.0				
10512		Z	6.83	79.22	21.40		80.0	
10513- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.59	74.00	20.32	2.23	80.0	± 9.6 %
		Y	5.54	73.30	19.79		80.0	
		Z	5.13	72.20	19.19		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.48	73.14	20.00	2.23	80.0	± 9.6 %
					19.53		80.0	
					18.98		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)			67.44	18.30	0.00	150.0	± 9.6 %
					17.12		150.0	
10510					15.98		150.0	
10516- AAA	Mbps, 99pc duty cycle)		_		53.92	0.00	150.0	± 9.6 %
					34.01		150.0	
10517-					24.35		150.0	
AAA	Mbps, 99pc duty cycle)				21.82	0.00	150.0	± 9.6 %
		Y 5.45 72.55 19 Z 5.09 71.56 18 b WiFi 2.4 GHz (DSSS, 2 X 1.15 67.44 18 duty cycle) Y 1.10 66.10 17 Z 1.04 64.87 15 b WiFi 2.4 GHz (DSSS, 5.5 X 100.00 185.02 53 duty cycle) Y 4.08 110.19 34 Z 1.21 84.34 24 b WiFi 2.4 GHz (DSSS, 11 X 1.23 74.63 21 duty cycle) Y 1.06 70.88 19 Z 0.94 68.06 17 a/h WiFi 5 GHz (OFDM, 9 X 4.59 67.92 17	19.41		150.0			
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)				<u>17.43</u> 17.08	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	4.55	67.66	16.83		150.0	
•		Z	4.47	67.43	16.55		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.75	68.08	17.16	0.00	150.0	± 9.6 %
		Y_	4.71	67.83	16.91		150.0	
		Z	4.62	67.60	16.63		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.61	68.08	17.11	0.00	150.0	± 9.6 %
	<u> </u>	<u>ا</u> ح	4.57	67.81	16.85		150.0	<u> </u>
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.48 4.55	67.55 68.08	16.56 17.11	0.00	150.0 150.0	± 9.6 %
		Y	4.50	67.80	16.85		150.0	
-	· · · · · · · · · · · · · · · · · · ·	Z	4.42	67.54	16.55		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.61	68.22	17.21	0.00	150.0	± 9.6 %
		Y	4.56	67.94	16.95		150.0	+
		Z	4.47	67.67	16.65			<u></u>

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10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.52	68.18	17.12	0.00	150.0	± 9.6 %
		Y	4.48	67.89	16.85		150.0	
		Z	4.39	67.64	16.56		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.56	68.16	17.20	0.00	150.0	± 9.6 %
		Y	4.51	67.87	16.93		150.0	
		Z	4.42	67.62	16.64		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.58	67.22	16.79	0.00	150.0	± 9.6 %
		Y	4.53	66.96	16.53		150.0	
		Z	4.45	66.71	16.25		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.73		16.92	0.00	150.0	± 9.6 %
		Y					150.0	
		Z	4.58				150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.66			0.00	150.0	± 9.6 %
		Y	4.61				150.0	
		Z	<u>4.</u> 51	66.98	16.31		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.67	67.56	16.90	0.00	150.0	± 9.6 %
		Y	4.62	67.27	16.64		150.0	
		Z	4.53	67.00	16.34		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.67	67.56	16.90	0.00	150.0	± 9.6 %
		Y	4.62	67.27	16.64		150.0	
		Z	4.53	67.00	16.34		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.65	67.64	16.91	0.00	150.0	± 9.6 %
		Y	4.60	67.34	16.64		150.0	
		Z	4.50					
10532- <u>AAA</u>	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.52	67.51	16.86	0.00	150.0	± 9.6 %
_		Y	4.47	67.22	16.59		150.0	
		Z	4.37	66.91				
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.68	67.65	16.91	0.00	150.0	± 9.6 %
		Y	4.63	67.36	16.65		150.0	
		Z	4.53					
10534- * AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.20	67.39	16.83	0.00	150.0	±9.6 %
		Y	5.16	4.42 67.62 16.64 150.0 4.58 67.22 16.79 0.00 150.0 4.45 66.71 16.25 150.0 4.45 66.71 16.25 150.0 4.73 67.55 16.92 0.00 150.0 4.68 67.28 16.66 150.0 4.68 67.28 16.66 150.0 4.66 67.55 16.37 150.0 4.61 67.26 16.61 150.0 4.61 67.26 16.61 150.0 4.67 67.56 16.90 0.00 150.0 4.67 67.56 16.90 0.00 150.0 4.62 67.27 16.64 150.0 4.62 67.27 16.64 150.0 4.62 67.64 16.91 0.00 150.0 4.65 67.65 16.91 0.00 150.0	150.0			
		Z	5.07			· · ·		·
10535- AAA	IEEE 802.11ac WIFi (40MHz, MCS1, 99pc duty cycle)	X	5.27	67.58		0.00		± 9.6 %
		Y	5.22		16.70		150.0	
		Z	5.12		16.43		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.15		16.91	0.00	150.0	±9.6 %
		Y	5.1 1	67.36	16.68		150.0	
10		Z	5.02	67.10				
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.20	67.53	16.88	0.00		± 9.6 %
		Y	<u>5.1</u> 6		16.66		150.0	
40500		Z	5.07		16.40			
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.27			0.00		± 9.6 %
		Y	5.23	67.27	16.67		150.0	
10515		·Ζ	5.14	67.03	16.42		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.20	67.48	16.91	0.00	150.0	± 9.6 %
		Ý	5.16	67.26	16.69		150.0	
		Z	5.07	67.00	16.42			

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10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.18	67.34	16.82	0.00	150.0	± 9.6 %
		Y	5.14	67.12	16.61		150.0	
		Z	5.05	66.89	16.35		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.33	67.42	16.87	0.00	150.0	±9.6 %
		Y	5.29	67.21	16.66		150.0	
		Z	5.20	66.99	16.41		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.40	67.44	16.90	0.00	150.0	±9.6%
		Y	5.36	67.24	16.70		150.0	
		Z	5.27	67.04	_ 16.47		150.0	
10544- 	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.53	67.39	16.75	0.00	150.0	±9.6 %
		Y	5.49	67.20	16.56		150.0	_
40545		Z	5.41	66.99	16.32		150.0	_
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.74	67.91	16.97	0.00	150.0	± 9.6 %
<u> </u>		Y	5.70	67.70	16.77		150.0	
10510		Z	5.60	67.47	16.52		_150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.57	67.55	16.80	0.00	150.0	± 9.6 %
		Y	5.53	67.35	16.60		150.0	
		Z	5.45	67.13	16.36		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.66	67.65	16.84	0.00	150.0	± 9.6 %
		Y	5.62	67.45	16.64		150.0	
		Z	5.53	67.23	16.41		150.0	
10548- <u>AA</u> A	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.90	68.59	17.29	0.00	150.0	± 9.6 %
		Y	5.84	68.33	17.06		150.0	·
		Z	5.71	67.98	16.76		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.64	67.75	16.92	0.00	150.0	± 9.6 %
		Y	5.60	67.54	16.71		150.0	
		Z	5.51	67.32	16.47		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.59	67.58	16.79	0.00	150.0	±9.6 %
		Y	5.55	67.38	16.59		150.0	
		Z	5.45	67.11	16.33		150.0	
10552- AAA	EEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.54	67.49	16.75	0.00	150.0	± 9.6 %
		Y	5.50	67.29	16.55		150.0	
		Z	5.42	67.10	16.32		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.60	67.45	16.75	0.00	150.0	± 9.6 %
		Y	5.56	67.25	16.56		150.0	-
		Z	5.48	67.05	16.33		150.0	
10554- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.95	67.70	16.80	0.00	150.0	± 9.6 %
		Y	5.91	67.51	16.61		150.0	
		Z	5.83	67.32	16.39		150.0	
10555- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.07	68.00	16.93	0.00	150.0	± 9.6 %
		Y	6.03	67.81	16.74		150.0	
		Z	5.94	67.58	16.50		150.0	
10556- AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.11	68.10	16.97	0.00	150.0	±9.6 %
		Y	6.07	67.90	16.78		150.0	
		Z	5.98	67.68	16.55		150.0	
10557- AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.05	67.93	16.91	0.00	150.0	± 9.6 %
		Y	6.01	67.74	16.72	<u> </u>	150.0	
		Z	5.92	67.53				

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10558- AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.09	68.07	16.99	0.00	150.0	± 9.6 %
		Y	6.04	67.87	16.80		150.0	
		Z	5.95	67.63	16.56		150.0	
10560- AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.08	67.92	16.95	0.00	150.0	± 9.6 %
		Y	6.04	67.73	16.77		150.0	
		Z	5.95	67.52	16.54		150.0	-
1056 1 - AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.02	67.94	17.00	0.00	150.0	± 9.6 %
		Y	5.98	67.74	16.81		150.0	
		Z	5.89	67.52	16.58		150.0	
10562- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.09	68.17	17.12	0.00	150.0	± 9.6 %
		Y	6.05	67.96	16.92		150.0	
		Z	5.95	67.72	16.67		150.0	
10563- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.19	68.10	17.04	0.00	150.0	± 9.6 %
_		Y	6.15	67.90	16.85		150.0	
		Z	6.04	67.65	16.60		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.91	67.89	17.17	0.46	150.0	±9.6 %
		Y	4.87	67.64	16.93		150.0	
		Z	4.80	67.46	16.69		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.11	68.27	17.46	0.46	150.0	±9.6 %
		Y	5.08	68.05	17.23		150.0	
		Z	4.99	67.85	16.98		150.0	
10566- 	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.96	68.15	17.30	0.46	150.0	±9.6 %
		Y	4.92	67.91	17.06		150.0	-
		Z	4.83	67.70	16.81		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.99	68.55	17.66	0.46	150.0	± 9.6 %
		Y	4.96	68.34	17.45		150.0	
		Z	4.87	68.08	17.17		150.0	······································
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.88	67.99	17.11	0.46	150.0	± 9.6 %
		Y	4.83	67.70	16.84		150.0	
_		Z	4.75	67.51	16.61		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.98	68.78	17.81	0.46	150.0	± 9.6 %
		Y	4.95	68.58	17.60	-	150.0	
		Z	4.86	68.32	17.31		150.0	· · · ·
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.98	68.56	17.69	0.46	150.0	± 9.6 %
		Y	4.95	68.33	17.47		150.0	
		Z	4.86	68.09	17.20		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.53	70.26	19.68	0.46	130.0	± 9.6 %
		Y	1.48	68.95	18.55		130.0	
		Z	1.37	67.40	17.39		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.59	71.46	20.33	0.46	130.0	± 9.6 %
	<u> </u>	Y	1.53	70.00	19.13		130.0	
		Z	1.41	68.22	17.86		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	167.17	47.85	0.46	130.0	±9.6 %
	<u> </u>	Y	100.00	157.87	43.89		130.0	
		Z	100.00	153.13	41.71		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	3.10	89.83	28.24	0.46	130.0	±9.6 %
		Y	2.51	83.93	25.32		130.0	
		Z	1.87	77.75	-			

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10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.72	67.77	17.29	0.46	130.0	± 9.6 %
		Y	<u>4.6</u> 8	67.55	17.05		130.0	
		Z	4.61	67.35	16.79		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.75	67.98	17.37	0.46	130.0	± 9.6 %
		Y	4.72	67.76	17.14		130.0	
		Z	4.64	67.55	16.88		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.92	68.19	17.49	0.46	130.0	± 9.6 %
		Y	4.89	67.98	17.27		130.0	
		Z	4.80	67.76	17.01		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.83	68.39	17.63	0.46	130.0	±9.6 %
		Y	4.80	68.19	17.41		130.0	
		Z	4.71	67.93	17.12		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.60	67.68	16.96	0.46	130.0	± 9.6 %
		LΥ]	4.56	67.40	16.68		130.0	
		Z	4.48	67.20	16.44	_	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.64	67.76	17.00	0.46	130.0	± 9.6 %
		Y	4.60	67.47	16.71		130.0	
		Z	4.52	67.27	16.47		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	68.54	17.65	0.46	130.0	±9.6 %
		Y	4.72	68.32	17.42		130.0	
		Z	4.63	68.05	17.12		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	67.47	16.77	0.46	130.0	± 9.6 %
		Y	4.49	67.15	16.46		130.0	
		Z	4.41	66.99	16.24		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.72	67.77	17.29	0.46	130.0	± 9.6 %
		Y	4.68	67.55	17.05		130.0	
	······································	Z	4.61	67.35	16.79		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.75	67.98	17.37	0.46	130.0	± 9.6 %
		Y	4.72	67.76	17.14		130.0	
		Z	4.64	67.55	16.88		130.0	
10585- AAA	HEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.92	68.19	17.49	0.46	130.0	± 9.6 %
		Y	4.89	67.98	17.27		130.0	
		Z	4.80	67.76	17.01	<u> </u>	130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.83	68.39	17.63	0.46	130.0	± 9.6 %
		Y	4.80	68.19	17.41		130.0	
		Z	4.71	67.93	17.12		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.60	67.68	16.96	0.46	130.0	± 9.6 %
		Y	4.56	67.40	16.68		130.0	
		Z	4.48	67.20	16.44		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.64	67.76	17.00	0.46	130.0	±9.6 %
		Y	4.60	67.47	16.71		130.0	
		Z	4.52	67.27	16.47		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	68.54	17.65	0.46	130.0	± 9.6 %
		Y	4.72	68.32	17.42		130.0	
		Z	4.63	68.05	17.12		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	67.47	16.77	0.46	130.0	± 9.6 %
		Y	4.49	67.15	16.46		100 0	
			4.40	1 07.10	1 10.40		130.0	

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10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.86	67.77	17.35	0.46	130.0	±9.6 %
AAA	MCS0, 90pc duty cycle)							
		Y	4.83	67.57	17.13		130.0	
		Z	4.76	67.39	16.89		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.00	68.10	17.48	0.46	130.0	±9.6 %
		Y	4.97	67.89	17.26		130.0	
		Z	4.88	67.69	17.01		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	x	4.92	68.01	17.36	0.46	130.0	± 9.6 %
		Y	4.89	67.79	17.13		130.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.80	67.59	16.88		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.97	68.18	17.52	0.46	130.0	± 9.6 %
		Y	4.94	67.97	17.30	_	130.0	
40505		Z	4.86	67.76	17.04		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.95	68.18	17.45	0.46	130.0	± 9.6 %
		Y	4.91	67.96	17.21		130.0	
405		Z	4.83	67.75	16.96		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.88	68.19	17.46	0.46	130.0	± 9.6 %
		Y	4.85	67.95	17.22		130.0	
		Z	4.76	67.74	16.97		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.83	68.07	17.33	0.46	130.0	± 9.6 %
		Y	4.80	67.83	17.08		130.0	
		Z	4.71	67.61	16.83		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.82	68.29	17.59	0.46	130.0	± 9.6 %
		Y	4.79	68.08	17.36		130.0	
		Z	4.70	67.83	17.08		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.54	68.17	17.50	0.46	130.0	± 9.6 %
		Y	5.51	67.99	17.30		130.0	
		Z	5.43	67.80	17.08		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.69	68.70	17.74	0.46	130.0	±9.6 %
		Y	5.65	68.47	17.52		130.0	
		Z	5.55	68.23	17.28		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.56	68.37	17.60	0.46	130.0	± 9.6 %
		Y	5.53	68.17	17.39		130.0	
		Z	5.44	67.97	17.16		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.70	68.54	17.60	0.46	130.0	± 9.6 %
		Y	5.66	68.33	17.38		130.0	
		Z	5.58	68.16	17.17		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.78	68.87	17.89	0.46	130.0	± 9.6 %
		Y	5.75	68.67	17.69		130.0	
		Z	5.64	68.42	17.44		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.65	68.51	17.70	0.46	130.0	± 9.6 %
		Y	5.62	68.31	17.49		130.0	
		Z	5.52	68.06	17.24		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.67	68.56	17.73	0.46	130.0	± 9.6 %
		Y	5.64	68.34	17.50		130.0	
		z	5.54	68.11	17.26		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.41	67.85	17.23	0.46	130.0	± 9.6 %
		X Y	5.41	67.85	17.23	0.46	130.0	± 9.6 %

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10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.73	67.22	17.05	0.46	130.0	± 9.6 %
		Y	4.69	66.99	16.81		130.0	<u>├</u> ─
		Z	4.61	66.77	16.55		130.0	<u> </u>
10608- <u>A</u> AA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.89	67.59	17.21	0.46	130.0	± 9.6 %
		<u>Y</u>	4.85	67.36	16.97		130.0	
		Z	4.76	67.12	16.70		130.0	· · · · · · · · · · · · · · · · · · ·
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.79	67.47	17.06	0.46	130.0	± 9.6 %
		Y	4.75	67.21	16.81		130.0	
10610-		Z	4.66	66.98	16.54		130.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.84	67.62	17.21	0.46	130.0	± 9.6 %
		<u>Y</u>	4.80	67.38	16.98		130.0	
10611-		Z	4.71	67.13	16.70		130.0	
	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.75	67.43	17.07	0.46	130.0	± 9.6 %
		<u> </u>	4.71	67.19	16.83		130.0	
10612-		Z	4.62	66.94	16.55		130.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.76	67.63	17.15	0.46	130.0	±9.6 %
		Y	4.72	67.36	16.89		130.0	
10613-		<u>Z</u>	4.62	67.11	16.61		130.0	L
AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.76	67.45	16.99	0.46	130.0	± 9.6 %
		Y	4.71	67.17	16.73		130.0	
10614-		Z	4.62	66.92	16.46		130.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.71	67.65	17.23	0.46	130.0	±9.6 %
	·	Y	4.68	67.41	16.99		130.0	
40045		Z	4.58	67.13	16.69		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.75	67.29	16.86	0.46	130.0	± 9.6 %
		Y	4.71	67.01	16.59		130.0	
10010		Z	4.62	66.80	16.34		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.36	67.41	17.11	0.46	130.0	± 9.6 %
		Y	5.32	67.22	16.91		130.0	
		Z	5.24	67.01	16.67		130.0	
10617- AAA	∺IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.44	67.66	17,21	0.46	130.0	±9.6 %
		Y	5.40	67.45	17.00		130.0	
		Z	5.30	67.20	16.74		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.34	67.71	17.26	0.46	130.0	±9.6 %
		Y	5.30	67.51	17.04		130.0	
40040		Z	5.21	67.26	16.79		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	x	5.34	67.48	17.07	0.46	130.0	± 9.6 %
		Y	5.30	67.27	16.86		130.0	
10055		Z	5.22	67.06	16.62		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.41	67.47	17.11	0.46	130.0	± 9.6 %
		Y	5.38	67.26	16.90		130.0	
1005		Z	<u>5</u> .29	67.06	16.67		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.41	67.55	17.27	0.46	130.0	± 9.6 %
		Y	5.38	67.38	17.08		130.0	
		Z	5.29	67.14	16.82		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.42	67.70	17.34	0.46	130.0	± 9.6 %
		- 1		<u> </u>				
		Y	5.38	67.50	17.14		130.0	1

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10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.29	67.21	16.97	0.46	130.0	±9.6 %
AAA	90pc duty cycle)		5.25	01.21	10.57	0.40	130.0	±9.0 %
		Y	5.26	67.01	16.75		130.0	
		Z	5.17	66.80	16.52		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.49	67.44	17.13	0.46	130.0	± 9.6 %
		Y	5.46	67.25	16.93		130.0	
		Z	5.37	67.04	16.70		130.0	····-
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.67	67.85	17.40	0.46	130.0	± 9.6 %
		Y	5.63	67.64	17.18		130.0	
_		Z	5.49	67.29	16.88		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.67	67.37	17.01	0.46	130.0	± 9.6 %
		Y	5.64	67.20	16.82		130.0	
		Z	5.56	67.01	16.60		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.95	68.11	17.34	0.46	130.0	± 9.6 %
		Y	5.91	67.91	17.14		130.0	
		Z	5.81	67.67	16.90		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.68	67.42	16.93	0.46	130.0	± 9.6 %
		Y	5.65	67.22	16.73		130.0	
		Z	5.56	67.03	16.51		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	x	5.78	67.58	17.01	0.46	130.0	± 9.6 %
		Y	5.75	67.38	16.80		130.0	
		Z	5.66	67.19	16.59		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.18	69.00	17.72	0.46	130.0	± 9.6 %
		Y	6.12	68.72	17.47		130.0	
		Z	5.97	68.32	17.16		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.05	68.69	17.74	0.46	130.0	±9.6%
		Υ	6.02	68.51	17.56		130.0	
		Z	5.90	68.19	17.27		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.92	68.20	17.52	0.46	130.0	± 9.6 %
		Y	5.89	68.03	17.34		130.0	· · ·
		Z	5.79	67.79	17.09	·	130.0	·
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.75	67.61	17.06	0.46	130.0	± 9.6 %
		Y	5.71	67.43	16.87		130.0	
		Z	5.61	67.18	16.62		130.0	·
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.73	67.62	17.12	0.46	130.0	± 9.6 %
		Y	5.70	67.45	16.93	_	130.0	
-		Z	5.61	67.26	16.71		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.59	66.93	16.52	0.46	130.0	± 9.6 %
		Y	5.55	66.70	16.29		130.0	
		Z	5.48	66.56	16.11		130.0	·
10636- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.10	67.70	17.06	0.46	130.0	±9.6 %
		Y	6.07	67.53	16.88		130.0	
(000		Z	5.99	67.35	16.67		130.0	
10637- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.26	68.11	17.25	0.46	130.0	±9.6 %
		Y	6.22	67.93	17.06		130.0	
		Z	6.13	67.70	16.83		130.0	
10638- AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.27	68.11	17.23	0.46	130.0	± 9.6 %
		Y	6.23	67.92	17.04	· · ·	130.0	
		Z	6.14	67.72	16.82		130.0	

ES3DV3-SN:3318

1. 1. 1. 1. 1. September 22, 2017

10639- AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.22	67.97	17.20	0.46	130.0	± 9.6 %
		Y	6.18	67.80	17.02		130.0	
_		Z	6.10	67.60	16.80		130.0	
10640- <u>AAB</u>	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.21	67.98	17.15	0.46	130.0	±9.6 %
		Y	6.17	67.78	16.95		130.0	
		Z	6.08	67.56	16.73		130.0	·
10641- AAB	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.30	68.00	17.18	0.46	130.0	± 9.6 %
		Υ	6.26	67.81	16.98		130.0	
		Z	6.17	67.61	16.77		130.0	
10642- AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	x_	6.30	68.13	17.40	0.46	130.0	± 9.6 %
		Y	6.27	67.97	17.23		130.0	
		Z –	6.18	67.76	17.01		130.0	
10643- AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X _	6.16	67.91	17.20	0.46	130.0	± 9.6 %
		Y	6.12	67.71	17.00		130.0	
		Z	6.03	67.50	16.78		130.0	
10644- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.24	68.16	17.34	0.46	130.0	±9.6%
		Y_	6.20	67.95	17.14		130.0	
		Z	6.10	67.72	16.91		130.0	
10645- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.44	68.39	17.42	0.46	130.0	± 9.6 %
		Y	6.39	68.17	17.21		130.0	
		Z	6.27	67.87	16.95		130.0	
10646- <u>AA</u> D	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	100.00	154.07	50.96	9.30	60.0	± 9.6 %
		Y	100.00	149.19	48.64		60.0	
		<u>Z</u>	100.00	151.77	49.64		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	100.00	155.63	51.65	9.30	60.0	±9.6 %
	<u> </u>	Y	100.00	150.58	49.25		60.0	
		Z	100.00	153.26	50.29		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	7.29	96.44	23.44	0.00	150.0	± 9.6 %
		Y	1.15	71.60	14.63		_ 150.0	
40055		Z	0.73	65.79	11.39		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.70	71.99	19.13	2.23	80.0	±9.6 %
	<u>+</u>	Y	4.65	71.36	18.64		80.0	
10050		Z	4.32	70.31	17.98		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.86	69.58	18.56	2.23	80.0	± 9.6 %
		Y	4.87	69.28	18.24		80.0	
		Z	4.66	68.67	17.81		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.78	68.93	18.47	2.23	80.0	± 9.6 %
		Y	4.81	68.69	18.18		80.0	
		Z	4.62	68.14	17.78		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.83	68.76	18.45	2.23	80.0	± 9.6 %
		Y	4.86	68.54	18.16		80.0	
		Z	4.67	68.01	17.79		80.0	

^E 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 Hac-MRA



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Issued: April 18, 2017

Accreditation No.: SCS 0108

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PC Test Client

Certificate No: EX3-7406_Apr17

CALIBRATION	CERTIFICATE		
Object	EX3DV4 - SN:7406)	
Calibration procedure(s)		CAL-12.v9, QA CAL-23.v5, QA ure for dosimetric E-field probes	CAL-25.V6 BNN 5-3-2017
	· · · · · · · · · · · · · · · · · · ·		5-3-2017
Calibration date:	April 18, 2017		
		al standards, which realize the physical units obability are given on the following pages and a	
The measurements and the unc	enainties with confidence pro-	ability are given on the following pages and c	ne part of the continuate.
All calibrations have been condu	ucted in the closed laboratory f	facility: environment temperature (22 ± 3)°C a	nd humidity < 70%.
Calibration Equipment used (M8	TE critical for calibration)		
Primary Standards		Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenualor	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
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		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 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: Oct-17
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	
	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	Milles -
Approved by:	Katja Pokovic	Technical Manager	10M

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

Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



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Glossarv:

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	ϑ 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
	the second s

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

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 ≤ 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 E²-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

Manufactured: November 24, 2015 Calibrated: April 18, 2017 April 18, 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 $(\mu V/(V/m)^2)^A$	0.47	0.42	0.45	± 10.1 %
DCP (mV) ^B	99.5	98.3	95.1	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	C	D	VR	Unc ^E
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	138.9	±2.5 %
		Y	0.0	0.0	1.0		129.6	
		Z	0.0	0.0	1.0		128.2	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V ^{−1}	ms.V⁻²	ms.V⁻¹	ms	V ⁻²	V-1	
Х	48.83	366.9	3 6.13	15.06	1.101	4.968	0.251	0.437	1.003
Y	19.57	145.7	35.6	3.888	0.704	4.934	0	0.021	1.004
Z	45.42	343.9	36.58	10.69	0.846	4.98	0	0.36	1.004

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%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

^B Numerical linearization parameter: uncertainty not required.

^E 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) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
600	42.7	0.88	10.42	10.42	10.42	0.10	1.20	± 13.3 %
750	41.9	0.89	10.26	10.26	10.26	0.52	0.80	± 12.0 %
835	41.5	0.90	9.97	9.97	9.97	0.53	0.81	± 12.0_%
1750	40.1	1.37	8.88	8.88	8.88	0.42	0.80	± 12.0 %
1900	40.0	1.40	8.40	8.40	8.40	0.26	0.87	± 12.0 %
2300	39.5	1.67	8.04	8.04	8.04	0.25	0.80	± 12.0 %
2450	39.2	1.80	7.68	7.68	7.68	0.38	0.80	± 12.0 %
2600	39.0	1.96	7.44	7.44	7.44	0.40	0.83	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

^c 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. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) 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 (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G 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.

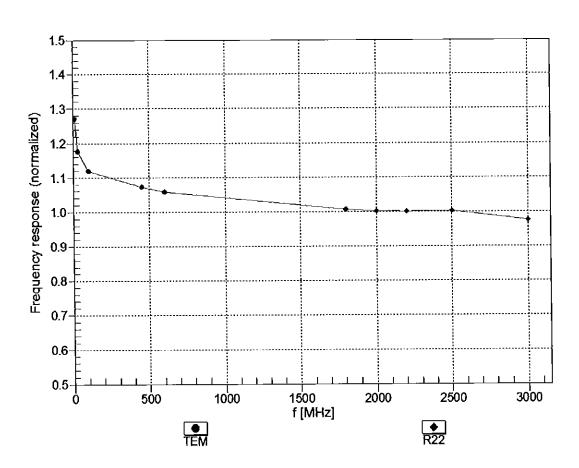
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
600	56.1	0.95	10.82	10.82	10.82	0.10	1.20	± 13.3 %
750	55.5	0.96	9,90	9.90	9.90	0.51	0.83	± 12.0 %
835	55.2	0.97	9.77	9.77	9.77	0.46	0.80	± 12.0 %
1750	53.4	1.49	8.08	8.08	8.08	0.41	0.85	± 12.0 %
1900	53.3	1.52	7.81	7.81	7.81	0.44	0.80	± 12.0 %
2300	52.9	1.81	7.65	7.65	7.65	0.38	0.84	± 12.0 %
2450	52.7	1.95	7.60	7.60	7.60	0.33	0.89	± 12.0 %
2600	52.5	2.16	7.31	7.31	7.31	0.31	0.94	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

^c 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. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

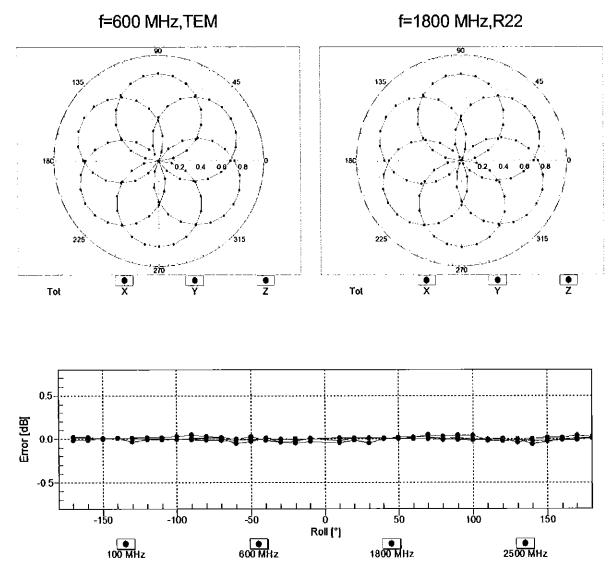
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty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

^G 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.



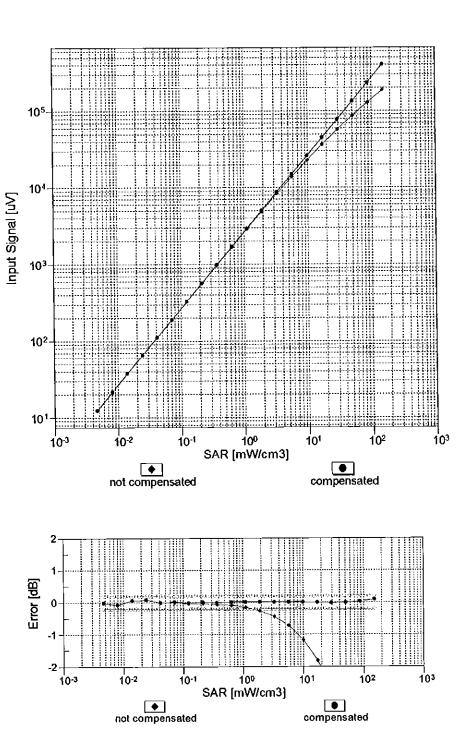
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



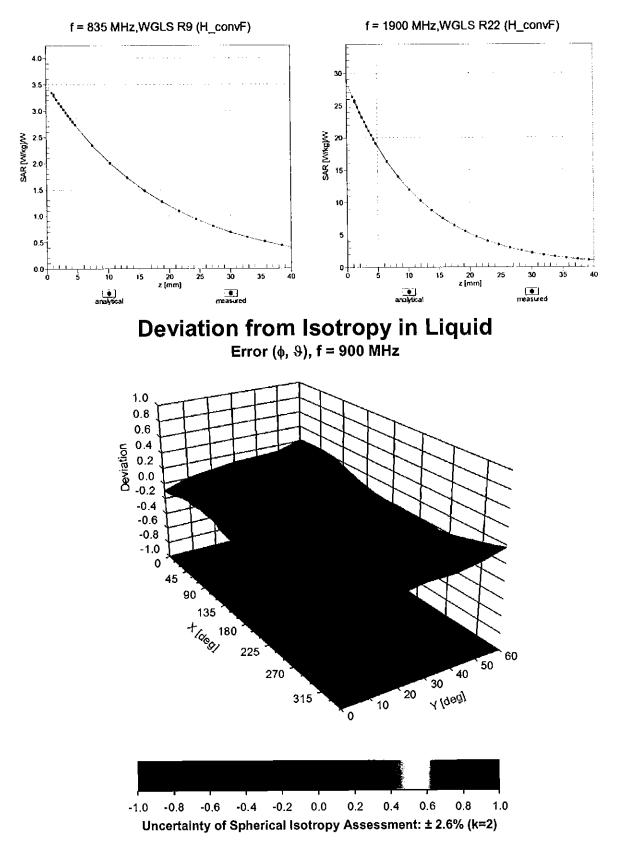
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)

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



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	0
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

April 18, 2017

EX3DV4-SN:7406

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	138.9	± 2.5 %
		Y	0.00	0.00	1.00		129.6	
		Z	0.00	0.00	1.00		128.2	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	2.73	66.22	10.89	10.00	20.0	± 9.6 %
		Y	2.50	65.91	10.39		20.0	
		Z	2.53	65.90	10.54		20.0	
10011- CAB	UMTS-FDD (WCDMA)	х	1.16	69.53	16.71	0.00	150.0	± 9.6 %
		Y	1.55	76.79	19.47		150.0	
10010		Z	1.09	68.24	15.96	0.44	150.0	
10012- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 1 Mbps)	X	1.21	64.38	15.70	0.41	150.0	±9.6 %
		Y	1.20	65.37	16.13		150.0	
40040		Z	1.18	63.82	15.33 16.98	1.46	150.0 150.0	± 9.6 %
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	4.87	66.56		1.40		±9.0 %
		Y	4.34	67.27	16.96		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	Z X	4,83 9.99	66.50 82.36	16.95 18.50	9.39	150.0 50.0	± 9.6 %
		Y	13.63	85.86	18.88		50.0	
		z	18.22	90.00	20.60		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	8.49	80.16	17.78	9.57	50.0	±9.6 %
		Y	7.32	78.16	16.31		50.0	
		Ζ	12.47	85.19	19.17		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Х	18.19	89.55	19.31	6.56	60.0	±9.6 %
		Y	100.00	107.67	23.01		60.0	
		Z	100.00	108.36	23.76		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	5.54	75.78	27.74	12.57	50.0	± 9.6 %
		Y	8.76	92.32	36.08		50.0	
		Z	4.44	70.37	25.26	0.50	50.0 60.0	1069/
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	9.90	90.96	31.21	9.56	60.0	± 9.6 %
		Y Z	5.70 7.85	81.99 86.95	30.11		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	106.69	22.59	4.80	80.0	± 9.6 %
DAC		Y	100.00	110.45	23.34	<u> </u>	80.0	<u> </u>
	· · · · · · · · · · · · · · · ·	z	100.00	108.23	22.93		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	107.01	22.11	3.55	100.0	± 9.6 %
		Y	100.00	117.41	25.54	1	100.0	
		Z	100.00	109.42	22.79		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	6.41	81.80	26.70	7.80	80.0	± 9.6 %
		Y	3.86	73.74	24.21		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	5.17 13.75	78.18 86.21	25.56 17.68	5.30	80.0	± 9.6 %
CAA			0.11	00.70	45.00		70.0	<u> </u>
		Y	8.41	82.76	15.88		70.0	
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Z X	100.00 100.00	106.60 106.42	22.49 20.68	1.88	100.0	± 9.6 %
		Y	100.00	120.98	25.51	1	100.0	1
		z	100.00	108.89	21.35	+	100.0	1

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	113.18	22.62	1.17	100.0	± 9.6 %
		<u> </u>	ļ					
		Y	100.00	160.14	39.75		100.0	
10033-	IEEE 802 15 1 Plustoath (Pl/4 DODCK	Z	100.00	117.70	24.05	l	100.0	
	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	6.02	81.27	20.17	5.30	70.0	± 9.6 %
		Y	2.18	67.67	12.00		70.0	
10034-		Z	5.24	80.63	20.08		70.0	
CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	2.82	75.11	17.10	1.88	100.0	± 9.6 %
	+	Y	0.75	61.82	7.32		100.0	
10035-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	Z	2.29	73.13	16.28		100.0	
CAA	DH5)	X X	2.17	73.18	16.32	1.17	100.0	± 9.6 %
		Y	0.59	61.24	6.75		100.0	
10036-	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Z	1.79	71.19	15.39		100.0	
CAA		X	7.12	83.90	21.15	5.30	70.0	± 9.6 %
	<u> </u>	Y	2.26	68.25	12.32		70.0	
10037-		Z	6.24	83.43	21.13		70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	2.66	74.41	16.79	1.88	100.0	± 9.6 %
		<u>Y</u>	0.71	61.41	7.10		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	2.15	72.41	15.96	l	100.0	
CAA		X	2.20	73.62	16.61	1.17	100.0	± 9.6 %
		<u>Y</u>	0.60	61.36	6.93		100.0	
10039-		Z	1.80	71.51	15.64		100.0	
CAB	CDMA2000 (1xRTT, RC1)	X	2.76	78.09	18.48	0.00	150.0	± 9.6 %
		Y	0.37	60.00	5.64		150.0	
40040		Ζ	2.22	74.97	16.93		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	7.43	78.80	16.12	7.78	50.0	± 9.6 %
		Y	8.26	80.71	16.15		50.0	
100(1		Z	12.01	84.59	17.75		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	100.49	0.10	0.00	150.0	± 9.6 %
		Y	0.04	60.00	50.13		150.0	
		Z	0.00	96.59	0.05		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	6.27	73.35	16.78	13.80	25.0	± 9.6 %
		Y	5.47	69.78	14.42		25.0	
40040		Z	7.09	74.59	16.89		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	6.62	76.07	16.59	10.79	40.0	± 9.6 %
	+	Y	5.50	73.13	14.63		40.0	
40050		Z	7.47	77.74	16.92		40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	8.73	81.97	20.70	9.03	50.0	± 9.6 %
		Y	5.30	74.02	15.71		50.0	— ——–
40050		Z	9.70	84.35	21.49		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.93	77.02	24.10	6.55	100.0	±9.6 %
		Y	3.18	70.36	21.96		100.0	
40050		Z	4.10	73.99	23.08		100.0	·
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	х	1.26	65.49	16.19	0.61	110.0	± 9.6 %
		Y	1.20	65.95	16.36		110.0	<u> </u>
40000		Z	1.20	64.67	15.74		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	13.21	104.87	27.26	1.30	110.0	± 9.6 %
		Y	4.90	96.93	26.57		110.0	├─── ──
		Z	4.52	91.43	23.95		110.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	2.92	78.86	20.97	2.04	110.0	±9.6 %
CAB	Mbps)							
		Y	1.70	73.25	19.05		110.0	
10062-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	<u>Z</u>	2.19	75.27	19.88	0.10	110.0	
CAB	Mbps)	X	4.70	66.68	16.55	0.49	100.0	± 9.6 %
		<u> </u>	4.18	67.42	16.56		100.0	
		Z	4.65	66.61	16.51		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.70	66.73	16.62	0.72	100.0	± 9.6 %
_		Y	4.18	67.49	16.63		100.0	
		Z	4.66	66.66	16.57		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.99	66.98	16.82	0.86	100.0	± 9.6 %
		Y	4.36	67.60	16.75		100.0	
		Z	4.94	66.90	16.78		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.85	66.84	16.87	1.21	100.0	±9.6 %
		Y	4.23	67.25	16.71		100.0	
		Z	4.80	66.75	16.83		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.86	66.83	16.99	1.46	100.0	± 9.6 %
		Y	4.21	67.08	16.71		100.0	
		Z	4.80	66.72	_ 16.95		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.14	66.93	17.36	2.04	100.0	±9.6 %
		Ý	4.40	67.10	16.99		100.0	
		Z	5.08	66.86	17.34		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.19	66.98	17.55	2.55	100.0	±9.6 %
		Υ	4.52	67.37	17.35		100.0	
		Z	5.12	66.84	17.50		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.27	66.95	17.72	2.67	100.0	±9.6 %
		Y	4.52	67.17	17.38	ĺ	100.0	
		Z	5.20	66.85	17.69		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.96	66.60	17.22	1.99	100.0	± 9.6 %
	······································	TT	4.44	67.29	17.20		100.0	
		Z	4.91	66.53	17.19		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.94	66.90	17.40	2.30	100.0	± 9.6 %
		Υ	4.35	67.27	17.25		100.0	
		Z	4.87	66.79	17.36	l i	100.0	1
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.99	67.03	17.67	2.83	100.0	± 9.6 %
		Y	4.41	67.49	17.58		100.0	
		Z	4.92	66.90	17.63		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.97	66.91	17.78	3.30	100.0	± 9.6 %
		Y	4.49	67.70	17.84		100.0	
		Z	4.90	66.77	17.74		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.02	67.05	18.08	3.82	90.0	± 9.6 %
		Y	4.55	67.83	18.12		90.0	
		Z	4.94	66.85	18.01		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.03	66.84	18.17	4.15	90.0	± 9.6 %
		Y	4.61	67.72	18.28		90.0	
		Z	4.95	66.65	18.12		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.06	66.90	18.26	4.30	90.0	± 9.6 %
		Y	4.65	67.85	18.42		90.0	
		Ż	4.98	66.71	18.21		90.0	1

10081- CAB	CDMA2000 (1xRTT, RC3)	x	1.05	69.26	14.55	0.00	150.0	±9.6%
		Y	0.28	60.00	5.33		150.0	
		z	0.92	67.44	13.36	· · ·	150.0	<u> </u>
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	х	0.52	58.22	3.69	4.77	80.0	± 9.6 %
		Y	0.41	56.78	1.87		80.0	
		Z	0.54	57.53	2.88		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	17.35	89.03	19.19	6.56	60.0	± 9.6 %
		Y	100.00	107.61	23.00		60.0	
40007		Z	100.00	108.37	23.77		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.96	68.94	16.57	0.00	150.0	±9.6 %
		Y	2.57	76.20	18.23		150.0	
10098-		Z	1.90	68.41	16.17	0.00	150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1,92	68.91	16.54	0.00	150.0	± 9.6 %
		Y	2.54	76.26	18.30		150.0	
10099-		Z	1.86	68.36	16.14		150.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	9.94	91.01	31.21	9.56	60.0	± 9.6 %
		Y	5.73	82.09	28.86		60.0	
10100-		Z	7.90	87.03	30.13	0.0	60.0	
CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.32	71.40	17.37	0.00	150.0	± 9.6 %
		Y	2.95	71.83	18.07		150.0	
40404		Z	3.20	70.72	17.06		150.0	
10101- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	x	3.33	67.99	16.32	0.00	150.0	± 9.6 %
		Y	3.00	68.42	16.63	_	<u>15</u> 0.0	
		Z	3.27	67.68			150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.43	67.94	16.40	0.00	150.0	± 9.6 %
		Y	3.10	68.46	16.71		150.0	
		z	3.37	67.66	16.24		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.02	73.90	19.30	3.98	65.0	±9.6 %
		Y	4.68	73.18	19.41		65.0	
		Z	5.62	73.49	19.33		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	6.42	73.34	19.91	3.98	65.0	± 9.6 %
		Y	4.72	70.79	18.81		65.0	
		Z	5.88	72.35	19.63		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	6.34	73.01	20.09	3.98	65.0	± 9.6 %
		Y	4.65	70.25	18.83		65.0	
		Z	<u>5.51</u>	70.92	19.28		65.0	
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	×	2.90	70.63	17.22	0.00	150.0	± 9.6 %
		Ý	2.58	72.09	18.15		150.0	
		Z	2.79	69.99	16.90		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.99	67.94	16.29	0.00	150.0	± 9.6 %
		Y	2.69	69.27	16.60		150.0	
		Z	2.93	67.61	16.08		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	2.37	69.82	16.91	0.00	150.0	± 9.6 %
		Y	2.17	72.66	17.66		150.0	
		Z	2.27	69.17	16.53		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	х	2.75	69.14	16.80	0.00	150.0	± 9.6 %
		Y	2.72	72.65	17.00		150.0	
		Z	2.68	68.77	16.52	İ	150.0	

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10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.11	67.90	16.33	0.00	150.0	±9.6 %
		Y	2.81	69.41	16.67		150.0	<u> </u>
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Z X	3.05 2.91	<u>67.61</u> 69.24	1 <u>6.14</u> 16.90	0.00	150.0 150.0	±9.6 %
		τ _γ Ι	2.80	72.45	16.91		150.0	
		Z	2.83	68.91	16.64		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.18	67.36	16.63	0.00	150.0	±9.6 %
		Y	4.69	67.54	16.80		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.15	67.30	16.59		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.48	67.50	16.70	0.00	150.0	± 9.6 %
·		Y	4.94	67.76	16.85		150.0	
		Z	5.42	67.37	16.64		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.28	67.57	16.65	0.00	150.0	±9.6 %
		Y T	4.76	67.79	16.84		150.0	
		Z	5.24	67.47	16.61		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.14	67.22	16.57	0.00	150.0	± 9.6 %
		Y	4.68	67.44	16.77		150.0	
		Z	5.11	67.13	16.53		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.56	67.71	16.81	0.00	150.0	± 9.6 %
		Y	4.92	67.65	16.80		150.0	
-		Z	5.51	67.59	16.75		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.26	67.51	16.64	0.00	150.0	± 9.6 %
-		Y	4.75	67.71	16.81		150.0	
		Z	5.23	67.43	16.60		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.47	67.94	16.32	0.00	150.0	± 9.6 %
		Y	3.08	68.53	16.60		150.0	
		Z	3.41	67.65	16.15		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.59	68.02	16.48	0.00	150.0	± 9.6 %
		İΥ	3.23	68.87	16.85		150.0	
		Z	3.53	67.77	16.33		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.17	70.14	16.75	0.00	150.0	± 9.6 %
		Y	1.93	72.39	15.85		150.0	
		Z	2.06	69.38	16.26		150.0	· · · · · · · · · · · · · · · · · · ·
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.69	70.39	16.77	0.00	150.0	± 9.6 %
		Y	1.77	67.88	12.65		150.0	
		Z	2.58	69.83	16.31		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.37	67.50	14.86	0.00	150.0	± 9.6 %
		Y	1.24	63.02	9.52		150.0	
		Z	2.27	66.99	14.42		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.43	67.32	13.24	0.00	150.0	± 9.6 %
		Y	0.41	60.00	4.04		150.0	
		Z	1.25	65.61	11.99		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.83	65.71	11.47	0.00	150.0	± 9.6 %
		Y	19.01	355.37	40.53		150.0	
		Z	1.52	64.01	10.27		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.14	67.65	12.55	0.00	150.0	± 9.6 %
		Y	123.11	63.95	2.67		150.0	
		Z	1.70	65.34	11.08		150.0	

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10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.00	68.01	16.34	0.00	150.0	± 9.6 %
		Y	2.71	69.38	16.67		150.0	·
		Z	2.94	67.68	16.14	t	150.0	-
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.12	67.96	16.38	0.00	150.0	± 9.6 %
		Y	2.83	69.51	16.73		150.0	
40454			3.06	67.68	16.19		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	×	6.55	76.73	20.51	3.98	65.0	± 9.6 %
		Y	4.65	75.11	19.92		65.0	
10152-		Z	5.91	75.87	20.37		65.0	
CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.92	73.14	19.51	3.98	65.0	± 9.6 %
		Y	4.14	70.22	17.64		65.0	
10153-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	Z	5.38	72.11	19.20		65.0	
CAC	64-QAM)	X	6.32	74.15	20.32	3.98	65.0	± 9.6 %
		Y	4.49	71.52	18.62		65.0	
10154-	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	Z X	5.75	73.14	20.03	- <u>-</u>	65.0	L
CAD	QPSK)	Y	2.44	70.37	17.23	0.00	150.0	± 9.6 %
			2.24	73.24	17.96		150.0	<u> </u>
10155-	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	Z X	2.32	69.67	16.83		150.0	
CAD	16-QAM)	Y	2.75	69.15	16.81	0.00	150.0	± 9.6 %
	<u> </u>	Z	2.68	72.83	17.10		150.0	
10156-	LTE-FDD (SC-FDMA, 50% RB, 5 MHz,	X	2.05	70.60	16.53	- 0.00	150.0	
CAD	QPSK)	Y	1.46			0.00	150.0	± 9.6 %
_		Z	1.92	69.42 69.63	13.50		150.0	<u> </u>
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.25	69.63	<u>16.11</u> 15.12	0.00	<u>150.0</u> 150.0	± 9.6 %
		ΤΥ	0.93	61.53	7.91	_	150.0	
		Z	2.13	67.76	14.53		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.91	69.31	16.96	0.00	150.0	± 9.6 %
		ΓY	2.84	72.68	17.03		150.0	
		Z	2.84	68.99	16.70	_	150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.39	69.07	15.47	0.00	150.0	± 9.6 %
		Y	0.94	61.44	7.84		150.0	
10400		Z	2.25	68.30	14.85	_	150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.87	69.48	16.90	0.00	150.0	± 9.6 %
		<u> </u>	2.53	71.06	17.44		150.0	
10161-	LTE-FDD (SC-FDMA, 50% RB, 15 MHz,	Z	2.80	69.08	16.66		150.0	
CAC	16-QAM)	X	3.02	67.94	16.33	0.00	150.0	± 9.6 %
	<u>+</u>	Y	2.72	69.68	16.46		150.0	
10162-	LTE-FDD (SC-FDMA, 50% RB, 15 MHz,	Z	2.96	<u>67.65</u>	16.13		150.0	
CAC	64-QAM)	X	3.13	68.07	16.43	0.00	150.0	± 9.6 %
	<u> </u>		2.84	70.03	16.63	_	150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Z X	<u>3.07</u> 3.48	67.8 <u>1</u> 69.00	<u>16.24</u> 18.84	3.01	150.0 150.0	± 9.6 %
		Y	2.37	66.02	18.17		150.0	_
		z	3.30	68.39	18.62		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.17	71.58	19.19	3.01	150.0 150.0	± 9.6 %
		Y	2.29	67.15	18.12		150.0	
		Ż	3.79	70.56	18.83		150.0	
			0.10	10.00	10.03		150.0	

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10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.66	74.00	20.63	3.01	150.0	± 9.6 %
		Y	2.48	69.25	19.67		150.0	
		z	4.22	72.96	20.30		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.83	68.21	18.52	3.01	150.0	± 9.6 %
		Y	1.98	64.24	17.28		150.0	
		Z	2.57	66.84	17.97		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.78	73.87	20.84	3.01	150.0	±9.6 %
		Y	1.95	66.56	18.68		150.0	
		Z	3.16	71.49	20.02		150.0	-
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.08	69.63	17.94	3.01	150.0	±9.6 %
		Y	1.72	64.21	_16.34		150.0	
		Z	2.64	67.80	17.26		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.42	80.62	23.60	6.02	65.0	±9.6 %
		Y	2.15	69.85	20.42		65.0	
		Z	4.45	78.76	23.36		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	8.97	86.28	23.79	6.02	65.0	± 9.6 %
		Y	2.26	72.00	19.72		65.0	
		Z	6.61	83.59	23.38		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	7.82	83.09	22.18	6.02	65.0	± 9.6 %
		Y	1.97	69.58	18.06		65.0	
		Z	5.22	78.89	21.15		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.79	67.90	18.26	3.01	150.0	±9.6 %
		Y	1.97	64.07	17.08		150.0	
		Z	2.54	66.56	17.72	_	150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.78	73.89	20.85	3.01	150.0	± 9.6 %
		Y	1.95	66.57	18.69		150.0	
		Z	3.16	71.52	20.03		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.82	68.06	18.36	3.01	150.0	± 9.6 %
		Y	1.98	64.12	17.12		150.0	
		Z	2.56	66.70	17.81		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	3.74	73.65	20.71	3.01	150.0	± 9.6 %
		Y	1.95	66.53	18.65		150.0	
		Z	3.13	71.32	19.91		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.39	71.59	19.23	3.01	150.0	±9.6 %
		Y	1.82	65.39	17.45		150.0	
		Z	2.87	69.52	18.50		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.08	69.55	17.88	3.01	150.0	± 9.6 %
		Y	1.72	64.21	16.33		150.0	
		Z	2.64	67.75	17.21		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.81	68.04	18.35	3.01	150.0	± 9.6 %
		Y	1.97	64.11	17.12		150.0	
		Z	2.56	66.68	17.80	<u> </u>	150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.73	73.62	20.70	3.01	150.0	±9.6 %
		Y	1.95	66.51	18.64		150.0	
		Z	3.13	71.29	19.90		150.0	L
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.07	69.53	17.87	3.01	150.0	± 9.6 %
		Y	1.72	64.19	16.32		150.0	
		Z	2.64	67.72	17.20		150.0	

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10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.82	68.08	18.37	3.01	150.0	± 9.6 %
		Y	1.98	64.13	17.13	<u> </u>	150.0	
		Z	2.56	66.72	17.83		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	3.75	73.70	20.74	3.01	150.0	± 9.6 %
		Y	1.96	66.56	18.67		150.0	
		Z	3.14	71.36	19.94		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	3.09	69.60	17.91	3.01	150.0	± 9.6 %
		Y	1.73	64.23	16.35		150.0	
10187-		Z	2.65	67.78	17.23		150.0	
CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.83	68.13	18.43	3.01	150.0	± 9.6 %
		Y	1.99	64.22	17.23		150.0	
10188-		Z	2.57	66.77	17.89		150.0	
CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.88	74.41	21.15	3.01	150.0	± 9.6 %
		Y	1.98	66.86	18.93		150.0	
10189-		<u>Z</u>	3.23	71.97	20.32		150.0	
AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.15	70.02	18.19	3.01	150.0	± 9.6 %
	+	Y	1.74	64.44	16.55		150.0	
10193-	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	Z	2.70	68.15	17.50		150.0	
CAB	BPSK)	X	4.57	66.79	16.35	0.00	150.0	± 9.6 %
		Y	4.14	67.99	16.59		150.0	
10194-	IEEE 802.11n (HT Greenfield, 39 Mbps,	Z	4.54	66.72	16.28		150.0	
<u>CAB</u>	16-QAM)	X	4.75	67.11	16.47	0.00	150.0	±9.6 %
		Y	4.22	68.00	16.68		150.0	
10195-		Z	4.70	67.02	16.41		150.0	
CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.79	67.14	16.49	0.00	150.0	± 9.6 %
	<u>+ </u>	Y	4.23	67.92	16.65		150.0	
10196-		Z	4.74	67.05	16.43		150.0	
CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.86	16.37	0.00	150.0	± 9.6 %
		Y	4.11	67.92	16.54		150.0	
10197-		Z	4.54	66.78	<u>16.3</u> 0		150.0	
CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	×	4.76	67.13	16.48	0.00	150.0	±9.6 %
		Y	4.23	68.00	16. <u>6</u> 9		150.0	
10100		Z	4.71	67.04	16.42		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.79	67.15	16.50	0.00	150.0	± 9.6 %
		Y	4.22	67.91	16.64		150.0	
10219-		Z	4.74	67.07	16.44		150.0	
CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.53	66.88	16.34	0.00	150.0	± 9.6 %
		Y	4.08	68.06	16.58		150.0	
10220-		Z	4.49	66.80	16.27		150.0	
CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.76	67.10	16.47	0.00	150.0	± 9.6 %
		Y	4.22	67.96	16.67	-	150.0	
10221-	IEEE 902 11p (IIT Mixed 70.0 Mixed 04	Z	4.71	67.01	16.41		150.0	
CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.80	67.08	16.48	0.00	150.0	± 9.6 %
	<u> </u>	Y	4.25	67.92	16.65		150.0	
10222-	IFEE 802 11p /UT Minod 45 Minor	Z	4.75	67.00	16.42		150.0	
<u>CAB</u>	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.12	67.23	16.57	0.00	150.0	± 9.6 %
	<u>+</u>	Y	4.67	67.48	16.77		150.0	
		Ζ	5.09	<u>67.</u> 14	16.52		150.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.42	67.42	16.68	0.00	150.0	± 9.6 %
CAB	QAM)	Y	4.05	07.57	40.77		450.0	
	+		4.85	67.57	16.77		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	Z X	<u>5.40</u> 5.17	67.40 67.35	16.67 16.56	0.00	<u>150.0</u> 150.0	± 9.6 %
		T	4.71	67.68	16.79		150.0	
		z	5.13	67.25	16.51		150.0	
10225- CAB	UMTS-FDD (HSPA+)	×	2.87	66.58	15.73	0.00	150.0	± 9.6 %
		Y	2.38	67.09	13.98		150.0	
		Z	2.82	66.38	15.50		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	9.50	87.34	24.24	6.02	65.0	± 9.6 %
		_ Y _	2.34	72.67	20.10		65.0	
		Z	6.98	84.60	23.83		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	8.72	84.77	22.80	6.02	65.0	± 9.6 %
		Y	2.21	71.55	18.95		65.0	
		Z	6.78	83.00	22.65		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	7.70	87.24	26.02	6.02	65.0	± 9.6 %
		Y	2.35	71.63	21.26		65.0	
		Z	5.43	82.72	24.92		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	9.03	86.38	23.83	6.02	65.0	± 9.6 %
		Y	2.27	72.06	19.75		65.0	
		Z	6.67	83.69	_23.42		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	8.29	83.90	22.43	6.02	65.0	± 9.6 %
		Y	2.13	70.90	18.60		65.0	
		Z	6.44	82.12	22.26		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	7.38	86.38	25.64	6.02	65.0	± 9.6 %
		Y	2.30	71.12	20.95		65.0	
		Z	5.24	81.97	24.56		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	9.02	86.36	23.83	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.75		65.0	
		Z	6.65	83.67	23.41		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	8.28	83.89	22.42	6.02	65.0	± 9.6 %
		Y	2.13	70.87	18.59		65.0	
		Z	6.43	82.09	22.25		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	7.10	85.54	25.23	6.02	65.0	± 9.6 %
		Y	2.26	70.79	20.68		65.0	
		Z	5.08	81.30	24.19		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	9.02	86.38	23.84	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.76		65.0	ļ
		Z	6.65	83.69	23.42		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	8.34	83.99	22.45	6.02	65.0	± 9.6 %
		Y	2.15	70.97	18.63		65.0	ļ
		Z	6.48	82.21	22.28		65.0	
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	7.38	86.43	25.66	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	L
		Z	5.24	82.00	24.57		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.00	86.33	23.82	6.02	65.0	± 9.6 %
		Y	2.26	72.03	19.74		65.0	
		Z	6.63	83.64	23.40		65.0	

10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	8.25	83.86	22.41	6.02	65.0	± 9.6 %
		Y	2.13	70.85	18.59		65.0	1
		Ż	6.41	82.06	22.24		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	7.36	86.38	25.64	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	
	·	Ζ	5.22	81.96	24.56		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	7.65	78.90	23.86	6.98	65.0	± 9.6 %
		Y	4.15	74.63	23.03		65.0	
		Z	6.65	77.23	23.41		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	х	7.40	78.25	23.51	6.98	65.0	± 9.6 %
		Y	3.84	73.21	22.33		65.0	
		Z	6.07	75.38	22.52		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	6.13	75.50	23.22	6.98	65.0	± 9.6 %
·		Y	3.68	71.24	22.18		65.0	
		Z	5.17	72.72	22.17		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	×	4.96	71.78	16.23	3.98	65.0	± 9.6 %
		Y	1.47	60.59	6.86		65.0	
1001		Z	4.27	70.57	15.63		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	×	4.90	71.39	16.01	3.98	65.0	± 9.6 %
		Y	1.47	60.48	6.73		65.0	
		Z	4.22	70.14	15.39		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	4.94	75.03	17.94	3.98	65.0	± 9.6 %
		Y	1.46	62.04	8.51		65.0	
		Z	4.23	73.72	17.40		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.94	72.43	17.57	3.98	65.0	± 9.6 %
		Y	2.10	63.24	9.90		65.0	
		Z	4.38	71.34	17.07		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	4.96	72.03	17.39	3.98	65.0	± 9.6 %
		Y	2.10	62.93	9.72		65.0	
		Z	4.40	70.92	16.87		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	6.07	78.35	20.13	3.98	65.0	± 9.6 %
		Y	2.33	67.19	12.94		65.0	
		Z	5.28	77.21	19.80		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	5.95	75.24	20.37	3.98	65.0	±9.6%
		Y	3.82	70.93	16.95		65.0	
		Z	5.33	74.14	20.02		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	5.69	73.28	19.20	3.98	65.0	± 9.6 %
		Y	3.45	68.36	15.25		65.0	
		Z	5.13	72.25	18.83		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	×	6.58	78.88	21.28	3.98	65.0	± 9.6 %
		Y	4.11	75.12	18.99		65.0	
		Z	5.80	77.80	21.07		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	5.80	72.65	19.29	3.98	65.0	± 9.6 %
		Y	4.01	69.64	16.98		65.0	•
		Z	5.29	71.67	18.98		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.17	73.58	20.02	3.98	65.0	± 9.6 %
		Y	4.31	70.68	17.76		65.0	1
		Z	5.63	72.60	19.71		65.0	1

10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	6.29	76.23	20.52	3.98	65.0	± 9.6 %
CAC	QPSK)	Y	- 4 4 4	74.07	40.40			
			4.41	74.27	19.43		65.0	
10256-	LTE-TDD (SC-FDMA, 100% RB, 1.4	Z	5.67	75.30	20.34		65.0	
CAA	MHz, 16-QAM)	X	3.88	68.28	13.63	3.98	65.0	± 9.6 %
		Y	1.05	58.86	4.54		65.0	
40057		Z	3.28	66.95	12.85		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.85	67.85	13.35	3.98	65.0	±9.6 %
		Y	1.05	58.75	4.36		65.0	
40050		Z	3.25	66.51	12.54		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	3.78	70.85	15.35	3.98	65.0	± 9.6 %
		Y	1.11	60.00	5.99		65.0	
		Z	3.18	69.35	14.58		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	5.33	73.49	18.59	3.98	65.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.60	65.55	12,14		65.0	
		Z	4.76	72.43	18.16		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	5.38	73.29	18.52	3.98	65.0	±9.6 %
		Y	2.62	65.36	12.01		65.0	
		Z	4.80	72.23	18.08		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	6.02	77.89	20.37	3.98	65.0	± 9.6 %
		Y	2.87	69.70	14.96		65.0	
		Z	5.26	76.76	20.06		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	5.94	75.19	20.32	3.98	65.0	±9.6 %
		Y	3.80	70.83	16.88		65.0	
		Z	5.32	74.09	19.98		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	5.68	73.26	19.19	3.98	65.0	± 9.6 %
		Y	3.45	68.35	15.24		65.0	
		Z	5.12	72.23	18.82		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	6.52	78.70	21.19	3.98	65.0	± 9.6 %
		Y	4.06	74.89	18.86		65.0	
		Ż	5.75	77.62	20.97		65.0	· · · · · · · · · · · · · · · · · · ·
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.92	73.14	19.52	3.98	65.0	± 9.6 %
0/10		Y	4.14	70.23	17.64		65.0	
		Z	5.38	72.12	19.20		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	6.31	74.13	20.31	3.98	65.0	± 9.6 %
		Y	4.49	71.50	18.60	-	65.0	
	1	z	5.75	73.12	20.02	İ	65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.54	76.70	20.49	3.98	65.0	±9.6 %
		Y	4.64	75.05	19.89		65.0	
		z	5.90	75.83	20.35		65.0	1
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.58	73,24	19.99	3.98	65.0	± 9.6 %
55		Y	4.89	71.06	18.92		65.0	
40000		Z	6.05	72.29	19.72	0.00	65.0	100%
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.56	72.88	19.90	3.98	65.0	± 9.6 %
		Y	4.96	70.94	18.86		65.0	
			6.05	71.95	19.63		65.0	
10270-	LTE-TDD (SC-FDMA, 100% RB, 15	X	6.52	74.64	19.85	3.98	65.0	±9.6 %
CAC	MHz, QPSK)							
CAC	MHz, QPSK)	Ŷ	4.97	73.67	19.72		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.66	67.03	15.70	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.34	68.55	14.63		150.0	
		z	2.62	66.83	15.48		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.75	69.41	16.56	0.00	150.0	± 9.6 %
		Y	2.02	74.91	18.12		150.0	
		Ζ	1.67	68.59	16.06		150.0	
10277- CAA	PHS (QPSK)	X	2.57	62.13	7.82	9.03	50.0	± 9.6 %
		Y	1.60	59.68	4.94		50.0	
		Z	2.26	61.44	7.11		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	4.26	69.41	14.02	9.03	50.0	± 9.6 %
		Y	2.29	61.84	7.55		50.0	
		Ζ	3.87	68.64	13.41		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	Х	4.37	69.66	14.18	9.03	50.0	± 9.6 %
		Y	2.31	61.88	7.61		50.0	
		Ζ	3.97	68.90	13.58		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	Х	1.85	72.31	15.88	0.00	150.0	± 9.6 %
		Y	0.36	60.00	5.29		150.0	
		Z	1.58	70.17	14.63		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	1.02	68.88	14.36	0.00	150.0	± 9.6 %
		Y	0.28	60.00	5.31		150.0	
		Z	0.90	67.15	13.20		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1.80	77.95	18.61	0.00	150.0	± 9.6 %
		. Y	0.38	62.69	7.21		150.0	
		Z	1.39	74.03	16.69		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	5.83	95.82	25.10	0.00	150.0	± 9.6 %
		Y	100.00	107.50	20.43		150.0	
		Z	3.54	87.74	22.15		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	х	7.34	78.85	20.80	9.03	50.0	± 9.6 %
		Y	17.07	85.10	19.02		50.0	
		Z	7.80	80.40	21.29		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.92	70.76	17.30	0.00	150.0	± 9.6 %
		Ý	2.60	72.27	18.25		150.0	
		Z	2.80	70.10	16.98		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.81	69.98	15.49	0.00	150.0	± 9.6 %
	·	Y	0.52	60.00	6.04		150.0	
		Z	1.63	68.52	14.51		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.47	68.97	14.03	0.00	150.0	± 9.6 %
		Y	0.58	60.00	4.73		150.0	
		Z	2.10	67.38	13.05		150.0	
10300- 	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.87	64.64	11.20	0.00	150.0	± 9.6 %
		Y	0.56	60.00	4.04		150.0	
		Z	1.64	63.62	10.41		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.64	64.99	17.32	4.17	50.0	± 9.6 %
		Y	3.97	66.09	16.87		50.0	
		Z	4.63	65.19	17.38		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.19	65.93	18.20	4.96	50.0	± 9.6 %
		Y	4.41	66.55	17.60		50.0	
		Z	5.08	65.68	18.02	1	50.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.95	65.59	18.05	4.96	50.0	± 9.6 %
		T Y	4.26	66.62	17.49		50.0	
		Ż	4.83	65.30	17.84		50.0	·
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.75	65.47	17.56	4.17	50.0	±9.6 %
		Y	4.05	66.34	16.93		50.0	
		Z	4.65	65.23	17.38		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.49	67.73	19.78	6.02	35.0	±9.6 %
		Y	3.71	67.28	16.67		35.0	
		Z	4.28	66.94	19.23		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.75	66.48	19.22	6.02	35.0	±9.6 %
		Y	4.04	67.06	17.49		35.0	
40007		Z	4.60	65.99	18.86		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.67	66.74	19.24	6.02	35.0	±9.6 %
		<u>Y</u>	3.93	66.99	17.33		35.0	
10000		Z	4.50	66.15	18.83		35.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.65	66.96	19.39	6.02	35.0	± 9.6 %
	·	Y	3.96	67.42	17.62		35.0	
10309-		Z	4.47	66.34	18.96	0.00	35.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.80	66.69	19.36	6.02	35.0	± 9.6 %
		Y	4.07	67.23	17.68		35.0	
40040		Z	4.64	66.17	18.98		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.70	66.58	19.22	6.02	35.0	± 9.6 %
		<u>Y</u>	4.03	67.27	17.61		35.0	
40044		Z	4.55	66.06	18.84		35.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.29	69.98	16.90	0.00	150.0	± 9.6 %
		Y	2.90	70.63	17.62		150.0	
10010		Z	3.17	69.35	16.60		150.0	
10313- AAA	iDEN 1:3	X	3.28	70.39	14.65	6.99	70.0	± 9.6 %
	·	Y	2.53	71.17	15.80		70.0	
40044		Z	2.85	70.12	14.78	40.00	70.0	
10314- AAA	iDEN 1:6	X	4.28	75.46	19.37	10.00	30.0	± 9.6 %
	· · · ·	Y	4.79	80.62	22.06		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	4.09 1.12	76.26 64.41	<u>19.99</u> 15.77	0.17	30.0 150.0	± 9.6 %
1770	Mbps, 96pc duty cycle)	Y	1.15	65.92	16.47		150.0	
		Z	1.10	63.89	15.39	<u> </u>	150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.61	66.72	16.37	0.17	150.0	± 9.6 %
		Y	4.09	67.47	16.39		150.0	
		z	4.56	66.65	16.32		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.61	66.72	16.37	0.17	150.0	± 9.6 %
		Y	4.09	67.47	16.39		150.0	
		Z	4.56	66.65	16.32		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.74	67.15	16.46	0.00	150.0	± 9.6 %
		Y	4.09	67.65	16.48		150.0	
		Z	4.69	67.06	16.40		150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.44	67.31	16.60	0.00	150.0	± 9.6 %
		Y	4.84	67.31	16.60	1	150.0	
		Z	5.42	67.27	16.57		150.0	

10402-	IEEE 802.11ac WIFi (80MHz, 64-QAM,	X	5.69	67.61	16.60	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)						ļ	
		Ύ	5.24	67.76	16.80		150.0	
10403-		Z	5.65	67.50	16.56		150.0	
AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.85	72.31	15.88	0.00	115.0	±9.6 %
		Y	0.36	60.00	5.29		115.0	
		Z	1.58	70.17	14.63		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.85	72.31	15.88	0.00	115.0	± 9.6 %
		Y	0.36	60.00	5.29		115.0	
		Z	1.58	<u>70.17</u>	14.63		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	53.12	115.17	29.24	0.00	100.0	± 9.6 %
		Y	100.00	124.65	27.76		100.0	
		Z	28.83	109.13	27.97		100.0	
10410- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.68	83.50	19.17	3.23	80.0	± 9.6 %
		Y	1.37	73.33	16.57		80.0	
		Z	5.13	82.70	19.33		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.04	63.68	15.36	0.00	150.0	± 9.6 %
		Y	1.11	65.66	16.32		150.0	
		Z	1.04	63.32	15.03		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.58	66.83	16.42	0.00	150.0	± 9.6 %
		Y	4.11	67.78	16.58		150.0	
		Ζ	4.54	66.76	16.35		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	Х	4.58	66.83	16.42	0.00	150.0	± 9.6 %
		Y	4.11	67.78	16.58		150.0	
		Z	4.54	66.76	16.35		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.57	67.00	16.44	0.00	150.0	±9.6 %
		Y	4.09	68.01	16.69		150.0	
		Z	4.53	66.93	16.39		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.59	66.94	16.44	0.00	150.0	± 9.6 %
		Y	4.11	67.93	16.65		150.0	
		Ζ	4.55	66.87	16.38		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.71	66.93	16.45	0.00	150.0	± 9.6 %
		Y	4.19	67.82	16.64		150.0	
		Z	4.66	66.86	16.39		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.87	67.25	16.56	0.00	150.0	± 9.6 %
		Y	4.27	68.04	16.70	_	150.0	
		Z	4.82	67.16	16.50		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.79	67.20	16.54	0.00	150.0	± 9.6 %
		Y	4.21	67.94	16.67		150.0	
		Z	4.74	67.12	16.47		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.39	67.48	16.69	0.00	150.0	± 9.6 %
		Y	4.86	67.72	16.85		150.0	
		Z	5.35	67.38	16.64		150.0	
10426-	IEEE 802.11n (HT Greenfield, 90 Mbps,	X	5.40	67.51	16.70	0.00	150.0	±9.6 %
AAA	10-QAM)							
AAA	16-QAM)	Y	4.89	67.85	16.91		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.41	67.49	16.68	0.00	150.0	± 9.6 %
		Y	4.87	67.71	16.83		150.0	
		Ż	5.37	67.41	16.64		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.48	71.93	18.89	0.00	150.0	± 9.6 %
		Y	5.16	77.88	19.19		150.0	
		Z	4.43	71.96	18.79		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.27	67.46	16.46	0.00	150.0	± 9.6 %
		Y	3.63	68.54	16.11		150.0	
		Z	4.21	67.36	16.35		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.56	67.28	16.50	0.00	150.0	± 9.6 %
		Υ	3.98	68.25	16.55		150.0	
40.400		Z	4.51	67.19	16.43		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.81	67.24	16.56	0.00	150.0	± 9.6 %
		Y	4.24	68.00	16.70		150.0	
10434-		Z	4.76	67.15	16.49	0.00	150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.67	73.09	18.99	0.00	150.0	± 9.6 %
·	·	Y	4.20	74.62	16.81		150.0	
10435-		Z	4.61	73.09	18.84	0.00	150.0	10.00
AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.37	82.80	18.90	3.23	80.0	± 9.6 %
		Y	1.33	72.76	16.26		80.0	
40447		Z	4.91	82.00	19.05		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.58	67.63	15.88	0.00	150.0	± 9.6 %
		Y	2.52	66.35	12.95		150.0	
		Z	3.50	67.43	15.64		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.11	67.25	16.33	0.00	150.0	± 9.6 %
		Y	3.54	68.41	16.05		150.0	
40440		Z	4.05	67.14	16.22		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.38	67.12	16.41	0.00	150.0	±9.6 %
		Y	3.87	68.13	16.50		150.0	
40450		Z	4.33	67.03	16.33		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X Y	4.57	67.02	16.42 16.59	0.00	150.0	± 9.6 %
				66.93	16.35		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	Z X	4.53 3.49	67.88	15.53	0.00	150.0	± 9.6 %
		Y	2.00	64.08	10.79		150.0	
		Z	3.38	67.58	15.21		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.26	68.00	16.81	0.00	150.0	± 9.6 %
		Y	6.16	68.95	17.43		150.0	
		Z	6.24	67.94	16.79		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.82	65.46	16.13	0.00	150.0	± 9.6 %
		Y	3.61	66.92	16.42		150.0	
		Z	3.81	65.40	16.06		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.29	67.12	14.89	0.00	150.0	± 9.6 %
		Y	1.44	60.53	7.42		150.0	
		Z	3.18	66.78	14.49		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.43	65.51	15.86	0.00	150.0	±9.6 %
		Y	2.62	61.35	10.29		150.0	
		Z	4.37	65.53	15.72		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	1.04	71.02	17.96	0.00	150.0	± 9.6 %
		Y	1.96	84.00	22.92		150.0	
10461-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X	0.97 3.48	69.34 77.15	<u>16.98</u> 17.91	3.29	150.0 80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		0.40	11.10	17.31	5.25	00.0	19.0 %
		Y	0.97	69.25	15.91		80.0	
		Ζ	2.58	75.48	17.77		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.03	60.33	8.14	3.23	80.0	± 9.6 %
		Y	0.21	55.42	3.53		80.0	
		Ż	0.84	60.00	7.93		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.01	60.00	7.51	3.23	80.0	± 9.6 %
		Y	28.36	203.22	3.05		80.0	
		Z	0.86	60.00	7.39		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.64	73.32	15.98	3.23	80.0	± 9.6 %
		Y	0.75	66.12	13.77		80.0	
		Ζ	2.03	72.11	15.91		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	х	0.99	60.00	7.91	3.23	80.0	± 9.6 %
		Y	29.96	194.97	5.15		80.0	
10100		_Z	0.84	60.00	7.86		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	1.01	60.00	7.46	3.23	80.0	± 9.6 %
		Y	30.98	196.96	1.83		80.0	
10467		Z	0.86	60.00	7.34	0.00	80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.77	73.96	16.25	3.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	0.77	66.65	14.10		80.0	
10468-		Z X	2.12	72.73	16.19	0.00	80.0	
AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)		0.99	60.08	7.96	3.23	80.0	±9.6 %
		Y	0.21	55.39	3.50		80.0	
10469-	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-	Z X	0.84	60.00 60.00	7.88 7.46	2.00	80.0	
AAB	QAM, UL Subframe=2,3,4,7,8,9)					3.23	80.0	± 9.6 %
		Y	30.66	197.41	1.31		80.0	
10470		Z	0.86	60.00	7.34	0.00	80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.76	73.94	16.23	3.23	80.0	± 9.6 %
	- <u> </u>	Y	0.77	66.67	14.10		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	2,11 0.99	72.72 60.05	<u>16.18</u> 7.93	3.23	80.0 80.0	± 9.6 %
	Gravi, OL GUDITATTE-2,3,4,7,0,7)	Y	29.34	196.18	6.49		80.0	·
	· · · · · · · · · · · · · · · · · · ·	Z	0.84	60.00	7.87	<u> </u>	80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	x	1.01	60.00	7.45	3.23	80.0	± 9.6 %
		Y	30.49	197.73	1.27		80.0	
		Z	0.86	60.00	7.33		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.76	73.90	16.22	3.23	80.0	± 9.6 %
		Y	0.77	66.63	14.08		80.0	
10.17		Z	2.11	72.69	16.16		80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.99	60.03	7.93	3.23	80.0	± 9.6 %
		Y	29.25	196.25	6.42		80.0	
10475		Z	0.84	60.00	7.87	0.00	80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	1.01	60.00	7.45	3.23	80.0	± 9.6 %
		Y	30.47	197.62	1.42		80.0	
		Z	0.86	60.00	7.33		80.0	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.98	60.00	7.89	3.23	80.0	± 9.6 %
		Y	29.49	195.72	5.56		80.0	
		Z	0.84	60.00	7.84		80.0	
10478- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	7.44	3.23	80.0	± 9.6 %
		Y	30.62	197.39	1.80		80.0	
		Z	0.86	60.00	7.32		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	3.88	74.90	18.39	3.23	80.0	± 9.6 %
		Y	2.49	77.92	19.26		80.0	
10100		Z	3.49	74.59	18.40		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.37	69.78	14.78	3.23	80.0	± 9.6 %
		Y	0.68	60.27	8.31		80.0	
40404		Z	2.92	69.11	14.47		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.92	67.65	13.55	3.23	80.0	± 9.6 %
		Y	0.66	60.00	7.51		80.0	
40400		Z	2.50	66.84	13.14	0.00	80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.52	68.86	15.13	2.23	80.0	± 9.6 %
		Y_	0.83	60.00	6.91		80.0	
10483-		Z	2.14	67.39	14.41		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.86	67.07	13.71	2,23	80.0	± 9.6 %
		Y	1.05	60.00	5.62		80.0	
10404		Z	2.44	65.81	13.01	0.00	80.0	
10484- 	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.80	66.60	13.51	2.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.07	60.00	5.60		80.0	
10108		Z	2.40	65.34	12.79		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.96	70.85	16.91	2.23	80.0	± 9.6 %
		Y	1.17	62.58	10.56		80.0	
		Z	2.58	69.54	16.39		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.96	67.72	15.13	2.23	80.0	± 9.6 %
		Y.	1.13	60.00	7.87		80.0	
		Z	2.66	66.76	14.61		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.97	67.43	14.99	2.23	80.0	± 9.6 %
		Y	1.16	60.00	7.81		80.0	
10488-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	Z X	2.67 3.38	66.49 70.90	14.47 17.67	2.23	80.0 80.0	± 9.6 %
AAB	QPSK, UL Subframe=2,3,4,7,8,9)	<u> </u>				ļ		
		Y	2.25	69.00	16.17		80.0	ļ. .
		Z	3.02	69.76	17.29		80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.39	68.12	16.57	2.23	80.0	± 9.6 %
		Y	2.32	66.16	14.18	ļ	80.0	
		Z	3.13	67.37	16.26	-	80.0	
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.49	68.02	16.54	2.23	80.0	± 9.6 %
	1	Y	2.33	65.79	13.96		80.0	
		Z	3.23	67.30	16.25		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.68	69.90	17.42	2.23	80.0	± 9.6 %
		Y	2.62	68.57	16.67		80.0	· ·
		Z	3.36	68.97	17.13	<u> </u>	80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	3.77	67.68	16.72	2.23	80.0	± 9.6 %
		Y	2.84	66.78	15.53		80.0	
		Z	3.53	67.02	16.47		80.0	

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.84	67.59	16.70	2.23	80.0	±9.6 %
		Y	2.87	66.60	15.40		80.0	
		Z	3.60	66.95	16.45		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.93	71.14	17.78	2.23	80.0	± 9.6 %
		Y	2.77	69.47	17.23		80.0	
		Z	3.56	70.11	17.48		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.80	68.03	16.89	2.23	80.0	± 9.6 %
		Y	2.91	67.12	16.06		80.0	
		Z	3.55	67.32	16.64		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.89	67.83	16.85	2.23	80.0	± 9.6 %
		Y	2.99	66.99	16.00		80.0	
		Z	3.64	67.16	16.61		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.81	64.83	12.37	2.23	80.0	± 9.6 %
		Y	0.97	60.00	4.80		80.0	
		Z	1.52	63.38	11.47		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.56	60.98	9.46	2.23	80.0	± 9.6 %
		Y	19.60	209.65	15.97		80.0	
		Z	1.35	60.00	8.64		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.53	60.58	9.11	2.23	80.0	± 9.6 %
		Y	17.31	229.94	5.52		80.0	
		Z	1.37	60.00	8.51		80.0	1
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.10	70.67	17.16	2.23	80.0	± 9.6 %
		Y	1.60	65.48	12.91		80.0	
		Z	2.73	69.49	16.71		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.16	67.97	15.73	2.23	80.0	± 9.6 %
		Y	1.34	60.72	9.33		80.0	
		Z	2.88	67.15	15.31		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.22	67.87	15.63	2,23	80.0	± 9.6 %
		Y	1.33	60.43	9.07		80.0	-
		Z	2.93	67.06	15.21		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.34	70.72	17.57	2.23	80.0	± 9.6 %
		Y	2.22	68.78	16.06		80.0	
		Z	2.98	69.59	17.20		80.0	
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.37	68.03	16.51	2.23	80.0	± 9.6 %
		· · · T	0.00	1 00 04	44.00		80.0	
		Y	2.30	66.01	14.09			
		Y Z	<u>2.30</u> 3.11	67.28	16.20		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	3.11 3.47	67.28 67.93	16.20 16.49	2.23	80.0 80.0	± 9.6 %
10505-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	Z	3.11	67.28	16.20	2.23		± 9.6 %
10505-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z	3.11 3.47	67.28 67.93	16.20 16.49	2.23	80.0	± 9.6 %
10505-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	Z X Y Z X	3.11 3.47 2.31 3.21 3.90	67.28 67.93 65.66 67.21 71.01	16.20 16.49 13.87 16.19 17.71	2.23	80.0 80.0 80.0 80.0	± 9.6 %
10505- AAB 10506-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y	3.11 3.47 2.31 3.21 3.90 2.75	67.28 67.93 65.66 67.21 71.01 69.34	16.20 16.49 13.87 16.19 17.71 17.15		80.0 80.0 80.0	
10505- AAB 10506-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X Y Z X	3.11 3.47 2.31 3.21 3.90	67.28 67.93 65.66 67.21 71.01	16.20 16.49 13.87 16.19 17.71		80.0 80.0 80.0 80.0	
10505- AAB 10506-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	Z X Y Z X Y	3.11 3.47 2.31 3.21 3.90 2.75	67.28 67.93 65.66 67.21 71.01 69.34	16.20 16.49 13.87 16.19 17.71 17.15		80.0 80.0 80.0 80.0 - 80.0	
10505- AAB 10506- AAB 10507-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10	Z X Z Z X Y Z	3.11 3.47 2.31 3.21 3.90 2.75 3.53	67.28 67.93 65.66 67.21 71.01 69.34 69.98	16.20 16.49 13.87 16.19 17.71 17.15 17.41	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.87	67.76	16.81	2.23	80.0	± 9.6 %
		Y	2.97	66.90	15.95		80.0	
		Z	3.63	67.09	16.57		80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.29	70.13	17.39	2.23	80.0	±9.6 %
		Ŷ	3.19	68.68	17.10		80.0	
		Z	3.96	69.31	17.16		80.0	
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.29	67.87	16.94	2.23	80.0	± 9.6 %
		Y	3.35	66.74	16.37		80.0	
		Z	4.04	67.22	16.73		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.35	67.67	16.90	2.23	80.0	± 9.6 %
		Y	3.43	66.67	16.35		80.0	
		Z	4.11	67.05	16.70		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.41	71.37	17.74	2.23	80.0	± 9.6 %
		Y	3.20	69.31	17.29		80.0	
		Z	4.03	70.41	17.47		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.17	68.08	17.01	2.23	80.0	± 9.6 %
		Y	3.27	66.70	16.44		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	3.92 4.20	67.38 67.73	16.78 16.93	2.23	80.0 80.0	± 9.6 %
	Subirame=2,3,4,7,6,9)	Y	3.34	66.53	16.38		80.0	
		Z	<u> </u>	67.07	16.71		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.01	63.92	15.46	0.00	150.0	± 9.6 %
7001		Y	1.07	66.05	16.52		150.0	
		Ż	1.00	63.52	15.11		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.80	76.03	20.57	0.00	150.0	± 9.6 %
		Y	1.63	90.26	26.95		150.0	
		Z	0.67	72.14	18.59		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.88	66.52	16.52	0.00	150.0	± 9.6 %
		Y	0.99	69.72	18.29		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	0.86 4.57	65.67 66.91	15.91 16.40	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	4.10	67.98	16.63		150.0	
	··· · · · · · · · · · · · · · · · · ·	Ż	4.53	66.84	16.34		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.75	67.14	16.51	0.00	150.0	± 9.6 %
		Y	4.20	68.09	16.69		150.0	
		Z	4.70	67.05	16.44		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.61	67.11	16.44	0.00	150.0	± 9.6 %
		Y	4.07	67.97	16.60		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.56 4.54	67.01 67.11	16.37 16.43	0.00	150.0 150.0	± 9.6 %
1111		Y	4.00	67.83	16.53		150.0	
		z	4.49	67.00	16.36	<u>+-</u>	150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.60	67.20	16.52	0.00	150.0	± 9.6 %
		Y	4.00	67.82	16.53	I	150.0	
		Z	4.55	67.12	16.45		150.0	

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10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.49	67.08	16.37	0.00	150.0	± 9.6 %
		Y	4.01	68.16	16.68		150.0	1
		Z	4.44	67.01	16.31		150.0	
10524- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.54	67.12	16.48	0.00	150.0	± 9.6 %
		Y	3.97	67.92	16.63		150.0	
		Z	4.49	67.03	16.42		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.54	66.18	16.08	0.00	150.0	± 9.6 %
	·	Y	4.09	67.26	16.38		150.0	
48-00		Z	4.50	66.10	16.02		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.71	66.55	16.22	0.00	150.0	± 9.6 %
		Y	4.14	67.37	16.43		150.0	
40507		Z	4.65	66.45	16.16		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duly cycle)	X	4.63	66.51	16.17	0.00	150.0	± 9.6 %
		Y.	4.11	67.44	16.42		150.0	
		Z	4.58	66.41	16.10		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.64	66.53	16.20	0.00	150.0	± 9.6 %
	·	Y	<u> 4.10 </u>	67.35	16.39		150.0	
		Z	4.59	66.42	16.13		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.64	66.53	16.20	0.00	150.0	± 9.6 %
		Y	4.10	67.35	16.39		150.0	
		Z	4.59	66.42	16.13		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.64	66.64	16.22	0.00	150.0	± 9.6 %
		Y	4.06	67.36	16.37		150.0	
		Z	4.58	66.51	16.14		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.50	66.50	16.16	0.00	150.0	± 9.6 %
		Y.	3.98	67.28	16.33		150.0	
		Z	4.44	66.37	16.07		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.65	66.58	16.19	0.00	150.0	± 9.6 %
		Y	4.11	67.58	16.46		150.0	
		Z	4.60	66.49	16.13		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.17	66.59	16.23	0.00	150.0	± 9.6 %
		Y	4.70	66.96	16.45		150.0	
		Z	5.13	66.48	16.18		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.77	16.31	0.00	150.0	± 9.6 %
		Y	4.70	67.00	16.48		150.0	
		Z	5.20	66.68	16.26		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.73	16.27	0.00	150.0	± 9.6 %
		Y	4.62	67.02	16.47		150.0	
		Z	5.07	66.63	16.22		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.17	66.69	16.25	0.00	150.0	± 9.6 %
		Y	4.71	67.16	16.55		150.0	
10520		Z	5.13	66.59	16.20		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.26	66.70	16.30	0.00	150.0	± 9.6 %
	+	Υ	4.72	66.92	16.45		150.0	
40546		Z	5.21	66.59	16.24		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.73	16.33	0.00	150.0	± 9.6 %
<u> </u>		Ϋ́	4.66	66.87	16.46		150.0	
		Z	5.14	66.60	16.27		150.0	

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10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.16	66.59	16.25	0.00	150.0	± 9.6 %
7991		Y	4.67	66.90	16.44	<u> </u>	150.0	
		z	5.12	66.48	16.19		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.31	66.65	16.29	0.00	150.0	±9.6%
		Y	4.80	66.97	16.49		150.0	
		Z	5.27	66.55	16.25		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.39	66.68	16.33	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.85	67.01	16.54		150.0	
40544		Z	5.34	66.57	16.28		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duly cycle)	X	5.48	66.68	16.21	0.00	150.0	± 9.6 %
· · -		Υ Υ	5.09	66.77	16.36		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	Z	5.46	66.59	16.17		150.0	
AAA	99pc duty cycle)	X	5.68	67.10	16.37	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.20	67.11	16.51		150.0	
10546-		Z	5.65	67.02	16.33	0.00	150.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.55	66.89	16.28	0.00	150.0	± 9.6 %
		Y	5.10	66.84	16.37		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z	5.51	66.77	16.22	0.00	150.0	
AAA	99pc duty cycle)	X	5.62	66.93	16.29	0.00	150.0	±9.6%
		Y	5.22	67.15	16.53		150.0	
10548-		Z	5.58	66.82	16.24	0.00	150.0	
AAA	IEEE 802.11ac WIFi (80MHz, MCS4, 99pc duty cycle)	X	5.87	67.85	16.72	0.00	150.0	± 9.6 %
		Y	5.13	67.04	16.46		150.0	
40550		Z	5.82	67.71	16.65		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.91	16.30	0.00	150.0	±9.6 %
		Y	5.24	67.42	16.68		150.0	
10551-			5.55	66.83	16.27	0.00	150.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.96	16.28	0.00	150.0	± 9.6 %
		Y -	5.07	66.77	16.33		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	Z X	5.54 5.50	66.84 66.76	16.2 <u>3</u> 16.19	0.00	150.0 150.0	± 9.6 %
1001		Y	5.09	66.99	16.43		150.0	
		z	5.47	66.66	16.15		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.78	16.23	0.00	150.0	± 9.6 %
		Y	5.11	66.82	16.35		150.0	
		Z	5.54	66.67	16.18		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.89	67.03	16.29	0.00	150.0	± 9.6 %
		Y	5.55	66.98	16.39		150.0	
		Z	5.87	66.94	16.25		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.02	67.33	16.41	0.00	150.0	± 9.6 %
		Y	5.61	67.17	16.48		150.0	
		Z	5.99	67.24	16.37		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duly cycle)	X	6.04	67.38	16.43	0.00	150.0	± 9.6 %
		Y	5.65	67.28	16.52		150.0	
		Z	6.02	67.29	16.39		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duly cycle)	X	6.01	67.28	16.40	0.00	150.0	± 9.6 %
		Y	5.60	67.14	16.47		150.0	
		Z	5.97	67.17	16.35		150.0	

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10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.05	67.44	16.50	0.00	150.0	± 9.6 %
		Y	5.55	67.02	16.43		150.0	
		Z	6.02	67.33	16.43		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.05	67.29	16.46	0.00	150.0	± 9.6 %
		Y	5.59	67.02	16.46		150.0	
		Z	6.01	67.17	16.41		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.97	67.26	16.48	0.00	150.0	± 9.6 %
		Y	5.53	66.98	16.46		150.0	
		Z	5.94	67.16	16.44		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.09	67.63	16.67	0.00	150.0	± 9.6 %
		Y	5.59	67.19	16.57		150.0	
40500		Z	6.05	67.48	16.60		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duly cycle)	X	6.29	67.85	16.73	0.00	150.0	±9.6 %
· · ·		Y	5.86	67.78	16.84		150.0	
40501		Z	6.16	67.47	16.55		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.89	66.92	16.50	0.46	150.0	±9.6 %
		Y	4.37	67.73	16.65		150.0	
40505		Z	4.84	66.85	16.44		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.12	67.38	16.83	0.46	150.0	±9.6 %
		Y	4.53	68.17	16.98		150.0	
		Ž	5.07	67.30	16.78		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.95	67.23	16.64	0.46	150.0	± 9.6 %
		Y	4.37	67.89	16.75		150.0	
		Z	4.90	67.13	16.58		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.98	67.65	17.02	0.46	150.0	± 9.6 %
		Y	4.44	68.37	17.19		150.0	
		Z	4.94	67.56	16.97		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.85	66.96	16.38	0.46	150.0	±9.6 %
		Y	4.20	67.26	16.25		150.0	
		Z	4.80	66.87	16.32		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.94	67.75	17.08	0.46	150.0	± 9.6 %
		Y	4.45	68.76	17.43		150.0	
		Z	4.90	67.68	17.04		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.98	67.59	17.02	0.46	150.0	± 9.6 %
		<u> Y</u>	4.39	68.33	17.21		150.0	l
40554		Z	4.93	67.52	16.97		150.0	L
10571- 	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.19	64.81	15.85	0.46	130.0	± 9.6 %
		Y	1.17	65.59	16.16		130.0	L
10575		Z	1.15	64.12	15.44		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.21	65.43	16.24	0.46	130.0	± 9.6 %
		Ý	1.18	66.27	16.61		130.0	
105-5		Z	1.17	64.67	15.80		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.73	90.43	24.99	0.46	130.0	± 9.6 %
		Υ	2.86	95.55	28.03		130.0	
		Z	1.51	81.07	21.85		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	X	1.39	72.10	19.60	0.46	130.0	± 9.6 %
		Y	1.35	73.36	20.46		130.0	
		Z	1.26	70.26	18.73	1	130.0	t

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10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
	OFDM, 6 Mbps, 90pc duty cycle)					0.40	100.0	± 0.0 %
		Y	4.13	67.33	16.45		130.0	
10576-		Z	4.61	66.55	16.40		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	± 9.6 %
		Y	4.17	67.68	16.63		130.0	
10577-		Z	4.64	66.73	16.48		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	Z X	4.83	67.01 67.27	16.65 16.82	0.46	130.0 130.0	± 9.6 %
	or bin, to hipps, sope duty cycle)	Y	4.22	68.05	16.92		130.0	
		z	4.73	67.18	16.92		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.53	66.48	16.08	0.46	130.0	± 9.6 %
		Y	3.91	66.80	15.89		130.0	
		Z	4.48	66.37	16.01	-	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
		Y	3.89	66.66	15.78		130.0	
		Z	4.53	66.42	16.03		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	67.30	16.76	0.46	130.0	±9.6 %
		Y	4.14	68.18	16.94		130.0	
10500		Z	4.63	67.21	16.71		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duly cycle)	X	4.47	66.23	15.85	0.46	130.0	±9.6 %
		Y	3.80	66.45	15.61		130.0	
10500		Z	4.42	66.12	15.78		130.0	
10583- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
		Y	4.13	67.33	16.45		<u>130.</u> 0	
40504		Z	4.61	66.55	16.40		130.0	
10584- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	±9.6 %
		Y	4.17	67.68	16.63		130.0	
40505		Z	4.64	66.73	16.48		130.0	
10585- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	Z X	<u>4.83</u> 4.78	67.01 67.27	16.65 16.82	0.46	130.0 130.0	± 9.6 %
		Y	4.22	68.05	16.92		130.0	
		z	4.73	67.18	16.77		130.0	·
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.53	66.48	16.08	0.46	130.0	±9.6 %
		Y	3.91	66.80	15.89		130.0	
		Z	4.48	66.37	16.01		130.0	
10588- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
· · ·		Y	3.89	66.66	15.78		130.0	
40500		Z	4.53	66.42	16.03		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	67.30	16.76	0.46	130.0	±9.6 %
		<u>Y</u>	4.14	68.18	16.94		130.0	
10500		Z	4.63	67.21	16.71	-	130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	×	4.47	66.23	15.85	0.46	130.0	± 9.6 %
		Y	3.80	66.45	15.61		130.0	
_		Z	4.42	66.12	15.78		130.0	

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10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.80	66.69	16.56	0.46	130.0	± 9.6 %
AAA	MCS0, 90pc duly cycle)	-	1.00	0= 15				
		Y	4.29	67.48	16.65		130.0	
40500		Z	4.76	66.62	16.52		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duly cycle)	X	4.96	67.02	16.69	0.46	130.0	± 9.6 %
		Y	4.35	67.66	16.74		130.0	
		Z	4.91	66.95	16.65		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.87	66.92	16.57	0.46	130.0	± 9.6 %
		Y	4.28	67.58	16.60		130.0	
		Z	4.82	66.84	16.52		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.93	67.10	16.73	0.46	130.0	± 9.6 %
		Y	4.32	67.69	16.75		130.0	
		Z	4.88	67.02	16.68		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.90	67.04	16.62	0.46	130.0	±9.6 %
		Y	4.28	67.67	16.66		130.0	
		Z	4.85	66.97	16.57		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.83	67.04	16.62	0.46	130.0	± 9.6 %
		Y	4.19	67.48	16.58		130.0	
		Z	4.78	66.95	16.57		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.78	66.93	16.50	0.46	130.0	± 9.6 %
		Y	4.17	67.42	16.44		130.0	
		Z	4.73	66.84	16.44		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.77	67.20	16.78	0.46	130.0	± 9.6 %
		Y	4.23	67.87	16.85		130.0	<u> </u>
		Z	4.72	67.09	16.72		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.48	67.23	16.77	0.46	130.0	±9.6 %
		Y	5.11	68.05	17.18		130.0	
		Z	5.44	67.15	16.74		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.60	67.61	16.93	0.46	130.0	± 9.6 %
		Y	5.02	67.79	17.02		130.0	
		Z	5.57	67.57	16.91		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.49	67.38	16.83	0.46	130.0	± 9.6 %
		Y	4.99	67.77	17.04		130.0	
		Ż	5.46	67.31	16.81		130.0	· · · ·
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duly cycle)	X	5.59	67.40	16.75	0.46	130.0	±9.6 %
		Y	5.00	67.54	16.84		130.0	
		Ż	5.57	67.40	16.76		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.67	67.72	17.05	0.46	130.0	± 9.6 %
		Y	5.02	67.69	17.07		130.0	1
	· · · · ·	Ż	5.64	67.68	17.04		130.0	· ·
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duly cycle)	X	5.49	67.21	16.78	0.46	130.0	± 9.6 %
· · ·		Y	5.00	67.56	16.96		130.0	1
		Ż	5.49	67.27	16.82		130.0	1
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.59	67.50	16.92	0.46	130.0	± 9.6 %
		Y	4.95	67.41	16.89		130.0	
	·	Ż	5.56	67.47	16.92	1	130.0	
						+ - 		1
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duly cycle)	X	5.33	66.83	16.44	0.46	130.0	± 9.6 %
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duly cycle)		5.33 4.96	66.83 67.58	16.44 16.81	0.46	130.0	± 9.6 %

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10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	ТхТ	4.64	66.02	16.19	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)			CONDE	10.10	0.40	100.0	10.070
		Y	4.16	66.91	16.36		130.0	
		Z	4.60	65.95	16.15		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.83	66.42	16.36	0.46	130.0	± 9.6 %
		Y	4.22	67.08	16.44		130.0	
		Z	4.78	66.34	16.31		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.71	66.26	16.19	0.46	130.0	± 9.6 %
		Y Y	4.14	66.94	<u>16.27</u>		130.0	
40040		Z	4.67	66.17	16.14		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.77	66.42	16.36	0.46	130.0	± 9.6 %
		Y	4.18	67.09	16.43		130.0	
		Z	4.72	66.34	16.31		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	×	4.68	66.22	16.20	0.46	130.0	± 9.6 %
		Y	<u>4.10</u>	<u>66.8</u> 7	16.26		130.0	
4004-		Z	4.63	66.13	16.14		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	×	4.69	66.36	16.23	0.46	130.0	± 9.6 %
		Y	4.03	66.77	16.18		130.0	
		Z	4.63	66.26	16.18		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.69	66.24	16.12	0.46	130.0	± 9.6 %
		Y	4.05	66.68	16.06		130.0	
		Z	4.63	66.13	16.05		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.64	66.46	16.37	0.46	130.0	± 9.6 %
		Y	4.09	67.10	16.44		130.0	
		Z	4.59	66.36	16.31		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.68	66.02	15.96	0.46	130.0	± 9.6 %
		Y	4.06	66.66	15.97		130.0	
		Z	4.62	65.94	15.90	-	130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.29	66.48	16.38	0.46	130.0	± 9.6 %
		Y	4.78	66.74	16.52		130.0	
		Z	5.26	66.40	16.35		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.36	66.65	16.44	0.46	130.0	± 9.6 %
		Y	4.78	66.75	16.51		130.0	
		Z	5.33	66.60	16.42		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.25	66.67	16.46	0.46	130.0	± 9.6 %
		Y	4.72	66.85	16.58		130.0	
		Z	5.21	66.61	16.44		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.26	66.46	16.29	0.46	130.0	± 9.6 %
		Y	4.77	66.81	16.49		130.0	
		Z	5.22	66.38	16.26		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.35	66.50	16.36	0.46	130.0	± 9.6 %
		Y	4.78	66.60	16.41		130.0	
		Z	5.31	66.41	16.33		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.35	66.65	16.56	0.46	130.0	± 9.6 %
		Y	4.83	66.85	16.68		130.0	
		_ Z	5.32	66.59	16.54		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duly cycle)	X	5.37	66.81	16.63	0.46	130.0	± 9.6 %
		Y	4.79	66.84	16.68		130.0	
		Z	5.33	66.74	16.61	l	130.0	

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10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.24	66.32	16.25	0.46	130.0	± 9.6 %
		Y	4.72	66.50	16.34		130.0	
		z	5.20	66.24	16.22		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.43	66.52	16.42	0.46	130.0	± 9.6 %
		Y	4.88	66.72	16.52		130.0	
		Z	5.40	66.45	16.39		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.79	67.47	16.94	0.46	130.0	± 9.6 %
		Y	5.00	67.06	16.76		130.0	
		Z	5.70	67.26	16.85		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.59	66.53	16.33	0.46	130.0	± 9.6 %
		Y	5.18	66.57	16.44		130.0	
40007		Z	5.56	66.46	16.31		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duly cycle)	X	5.83	67.09	16.57	0.46	130.0	± 9.6 %
		Y	5.32	67.03	16.66		130.0	
40000		Z	5.81	67.05	16.57		130.0	<u> </u>
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.62	66.61	16.26	0.46	130.0	± 9.6 %
		Y	5.14	66.45	16.28		130.0	
40600		Z	5.58	66.50	16.22		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.69	66.66	16.28	0.46	130.0	± 9.6 %
		Y	5.30	66.90	16.51		130.0	
40000		Z	5.66	66.57	16.25		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.12	68.14	17.02	0.46	130.0	± 9.6 %
		Ý	5.23	66.85	16.50		130.0	
		Z	6.06	67.97	16.95		130.0	
10631- AAA	IEEE 802.11ac WIFi (80MHz, MCS5, 90pc duty cycle)	X	6.03	67.99	17.15	0.46	130.0	±9.6 %
		Y	5.35	67.44	17.00		130.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.98	67.84	17.09		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.80	67.18	16.76	0.46	130.0	± 9.6 %
		Y	5.50	67.84	17.20		130.0	
		Z	<u>5.</u> 78	67.15	16.76		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	X	5.68	66.78	16.38	0.46	130.0	±9.6 %
		Y	<u>5.16</u>	66.59	16.40		130.0	
		Z	5.65	66.69	16.35		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.67	66.82	16.47	0.46	130.0	±9.6 %
		Y	5.24	66.99	16.65		130.0	
		Z	5.63	66.72	16.43		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.54	66.10	15.82	0.46	130.0	± 9.6 %
		Y	5.01	65.92	15.79		130.0	
		Ζ	5.50	65.99	15.78		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.00	66.89	16.41	0.46	130.0	± 9.6 %
		Y	5.65	66.81	16.48		130.0	
1000-		Z	5.98	66.82	16.39	<u> </u>	130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.16	67.27	16.58	0.46	130.0	±9.6 %
		Y	5.75	67.13	16.64		<u>1</u> 30.0	
		Z	6.14	67.21	16.57		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duly cycle)	X	6.15	67.24	16.55	0.46	130.0	±9.6 %
		Ý	<u>5.76</u>	67.17	16.64		130.0	
		Z	6.13	67.17	16.53		130.0	

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.13	67.20	16.57	0.46	130.0	± 9.6 %
		Y	5.71	67.01	16.60		130.0	·
		Z	6.11	67.11	16.54	<u> </u>	130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.13	67.19	16.51	0.46	130.0	± 9.6 %
		Y	5.60	66.69	16.38		130.0	
		Z	6.11	67.10	16.47		130.0	· · · ·
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duly cycle)	X	6.18	67.10	16.48	0.46	130.0	± 9.6 %
		Y	5.73	66.87	16.49		130.0	
		Z	6.17	67.05	16.47		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.23	67.38	16.79	0.46	130.0	± 9.6 %
		Y	5.75	67.07	16.76		130.0	
		Z	6.20	67.30	16.77		130.0	
10643- 	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.06	67.04	16.51	0.46	130.0	± 9.6 %
		Y	5.58	66.67	16.43		130.0	
·		Z	6.04	66.97	16.50		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.22	67.52	16.78	0.46	130.0	± 9.6 %
		Y	5.68	67.01	16.62		130.0	
		Z	6.17	67.37	16.71		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.52	68.03	16.98	0.46	130.0	± 9.6 %
		Y	6.07	67.95	17.07		130.0	
		Z	6.34	67.53	16.76		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	13.12	97.57	31.83	9.30	60.0	± 9.6 %
··		Y	3.90	78.39	26.30		60.0	
		Z	9.88	93.63	31.05		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	12.04	96.40	31.56	9.30	60.0	±9.6 %
		Y	3.54	76.66	25.68		60.0	
		Z	8.93	92.04	30.63		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.77	65.21	11.99	0.00	150.0	± 9.6 %
		Y	0.27	60.00	4.67		150.0	
		Z	0.71	64.17	11.12		150.0	

^E 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





S Schweizerischer Kallbrierdienst

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 - 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

Certificate No: ES3-3213_Feb17

BN17 63-01-2017

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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 G 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

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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

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 E²-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) ²) ^A	1.44	1.32	1.29	± 10.1 %
DCP (mV) ^B	101.3	102.3	101.6	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	С	D	VR	Unc ^E
			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%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

⁶ Numerical linearization parameter: uncertainty not required. ^E 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) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (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

^c 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.

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) 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 (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

⁶ 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.

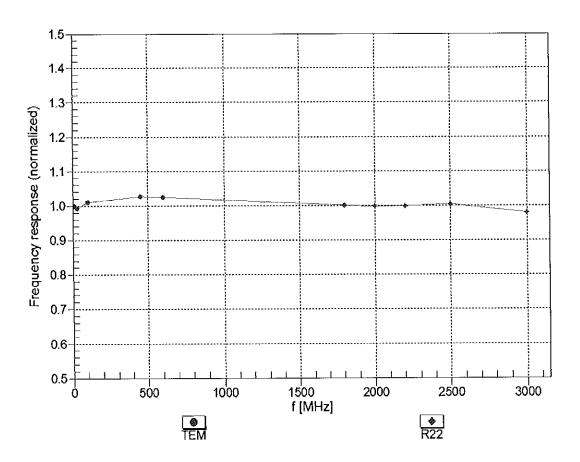
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.38	6.38	6.38	0.60	1.31	± 12.0 %
835	55.2	0.97	6.28	6.28	6.28	0.80	1.20	± 12.0 %
1750	53.4	1.49	5.09	5.09	5.09	0.66	1.33	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.40	1.85	± 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

^c 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.

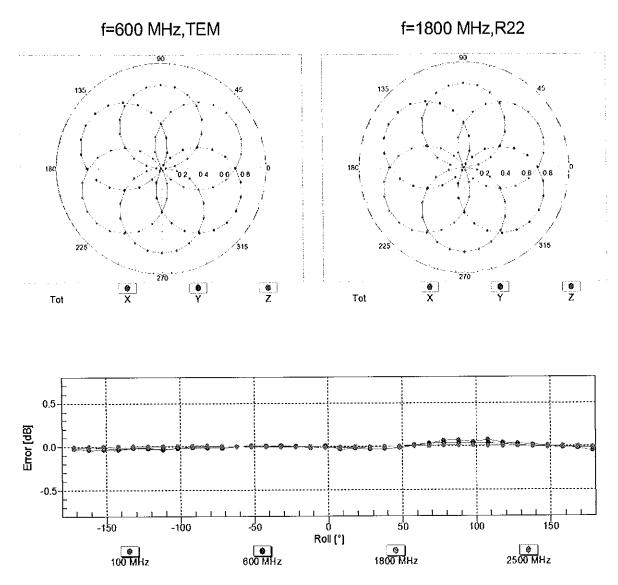
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF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

^G 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.



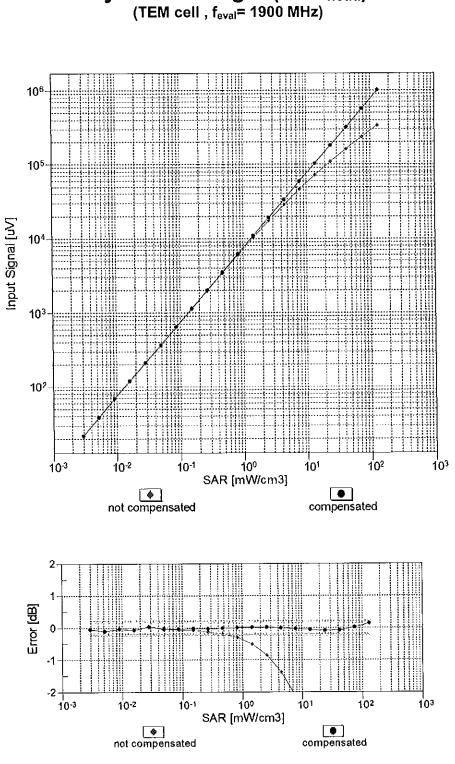
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



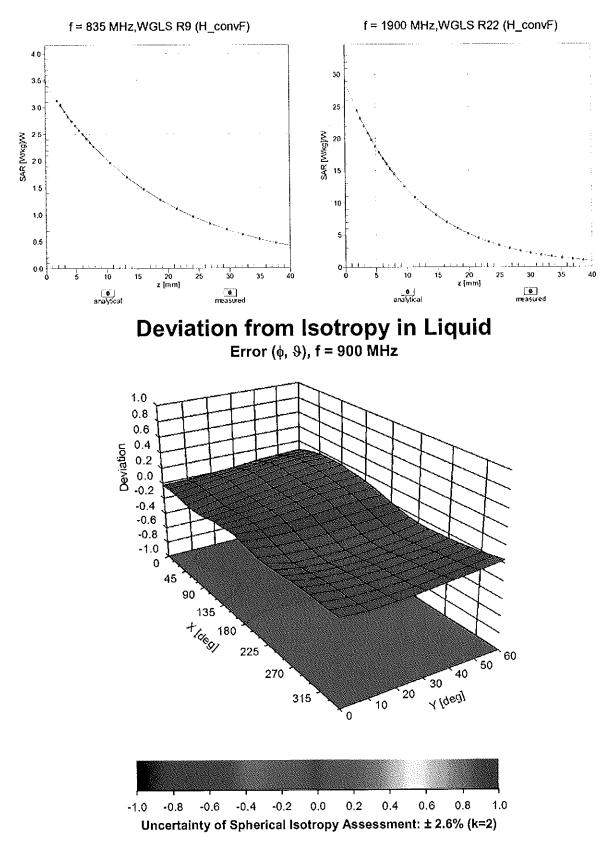
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



Dynamic Range f(SAR_{head})

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 ^E (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	
		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 % AB Mbps) Y 4.87 67.10 18.85 100.0 ± 9.6 % I0063- 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 % CAB Mbps) Y 4.53 67.06 17.25 100.0 ± 9.6 % Mbps) Y 5.23 67.40 17.28 100.0 ± 9.6 % Mbps) Y 5.13 67.61 17.41 100.0 ± 9.6 % AB Mbps) Y 5.13 67.61 17.41 100.0 ± 9.6 % CAB Mbps) Y 5.16 </th <th>10061- CAB</th> <th> IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)</th> <th>X</th> <th>7.70</th> <th>91.83</th> <th>25.70</th> <th>2.04</th> <th>110.0</th> <th>±9.6 %</th>	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 % 17.21 10066- CAB IEEE 802.11a/n WIF15 GHz (OFDM, 24 X X 5.19 5.50 67.74 17.48 14.6 100.0 ± 0.8 % 17.48 10067- CAB IEEE 802.11a/n WIF15 GHz (OFDM, 36 X 5.50 5.50 67.74 17.95 2.74 17.00 17.00 ± 0.8 % 17.8 17.80 100.0 10068- IEEE 802.11a/n WIF15 GHz (OFDM, 48 X 5.50 5.50 67.74 17.95 2.04 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
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 CAB Mbps) Y 4.95 67.00 17.08 0.86 100.0 10064- Mbps) 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 17.44 100.0 ± 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 5.61 67.76 17.44 100.0 ±			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	10063- CAB		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 %									
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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									
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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>									
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							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)	ZX	1.76	66.87	15.18		150.0	
DAC		Y	20.23	105.10	36.53	9.56	60.0	± 9.6 %
			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	i	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	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	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	
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)	 					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 %
		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		150.0	
		Z	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		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 %
		Y	3.70	72.91	21.00	1	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 %
		Y	4.85	77.04	21.45		150.0	
1		Z	3.53	71.17	18.68	-1	150.0	1

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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>	450.0	
_		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		150.0	
10187-		Z	3.55	71.24	18.71		150.0	
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 Y	5.67	80.08	23.42	3.01	150.0	± 9.6 %
			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 %
		TY	4.65	00.04	40.05			
		Z	4.65	66.84	16.35		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.82	66.64 67.00	16.13 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	
10100		Z	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 %
		Y	4.66	66.93	16.38		150.0	
10407		Z	4.59	66.71	16.15		150.0	
10197- 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	4.78	66.99	16.27		150.0	
CAB	QAM)	X	4.87	67.04	16.32	0.00	150.0	± 9.6 %
		Y	4.88	67.24	16.50		150.0	
0219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	Z X	<u>4.81</u> 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	16.04		450.0	
		Z	4.61	66.71	16.34		150.0	
0220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.84	67.00	<u>16.11</u> 16.31	0.00	150.0 150.0	± 9.6 %
		Y	4.84	67.20	16.48		150.0	
		Z	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	
0000		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	
	1 1	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)	X	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 %
		Υ	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	l
		Z	31.03	107.56	31.61		65.0	
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	<u> </u>
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	1
		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 %
		Y	100.00	128.93	37.35		65.0	

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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		65.0	+
		Z	11.71	86.68	27.54	· · · · · · · · · · · · · · · · · · ·	65.0	
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)	X	9.57	83.58	27.27	6.98	65.0	± 9.6 %
		Y	10.70	86.76	28.80		65.0	· · · · ·
		Z	8.63	81.57	26.33		65.0	1
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
40045		Z	8.76	79.58	20.36	·	65.0	T
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	1
40040		Z	8.56	78.97	20.07		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	9.14	83.08	21.95	3.98	65.0	± 9.6 %
		Y	9.72	84.22	22.38		65.0	
10017		Z	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	
100/0		Ζ	7.33	77.37	20.13		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	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	
		Z	10.18	85.27	23.26		65.0	
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	· · · · · · · · · · · · · · · · · · ·
10054		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		05.0	
		Ż	<u> </u>	10.02	22.23	1	65.0	

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10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	8.82	80.37	22.51	3.98	65.0	± 9.6 %
CAC	QPSK)		0.40	04.00	00.05		05.0	
		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	3.98	65.0	± 9.6 %
		Z	8.10 7.71	78.72 77.89	21.39		65.0 65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	9.63	83.94	20.85	3.98	65.0	± 9.6 %
	QPSK)	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		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 %
		Y ·	8.33	77.96	21.96		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	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	<u> </u>	65.0	
		Z	8.36	77.93	22.14	<u> </u>	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)	+	0.04	70.00	04.04		05.0	
		Y	8.64	76.83	21.94	<u> </u>	65.0 65.0	
40070	LTE TOD (80 EDMA 400% DB 45	Z	8.37 8.62	76.22	21.56	3.98	65.0	± 9.6 %
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15	^	0.02	10.00	21.00	0.90	00.0	- 5.0 /0
CAC	MHz, QPSK)	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	<u>+</u>
		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> </u>	± 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	·
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	
40200		Ζ	8.93	79.76	20.30		50.0	
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-	CDM42000 D02 0055 5 10 1	Z	1.38	67.47	13.43		150.0	
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-	CDM40000 D04 000 4/01 D 4 00 4	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 %
		Υ Υ	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-	TE EDD (SO EDMA FOR DE ALM	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 FOX DD AND	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	5.51	68.72	19.18		80.0	
10302-	IEEE 802.16e WIMAX (29:18, 5ms,	X	6.08	67.68	18.44	4.00	80.0	
AAA	10MHz, QPSK, PUSC, 3 CTRL symbols)	Ŷ		68.43	19.36	4.96	80.0	± 9.6 %
·		Z	6.31	69.64	20.14		80.0	
		6	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- AAA	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 %
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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 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 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 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 s			<u>Y</u>				ļ		
AAC 99pc duty cycle) Y 4.84 67.29 16.50 150.0 Image: Constraint of the state of the	101								1000
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	

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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	
		Z	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	
10/10-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z	21.98	102.39	26.35	<u>_</u>	100.0	
10410- AAB	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	
10/15	1555 902 11h WIELD & OUE (5000 1	Z	100.00	121.97	31.19		80.0	
10415- 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	
10424-		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 %
		<u> </u>	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	
10400		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 %
<u> </u>		Y	5.50	67.71	16.76		150.0	
	1	Z	5.45	67.53	16.59			

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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

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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	
l			0.27	01.02	17.00		80.0	

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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 64-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 80.0 1 9.6.9 80.0 1 9.6.9 1							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	
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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 4.87 71.52 18.23 80.0				5.13	77.51	19.85		80.0	
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Image: 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								80.0	
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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 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							<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- AAA	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	
10507- AAB	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	• • •	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 %
<u> </u>		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 %
		+	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 %
<u> </u>		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
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	

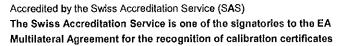
10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.38	66.52	16.31	0.46	130.0	± 9.6 %
		Y	5.39	66.70	16.48	<u>├───</u> ─────	120.0	
·		Z	5.33	66.49	16.48	·	130.0	· · · · ·
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.58	66.73	16.48	0.46	130.0 130.0	± 9.6 %
		Y	5.59	66.90	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)	Х	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	

^E 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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Schweizerischer Kallbrierdienst

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

Accreditation No.: SCS 0108

Client PC Test

Certificate No: ES3-3319	Mar17
이 집에 가장 이 집에 가지 않는 것을 것 같아요. 이 집에 있는 것 같아요. 가지 않는 것을 가지 않는 것을 하는 것이 것	かいえきょう たいしょうい かたいかさ ひかしたかたき いたいたいしょう

BN7 03-27-2017

CALIBRATION CERTIFICATE

ES3DV3 - SN:3319

Calibration procedure(s)

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

Calibration date:

March 14, 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:	Jeton Kastrati	Laboratory Technician	
			\mathcal{C}
Approved by:	Katja Pokovic	Technical Manager	10111
			port def-
This collibration contificati	a shall not be reproduced except in fu	il without written energyal of the John	Issued: March 16, 2017

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 Aprilo	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 E²-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:3319

Manufactured: Calibrated:

January 10, 2012 March 14, 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 $(\mu V/(V/m)^2)^A$	1.07	1.07	1.12	± 10.1 %
DCP (mV) ^B	102.5	101.2	103.5	

Modulation Calibration Parameters

UID	Communication System Name		A	В	С	D	VR	Unc⊏
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	199.3	±3.5 %
		Y	0.0	0.0	1.0		195.9	
		Z	0.0	0.0	1.0		195.7	

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	70.81	508.1	35.61	29.87	3.768	5.1	0.566	0.571	1.012
Y	67.78	484.5	35.24	29.79	3.269	5.1	1.181	0.458	1.009
Z	70.95	506.9	35.21	30.32	4.051	5.1	1.117	0.534	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%.

 ^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).
 ^B Numerical linearization parameter: uncertainty not required.
 ^E 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) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.76	6.76	6.76	0.52	1.48	± 12.0 %
835	41.5	0.90	6.46	6.46	6.46	0.59	1.35	± 12.0 %
1750	40.1	1.37	5.38	5.38	5.38	0.57	1.39	± 12.0 %
1900	40.0	1.40	5.20	5.20	5.20	0.80	1.13	± 12.0 %
2300	39.5	1.67	4.86	4.86	4.86	0.48	1.60	± 12.0 %
2450	39.2	1.80	4.60	4.60	4.60	0.76	1.23	± 12.0 %
2600	39.0	1.96	4.41	4.41	4.41	0.80	1.27	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

^c 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.

validity can be extended to \pm 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) 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 (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

^G 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.

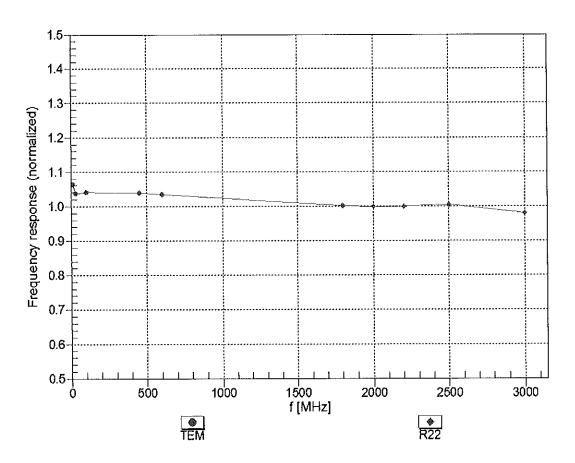
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.37	6.37	6.37	0.80	1.19	± 12.0 %
835	55.2	0.97	6.29	6.29	6.29	0.80	1.17	± 12.0 %
1750	53.4	1.49	5.07	5.07	5.07	0.57	1.50	± 12.0 %
1900	53.3	1.52	4.88	4.88	4.88	0.80	1.24	± 12.0 %
2300	52.9	1.81	4.62	4.62	4.62	0.80	1.21	± 12.0 %
2450	52.7	1.95	4.42	4.42	4.42	0.80	1.25	± 12.0 %
2600	52.5	2.16	4.18	4.18	4.18	0.80	1.25	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

^c 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. ^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

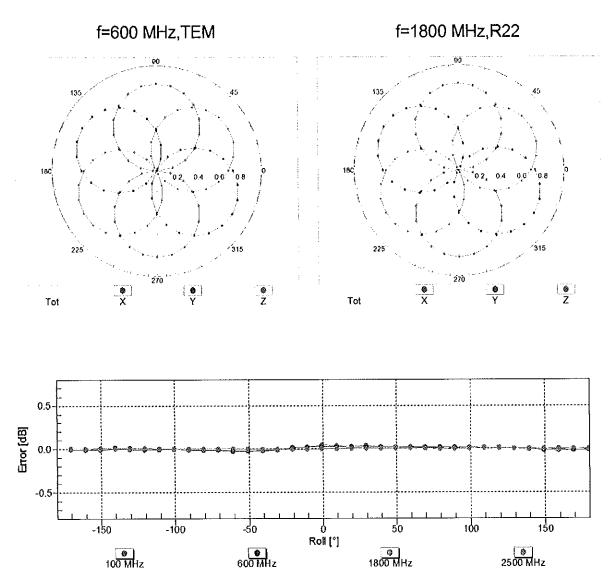
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF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

^G 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.



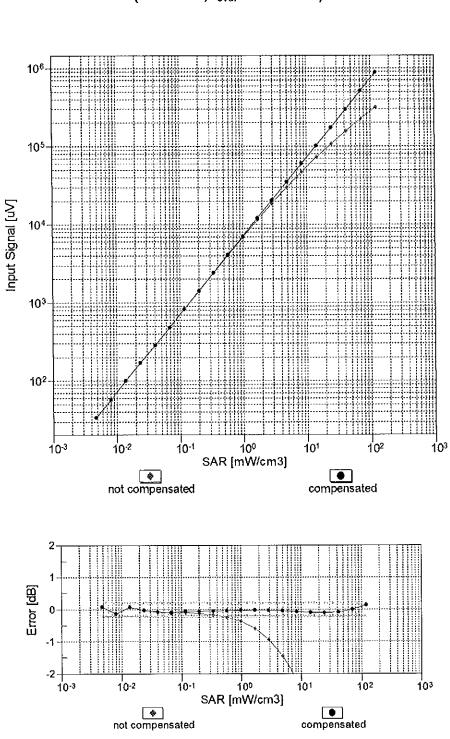
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



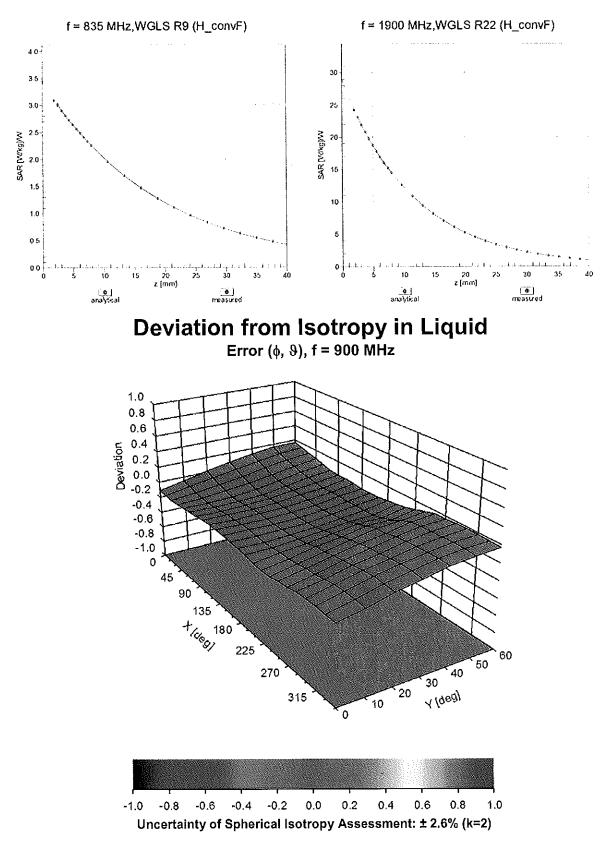
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}≕ 1900 MHz)

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



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	59.3
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 ^E (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	199.3	± 3.5 %
		Y	0.00	0.00	1.00		195.9	
10010-	SAR Validation (Square, 100ms, 10ms)	Z X	0.00 9.85	0.00 81.84	1.00 20.91	10.00	<u>195.7</u> 25.0	±9.6 %
CAA	orar validation (oquare, rooms, roms)	^	9.00	01.04	20.91	10.00	20.0	I 9.0 %
		Y	10.35	82.84	20.96		25.0	
		Z	9.24	80.45	20.49		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.42	72.72	18.48	0.00	150.0	±9.6 %
		Y Z	1.15 1.19	68.46 69.33	16.03 16.47		150.0 150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.41	66.60	17.14	0.41	150.0	±9.6 %
		Y	1.35	65.41	16.14		150.0	
100.10		Z	1.37	65.70	16.31		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.30	67.44	17.71	1.46	150.0	±9.6 %
		Y Z	5.25 5.29	67.26 67.34	17.48 17.54		150.0 150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	15.55	91.05	25.81	9.39	50.0	±9.6 %
		Y	21.52	97.05	27.50		50.0	
		Z	13.40	88.00	24.84		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	14.67	89.87	25.47	9.57	50.0	± 9.6 %
		Y Z	19.36 12.87	95.07 87.11	26.93 24.58		50.0 50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	72.67	116.69	31.50	6.56	60.0	±9.6 %
		Y	100.00	120.97	32.15		60.0	
		Z	31.96	103.34	28.02		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	17.81	101.87	38.70	12.57	50.0	±9.6 %
		Y Z	13.13 14.72	92.90 95.03	34.83 35.71		50.0 50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	18.31	99.96	34.53	9.56	60.0	± 9.6 %
		Y	16.31	97.17	33.33		60.0	
		Z	16.55	96.65	33.14		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	120.78	31.24	4.80	80.0	± 9.6 %
		Y Z	100.00 100.00	119.86 120.27	30.63 31.10		80.0 80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	120.27	30.58	3.55	100.0	± 9.6 %
		Y	100.00	120.10	29.87		100.0	
		Z	100.00	120.31	30.21		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	13.74	94.06	31.43	7.80	80.0	± 9.6 %
		Y Z	12.10 12.69	91.11 91.48	30.13 30.26		80.0 80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	120.44	31.46	5.30	70.0	± 9.6 %
		Y	100.00	119.51	30.84		70.0	1
		Z	86.39	117.92	30.89		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	124.75	30.39	1.88	100.0	± 9.6 %
		Y	100.00	122.04	29.08	1	100.0	
		Z	100.00	122.19	29.33		100.0	

Certificate No: ES3-3319_Mar17

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	132.42	32.41	1.17	100.0	± 9.6 %
CAA								
		Y	100.00	127.37	30.18		100.0	
10033-	JEEE 002 45 1 Divelocity (Dild DODO)	Z	100.00	127.22	30.26		100.0	
CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	16.06	95.52	27.18	5.30	70.0	± 9.6 %
		Y	16.39	95.85	27.05		70.0	
		Z	12.53	90.50	25.41		70.0	
10034-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	X	10.70	94.04	25.42	1.88	100.0	± 9.6 %
CAA	DH3)					-		
		Y	7.71	88.38	23.29		100.0	
40005		Z	7.05	86.60	22.76		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Х	6.38	88.03	23.33	1.17	100.0	± 9.6 %
UAA	DH3)	Y	4.42	81.78	20.80	-	100.0	
		Z	4.42	81.54	20.80		100.0 100.0	
10036-	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	18.54	98.19	28.07	5.30	70.0	± 9.6 %
CAA			10.04	00,10	20.07	0.00	70.0	1.0.0 /0
		Y	19.46	98.99	28.08		70.0	······
		Z	13.96	92.52	26.13		70.0	
10037-	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Х	10.52	93.81	25.31	1.88	100.0	± 9.6 %
CAA								
		Y	7.46	87.90	23.09		100.0	
40000		Z	6.91	86.34	22.63		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Х	6.72	89.10	23.77	1.17	100.0	± 9.6 %
CAA		Y	4 50	00.55	04.40		400.0	
		Y Z	<u>4.58</u> 4.59	82.55 82.28	21.16		100.0	
10039-	CDMA2000 (1xRTT, RC1)	X	2.88	78.08	21.12 19.66	0.00	100.0 150.0	± 9.6 %
CAB		^	2.00	70.00	19.00	0.00	150.0	±9.0 %
		Y	2.19	73.41	17.38		150.0	
		Z	2.24	73.69	17.58		150.0	
10042-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	X	29.89	101.32	27.42	7.78	50.0	± 9.6 %
CAB	DQPSK, Halfrate)							
		Y	57.75	111.39	29.82		50.0	
		Z	20.04	94.63	25.49		50.0	
10044-	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.01	60.00	29147.	0.00	150.0	±9.6 %
CAA			0.04	00.11	00			
		Y	0.01	96.41	0.53		150.0	
10048-	DEAT (TOD. TONA (COM. OFOIC 5. II	Z	0.00	108.36	0.61		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	10.82	81.42	24.20	13.80	25.0	± 9.6 %
	0101, 247	Y	12.01	84.16	25.00		25.0	
		z	10.45	80.25				···········
10049-	DECT (TDD, TDMA/FDM, GFSK, Double	X	12.11	85.56	23.85	10.79	25.0 40.0	± 9.6 %
CAA	Slot, 12)		14.11	00.00	27.01	10.10		1 0.0 70
		Y	14.10	88.79	25.27		40.0	
		Z	11.33	83.90	23.85		40.0	
10056-	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	12.14	85.93	24.81	9.03	50.0	± 9.6 %
CAA								
		Y	12.75	87.19	25.07		50.0	
40070		Z	11.32	84.12	24.10		50.0	
10058-	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	10.68	89.49	29.10	6.55	100.0	± 9.6 %
DAC		v	0.40	96.05	07.04		100.0	
		Y Z	9.42	86.65	27.81		100.0	
10059-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	X	10.05 1.65	87.45 69.30	28.09	0.61	100.0	1060/
CAB	Mbps)	^	1.00	09.00	18.41	0.01	110.0	±9.6 %
	······································	Y	1.54	67.66	17.23	ļ	110.0	
		z	1.58	68.07	17.43	· · · · · · · · · · · · · · · · · · ·	110.0	
10060-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	X	100.00	134.53	35.47	1.30	110.0	± 9.6 %
CAB	Mbps)							0.0 /0
		Y	100.00	132.25	34.36		110.0	
		Z	100.00	131.68	34.21		110.0	· · · · · · · · · · · · · · · · · · ·

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	15.72	103.92	29.80	2.04	110.0	± 9.6 %
		Y	9.78	95.24	26.89		110.0	
		Z	9.50	94.05	26.46		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	5.02	67.22	17.01	0.49	100.0	± 9.6 %
		Y	4.97	67.04	16.79	· · · · · · · · · · · · · · · · · · ·	100.0	
		Z	5.00	67.08	16.82		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	5.07	67.40	17.16	0.72	100.0	± 9.6 %
•••		Y	5.02	67.21	16.94		100.0	
		Z	5.04	67.26	16.97		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.43	67.77	17.43	0.86	100.0	± 9.6 %
		Y	5.38	67.58	17.21		100.0	
		Z	5.41	67.64	17.25		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.34	67.82	17.61	1.21	100.0	± 9.6 %
		Y	5.28	67.62	17.38		100.0	
40000		Z	5.32	67.69	17.43		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.40	67.98	17.85	1.46	100.0	±9.6 %
		Y	5.34	67.76	17.61		100.0	
40007		Z	5.39	67.85	17.67		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.73	68.10	18.30	2.04	100.0	± 9.6 %
		Y	5.66	67.87	18.05		100.0	
40000		Z	5.72	68.01	18.13		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.90	68.56	18.70	2.55	100.0	± 9.6 %
		Y	5.82	68.29	18.44		100.0	
		Z	5.90	68.48	18.54		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.97	68.43	18.86	2.67	100.0	± 9.6 %
		Y	5.89	68.17	18.59		100.0	
10071		Z	5.97	68.35	18.70		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.46	67.71	18.10	1.99	100.0	± 9.6 %
		Y	5.40	67.50	17.87		100.0	
40070		Z	5.45	67.61	17.94		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.55	68.34	18.45	2.30	100.0	± 9.6 %
		Y	5.48	68.10	18.20		100.0	
40070		Z	5.55	68.24	18.28	0.00	100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.71	68.73	18.89	2.83	100.0	± 9.6 %
		Y	5.63	68.45	18.63		100.0	
40074		Z	5.71	68.65	18.73		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.76	68.86	19.19	3.30	100.0	± 9.6 %
		Y	5.67	68.55	18.90		100.0	
10075-		Z	5.77	68.80	19.03	0.00	100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.97	69.51	19.77	3.82	90.0	± 9.6 %
		Y	5.85	69.11	19.43		90.0	
40070		Z	5.99	69.45	19.61	4 4 -	90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.96	69.27	19.86	4.15	90.0	± 9.6 %
		Y	5.85	68.87	19.52		90.0	
		Z	5.99	69.24	19.72		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	6.00	69.37	19.97	4.30	90.0	± 9.6 %
		Υ	5.89	68.96	19.62		90.0	
		Z	6.03	69.34	19.83		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	1.41	72.76	17.31	0.00	150.0	± 9.6 %
		Y	1.06	67.92	14.61		150.0	
		Z	1.11	68.62	15.03	†	150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	Х	2.74	66.09	10.68	4.77	80.0	± 9.6 %
		Y	2.51	65.26	10.02		80.0	
		Z	2.76	65.88	10.66		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	68.83	115.90	31.34	6.56	60.0	± 9.6 %
		Y	100.00	121.06	32.22		60.0	
10097-		Z	31.05	102.92	27.93		60.0	
CAB	UMTS-FDD (HSDPA)	X	2.05	69.35	17.13	0.00	150.0	± 9.6 %
·		Y	1.92	67.86	16.10		150.0	
10098-		Z	1.93	68.06	16.23		150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.02	69.37	17.13	0.00	150.0	± 9.6 %
		Y	1.88	67.83	16.06		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.90	68.05	16.21	0.55	150.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)		18.22	99.79	34.47	9.56	60.0	± 9.6 %
ļ		Y	16.25	97.06	33.29	<u> </u>	60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	Z	16.47	96.50	33.09		60.0	
CAC	MHz, QPSK)	X	3.71	72.76	17.93	0.00	150.0	± 9.6 %
		Y	3.41	71.21	17.05		150.0	
10101-		Z	3.48	71.52	17.17		150.0	
CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.57	68.80	16.73	0.00	150.0	± 9.6 %
·		Y	3.46	68.11	16.22		150.0	
40400		Z	3.49	68.27	16.30		150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.66	68.61	16.75	0.00	150.0	± 9.6 %
		Y	3.56	68.02	16.30		150.0	
		Z	3.58	68.13	16.36		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.88	78.01	21.33	3.98	65.0	± 9.6 %
		Y	8.67	77.74	21.13		65.0	
		Z	8.55	77.02	20.81		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.93	77.00	21.79	3.98	65.0	± 9.6 %
		Y	8.73	76.65	21.51		65.0	
		Z	8.82	76.47	21.44		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.98	74.72	21.06	3.98	65.0	± 9.6 %
		Y	8.03	74.96	21.06		65.0	
40400		Z	7.61	73.51	20.40		65.0	
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.27	71.88	17.76	0.00	150.0	± 9.6 %
		Y	3.02	70.38	16.87		150.0	
40400		Z	3.08	70.66	16.99		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.25	68.64	16.73	0.00	150.0	±9.6 %
		Y	3.13	67.91	16.18		150.0	
10110		Z	3.16	68.05	16.25		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.71	70.99	17.56	0.00	150.0	±9.6 %
		Y	2.49	69.37	16.56		150.0	
		Z	2.54	69.69	16.72		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.94	69.24	17.11	0.00	150.0	± 9.6 %
		Y	2.83	68.45	16.51		150.0	
		Z	2.85	68.47	16.54		150.0	

10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.35	68.45	16.70	0.00	150.0	± 9.6 %
		Y	3.25	67.82	16.20		150.0	
		z	3.28	67.92	16.26		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	3.09	69.18	17.14	0.00	150.0	± 9.6 %
		Y	2.99	68.50	16.60		150.0	
		Z	3.00	68.49	16.61		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.36	67.61	16.76	0.00	150.0	± 9.6 %
		Y	5.31	67.41	16.53		150.0	
		Z	5.33	67.45	16.56		150.0	····
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.78	68.00	16.95	0.00	150.0	±9.6 %
		Y	5.71	67.76	16.71		150.0	
		Z	5.74	67.85	16.76		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.50	67.87	16.80	0.00	150.0	± 9.6 %
		Y	5.45	67.67	16.59		150.0	
		Z	5.46	67.70	16.60		150.0	1
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	Х	5.37	67.63	16.79	0.00	150.0	±9.6 %
		Y	5.32	67.44	16.57		150.0	
		Z	5.33	67.46	16.59		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.80	67.97	16.94	0.00	150.0	± 9.6 %
		Y	5.75	67.80	16.74		150.0	
		Z	5.76	67.82	16.75		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	Х	5.47	67.83	16.80	0.00	150.0	± 9.6 %
		Y	5.42	67.63	16.58		150.0	
		Z	5.43	67.65	16.60		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.71	68.61	16.68	0.00	150.0	± 9.6 %
		Y	3.61	68.02	16.22		150.0	
		Z	3.64	68.14	16.28		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.82	68.57	16.77	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	3.73	68.05	16.36		150.0	
		Z	3.75	68.13	16.40		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.49	71.10	17.54	0.00	150.0	±9.6 %
		Y	2.27	69.32	16.43		150.0	
		Z	2.31	69.61	16.60		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.87	70.15	17.21	0.00	150.0	± 9.6 %
		Y	2.72	69.17	16.50		150.0	
		Z	2.73	69.14	16.52		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.68	68.25	15.88	0.00	150.0	± 9.6 %
		Y	2.54	67.28	15.14		150.0	1
		Z	2.58	67.43	15.28		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.97	70.87	16.37	0.00	150.0	± 9.6 %
		Y	1.68	68.25	14.76		150.0	
		Z	1.73	68.59	15.05		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.75	78.42	19.14	0.00	150.0	± 9.6 %
_		Y	3.83	74.52	16.97		150.0]
		Z	4.41	76.61	18.14		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	6.27	82.79	20.95	0.00	150.0	± 9.6 %
		Y	5.05	78.64	18.78		150.0	
		Ż	5.67	80.46	19.79		150.0	

10149-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz,	X	3.26	68.70	16.77	0.00	150.0	± 9.6 %
CAC	16-QAM)							
		Y	3.14	67.97	16.22		150.0	
10150-		Z	3.17	68.10	16.29		150.0	
CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	3.36	68.50	16.73	0.00	150.0	± 9.6 %
		Y	3.26	67.87	16.24		150.0	
40454		Z	3.28	67.96	16.30		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.26	79.92	22.22	3.98	65.0	± 9.6 %
		Y	9.15	79.84	22.08		65.0	
40.480		Z	8.96	78.94	21.70		65.0	
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.60	77.27	21.75	3.98	65.0	± 9.6 %
		Y	8.35	76.82	21.41		65.0	
40450		Z	8.46	76.64	21.35		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.88	77.79	22.28	3.98	65.0	±9.6 %
		Y	8.70	77.50	22.02		65.0	
40.45		Z	8.75	77.18	21.89		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.78	71.52	17.87	0.00	150.0	± 9.6 %
		Y	2.56	69.90	16.88		150.0	
		Z	2.60	70.17	17.01		150.0	
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.94	69.23	17.11	0.00	150.0	± 9.6 %
		Y	2.83	68.44	16.51		150.0	
		Z	2.85	68.47	16.54		150.0	
10156- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.40	71.71	17.74	0.00	150.0	± 9.6 %
		Y	2.14	69.64	16.49		150.0	
		Z	2.19	69.95	16.67		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.56	69.20	16.24	0.00	150.0	± 9.6 %
		Y	2.39	67.98	15.37		150.0	
		Z	2.42	68.11	15.51		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.10	69.22	17.17	0.00	150.0	± 9.6 %
		Y	2.99	68.55	16.64		150.0	
		Z	3.00	68.53	16.65		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.68	69.58	16.50	0.00	150.0	± 9.6 %
		Y	2.51	68.44	15.68		150.0	
		Z	2.54	68.50	15.78		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.14	70.23	17.31	0.00	150.0	± 9.6 %
		Y	2.97	69.12	16.58		150.0	
		Z	3.01	69.30	16.67		150.0	
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.25	68.37	16.69	0.00	150.0	± 9.6 %
		Y	3.15	67.75	16.20		150.0	
		Z	3.17	67.82	16.25		150.0	· · · · · · · · · · · · · · · · · · ·
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.35	68.34	16.71	0.00	150.0	±9.6 %
		Y	3.25	67.77	16.24		150.0	
		Ζ	3.27	67.82	16.29		150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.16	70.95	20.14	3.01	150.0	±9.6 %
		Y	4.09	70.57	19.65		150.0	·
		Z	4.23	71.07	20.00		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.42	74.49	20.88	3.01	150.0	± 9.6 %
		Y	5.38	74.26	20.45	· · · · ·	150.0	
		Z	5.66	74.92	20.85			

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10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.88	76.24	21.91	3.01	150.0	± 9.6 %
		Y	5.94	76.40	21.68		150.0	1
		Z	6.16	76.77	21.92		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.00	73.62	21.32	3.01	150.0	± 9.6 %
		Y	3.90	72.96	20.64		150.0	
		Z	4.22	74.22	21.31		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	6.31	81.51	24.09	3.01	150.0	± 9.6 %
		Ý	6.48	81.75	23.78		150.0	
		Z	7.05	82.86	24.27		150.0	
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	5.08	76.75	21.32	3.01	150.0	± 9.6 %
		Y	4.94	75.94	20.54		150.0	
		Z	5.51	77.53	21.31		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	×	28.35	107.78	33.34	6.02	65.0	±9.6 %
		Y	28.59	107.61	32.92		65.0	
101		Z	27.19	105.85	32.47		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	29.50	104.02	30.66	6.02	65.0	± 9.6 %
		Y	34.69	106.60	31.03		65.0	
		Z	27.86	101.98	29.79		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	23.87	98.93	28.69	6.02	65.0	± 9.6 %
		Y	26.66	100.64	28.84		65.0	
		Z	22.60	97.09	27.89		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.94	73.23	21.05	3.01	150.0	± 9.6 %
		Y	3.83	72.52	20.34		150.0	
		Z	4.15	73.80	21.02		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	6.32	81.53	24.10	3.01	150.0	±9.6 %
		Y	6.49	81.78	23.79		150.0	
		Z	7.06	82.89	24.28		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.98	73.42	21.16	3.01	150.0	± 9.6 %
		Y	3.88	72.74	20.47		150.0	
		Z	4.19	74.00	21.14		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	6.20	81.16	23.93	3.01	150.0	± 9.6 %
		Y	6.35	81.32	23.59		150.0	
		Z	6.91	82.48	24.09		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.64	78.94	22.55	3.01	150.0	±9.6 %
		Y.	5.60	78.53	21.96		150.0	
		Z	6.18	79.93	22.60		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	5.06	76.62	21.25	3.01	150.0	± 9.6 %
		Y	4.91	75.79	20.46		150.0	
		Z	5.47	77.39	21.24		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.98	73.40	21.15	3.01	150.0	± 9.6 %
		Y	3.87	72.72	20.46		150.0	
		Z	4.18	73.98	21.13		150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	6.19	81.13	23.92	3.01	150.0	± 9.6 %
		Y	6.34	81.29	23.57		150.0	
		Z	6.90	82.45	24.08		150.0	
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	5.05	76.59	21.24	3.01	150.0	± 9.6 %
		Y	4.90	75.76	20.45		150.0	
		Z	5.46	77.36	21.23	1	150.0	

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10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.99	73.45	21.17	3.01	150.0	± 9.6 %
		Y	3.89	72.78	20.49		150.0	
		Z	4.20	74.03	21.16		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	x	6.23	81.21	23.95	3.01	150.0	± 9.6 %
		Y	6.37	81.39	23.62		150.0	
		Z	6.94	82.53	24.12		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	х	5.08	76.67	21.27	3.01	150.0	±9.6 %
		Y	4.93	75.84	20.48		150.0	
		Z	5.49	77.44	21.26		150.0	
10187- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	4.00	73.48	21.22	3.01	150.0	± 9.6 %
		Y	3.89	72.80	20.53		150.0	
		Z	4.21	74.07	21.20		150.0	
10188- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	6.48	82.07	24.38	3.01	150.0	± 9.6 %
		Y	6.71	82.45	24.13		150.0	
		Z	7.27	83.49	24.57		150.0	
10189- AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	5.21	77.21	21.58	3.01	150.0	± 9.6 %
		Y	5.09	76.46	20.83		150.0	
		Z	5.66	78.03	21.58		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.79	66.98	16.56	0.00	150.0	± 9.6 %
		Y	4.74	66.79	16.32		150.0	
		Z	4.76	66.81	16.35		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	5.00	67.38	16.67	0.00	150.0	± 9.6 %
		Y	4.95	67.18	16.43		150.0	
		Z	4.97	67.21	16.46		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	x	5.04	67.38	16.66	0.00	150.0	±9.6%
		Y	4.99	67.18	16.43		150.0	
		Z	5.00	67.20	16.45		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.82	67.11	16.60	0.00	150.0	± 9.6 %
		Y	4.77	66.91	16.36		150.0	
		Z	4.78	66.93	16.39		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	x	5.02	67.40	16.67	0.00	150.0	±9.6 %
		Y	4.97	67.20	16.44		150.0	
		Z	4.98	67.22	16.46		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	Х	5.05	67.39	16.67	0.00	150.0	±9.6 %
		Y	5.00	67.20	16.44		150.0	
		Z	5.01	67.21	16.46		150.0	
10219-	IEEE 802.11n (HT Mixed, 7.2 Mbps,	X	4.77	67.13	16.58	0.00	150.0	± 9.6 %
CAB	BPSK)							
		Y	4.72	66.92	16.33		150.0	
CAB	BPSK)	Y Z	4.72 4.73	66.95	16.33 16.36		150.0	
		Z X	4.73 5.02	66.95 67.40	16.36 16.68	0.00	150.0 150.0	± 9.6 %
CAB 10220-	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-	Z X Y	4.73 5.02 4.97	66.95 67.40 67.20	16.36 16.68 16.44	0.00	150.0 150.0 150.0	± 9.6 %
CAB 10220- CAB	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	Z X	4.73 5.02 4.97 4.99	66.95 67.40	16.36 16.68	0.00	150.0 150.0	± 9.6 %
CAB 10220-	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-	Z X Y Z X	4.73 5.02 4.97 4.99 5.05	66.95 67.40 67.20 67.23 67.33	16.36 16.68 16.44 16.47 16.66	0.00	150.0 150.0 150.0	± 9.6 %
CAB 10220- CAB 10221-	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM) IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-	Z X Y Z	4.73 5.02 4.97 4.99	66.95 67.40 67.20 67.23	16.36 16.68 16.44 16.47		150.0 150.0 150.0 150.0	
CAB 10220- CAB 10221- CAB	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM) IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	Z X Y Z X Y Z	4.73 5.02 4.97 4.99 5.05	66.95 67.40 67.20 67.23 67.33	16.36 16.68 16.44 16.47 16.66		150.0 150.0 150.0 150.0 150.0	
CAB 10220- CAB 10221-	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM) IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-	Z X Y Z X Y	4.73 5.02 4.97 4.99 5.05 5.00	66.95 67.40 67.20 67.23 67.33 67.13	16.36 16.68 16.44 16.47 16.66 16.44		150.0 150.0 150.0 150.0 150.0 150.0	
CAB 10220- CAB 10221- CAB 10222-	BPSK) IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM) IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM) IEEE 802.11n (HT Mixed, 15 Mbps,	Z X Y Z X Y Z	4.73 5.02 4.97 4.99 5.05 5.00 5.02	66.95 67.40 67.20 67.23 67.33 67.13 67.15	16.36 16.68 16.44 16.47 16.66 16.44 16.44	0.00	150.0 150.0 150.0 150.0 150.0 150.0 150.0	± 9.6 %

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.75	68.00	16.98	0.00	150.0	± 9.6 %
		Y	5.70	67.82	16.77	1	150.0	
		Z	5.71	67.82	16.78		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.42	67.80	16.78	0.00	150.0	± 9.6 %
		Y	5.36	67.58	16.55		150.0	•••••••••••••••••••••••••••••••••••••••
		Z	5.38	67.63	16.58		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	3.07	66.80	16.19	0.00	150.0	±9.6 %
		Y	3.00	66.35	15.75		150.0	
		Z	3.01	66.39	15.81		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	30.74	104.89	30.99	6.02	65.0	± 9.6 %
···· .		Y	36.94	107.88	31.47		65.0	
40007		Z	29.00	102.81	30.11		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	24.57	99.58	28.97	6.02	65.0	± 9.6 %
		Ý	28.65	102.05	29.35		65.0	
40000		Z	23.52	97.91	28.22		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	30.31	109.61	33.99	6.02	65.0	± 9.6 %
		Y	29.44	108.70	33.37		65.0	
40000		Z	27.38	106.50	32.79		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	29.49	104.00	30.66	6.02	65.0	± 9.6 %
		Y	34.74	106.61	31.04		65.0	
		Z	27.87	101.97	29.80		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	23.73	98.88	28.69	6.02	65.0	±9.6 %
		Y	27.25	101.06	28.99		65.0	
		Z	22.75	97.24	27.95		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	29.15	108.72	33.67	6.02	65.0	± 9.6 %
		Y	27.96	107.57	32.97		65.0	
		Z	26.38	105.67	32.48		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	29.48	104.00	30.66	6.02	65.0	± 9.6 %
		Y	34.72	106.61	31.04		65.0	
		Z	27.86	101.97	29.80		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	23.75	98.91	28.70	6.02	65.0	± 9.6 %
		Y	27.26	101.08	28.99		65.0	
		Z	22.77	97.26	27.96		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	27.90	107.69	33.28	6.02	65.0	± 9.6 %
		Y	26.50	106.35	32.52		65.0	
		Z	25.32	104.71	32.10		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	29.56	104.06	30.68	6.02	65.0	± 9.6 %
		Y	34.83	106.68	31.06		65.0	
		Z	27.92	102.02	29.81		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	23.93	99.02	28.74	6.02	65.0	±9.6 %
		Y	27.48	101.20	29.02		65.0	
10007		Z	22.92	97.36	27.99	0.00	65.0	1000
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	29.43	108.94	33.73	6.02	65.0	± 9.6 %
		Y	28.18	107.75	33.02		65.0	
10000		Z	26.59	105.85	32.53		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	29.51	104.02	30.67	6.02	65.0	±9.6 %
		Y	34.75	106.63	31.04		65.0	
		Z	27.87	101.98	29.80		65.0	

10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	x	23.77	98.93	28.71	6.02	65.0	± 9.6 %
5,10		Y	27.27	101.10	29.00		65.0	
		Z	22.78	97.29	29.00		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	29.33	108.88	33.71	6.02	65.0	± 9.6 %
		Y	28.09	107.69	33.00		65.0	1
		Z	26.51	105.80	32.51		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	12.97	86.83	27.84	6.98	65.0	± 9.6 %
		Y	12.74	86.49	27.42		65.0	
		Z	13.39	87.03	27.74		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	11.77	84.58	26.87	6.98	65.0	± 9.6 %
		Y	12.19	85.46	26.94		65.0	-
		Ζ	12.90	86.14	27.32		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.86	82.57	26.93	6.98	65.0	± 9.6 %
		Y	9.88	82.69	26.70		65.0	
		Z	10.64	83.89	27.31		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	10.27	81.73	22.33	3.98	65.0	± 9.6 %
		Y	10.27	81.67	21.99		65.0	
		Z	10.19	81.13	21.98		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.17	81.33	22.14	3.98	65.0	± 9.6 %
		Y	10.15	81.24	21.78		65.0	
	·	Z	10.11	80.77	21.80		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	9.71	83.45	22.80	3.98	65.0	± 9.6 %
		Y	9.49	83.12	22.47		65.0	
		Z	8.94	81.57	21.97		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.20	78.33	21.34	3.98	65.0	± 9.6 %
		Y	8.00	78.01	21.02		65.0	
		Z	7.96	77.44	20.86		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.23	77.94	21.17	3.98	65.0	± 9.6 %
		Y	8.00	77.54	20.82		65.0	
		Ζ	8.02	77.11	20.72		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.15	84.14	23.49	3.98	65.0	± 9.6 %
		Y	9.98	83.94	23.24		65.0	
		Ζ	9.39	82.30	22.67		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	8.79	79.35	22.70	3.98	65.0	± 9.6 %
		Y	8.63	79.16	22.48		65.0	
		Z	8.57	78.51	22.22		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.44	77.55	21.73	3.98	65.0	± 9.6 %
		Y	8.21	77.13	21.40		65.0	
		Ζ	8.29	76.85	21.32		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	9.81	82.69	23.38	3.98	65.0	± 9.6 %
		Y	9.69	82.59	23.21		65.0	
		Z	9.29	81.25	22.69		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.37	76.69	21.57	3.98	65.0	± 9.6 %
		Y	8.14	76.24	21.23		65.0	
		Ζ	8.26	76.10	21.20		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.69	77.25	22.08	3.98	65.0	± 9.6 %
		Y	8.50	76.93	21.80		65.0	t
		Z	8.58	76.68	21.71		65.0	1

10255- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.00	79.61	22.34	3.98	65.0	± 9.6 %
		Y	8.85	79.45	22.16		65.0	
		Z	8.73	78.67	21.83		65.0	1
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.74	80.69	21.31	3.98	65.0	±9.6 %
		Y	9.59	80.32	20.81		65.0	
		Z	9.63	80.04	20.95		65.0	· · · · · · · · · · · · · · · · · · ·
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	9.62	80.13	21.03	3.98	65.0	±9.6 %
		Y	9.43	79.69	20.50		65.0	
		Z	9.55	79.55	20.70		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.09	82.16	21.89	3.98	65.0	± 9.6 %
		Y	8.77	81.62	21.46		65.0	
		Z	8.39	80.38	21.12		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.43	78.63	21.79	3.98	65.0	± 9.6 %
		Ϋ́	8.23	78.33	21.49		65.0	
		Z	8.20	77.76	21.31		65.0	1
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.46	78.42	21.72	3.98	65.0	± 9.6 %
		Y	8.27	78.12	21.43		65.0	
		Z	8.26	77.59	21.26		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.72	83.07	23.32	3.98	65.0	±9.6 %
		Y	9.52	82.82	23.06		65.0	
		Z	9.11	81.46	22.57		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.78	79.33	22.68	3.98	65.0	±9.6 %
		Y	8.62	79.12	22.45		65.0	
		Z	8.57	78.49	22.19		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.44	77.55	21.74	3.98	65.0	± 9.6 %
		Y	8.21	77.13	21.40		65.0	
		Z	8.29	76.86	21.32		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	9.77	82.59	23.33	3.98	65.0	± 9.6 %
		Y	9.63	82.47	23.15		65.0	
		Z	9.25	81.16	22.64		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.59	77.27	21.75	3.98	65.0	±9.6 %
		Y	8.35	76.82	21.41		65.0	
		Z	8.46	76.64	21.35		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.88	77.79	22.27	3.98	65.0	± 9.6 %
		Y	8.70	77.49	22.01		65.0	
		Z	8.76	77.18	21.88		65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.25	79.89	22.21	3.98	65.0	± 9.6 %
		Y	9.14	79.81	22.06		65.0	
		Z	8.95	78.92	21.69		65.0	
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.99	76.65	21.78	3.98	65.0	± 9.6 %
		Y	8.81	76.35	21.53		65.0	
10260		Z	8.91	76.18	21.46	0.00	65.0	10.00
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.91	76.26	21.70	3.98	65.0	± 9.6 %
		Y	8.73	75.96	21.44		65.0	
40070		Z	8.84	75.83	21.39		65.0	
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.90	77.57	21.40	3.98	65.0	± 9.6 %
		Y	8.79	77.49	21.27		65.0	
	1	Z	8.75	76.94	21.02		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.78	67.12	16.09	0.00	150.0	± 9.6 %
		Y	2.71	66.52	15.56	1	150.0	
		Z	2.72	66.59	15.63		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.98	70.91	17.52	0.00	150.0	± 9.6 %
		Y	1.76	68.59	16.10		150.0	
		Z	1.80	69.04	16.33		150.0	
10277- CAA	PHS (QPSK)	X	6.79	72.27	16.39	9.03	50.0	± 9.6 %
		Y	6.45	71.67	15.76		50.0	
		Z	6.90	72.24	16.49		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.13	81.40	22.32	9.03	50.0	± 9.6 %
		Y	10.29	81.97	22.29		50.0	
40070		Z	9.77	80.32	21.92		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	10.33	81.63	22.41	9.03	50.0	± 9.6 %
		Y	10.47	82.16	22.36		50.0	
40000		Z	9.96	80.55	22.00		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.27	74.32	17.90	0.00	150.0	± 9.6 %
		Y	1.81	70.49	15.86		150.0	
40004		Z	1.87	70.91	16.13		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.36	72.30	17.10	0.00	150.0	± 9.6 %
		Y	1.04	67.63	14.46		150.0	
		Ζ	1.08	68.31	14.87		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	×	1.99	79.46	20.52	0.00	150.0	± 9.6 %
		Y	1.29	71.82	16.85		150.0	
		Z	1.35	72.59	17.26		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	3.14	87.23	23.85	0.00	150.0	± 9.6 %
		Y	1.79	77.07	19.53		150.0	
		Z	1.82	77.43	19.74		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	10.44	82.93	24.52	9.03	50.0	± 9.6 %
		Y	10.27	82.91	24.32		50.0	
		Z	10.06	81.64	23.93		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.29	71.99	17.83	0.00	150.0	± 9.6 %
		Y	3.04	70.48	16.94		150.0	
		Z	3.09	70.76	17.06		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.22	71.79	17.28	0.00	150.0	± 9.6 %
		Y	1.94	69.36	15.82		150.0	
		Z	1.98	69.66	16.04		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.69	77.67	19.45	0.00	150.0	± 9.6 %
		Y	4.12	75.07	17.83		150.0	
		Ζ	4.54	76.51	18.69		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.41	71.70	16.24	0.00	150.0	± 9.6 %
		Y	3.02	69.50	14.72		150.0	
		Z	3.36	70.96	15.66		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	6.06	68.71	19.27	4.17	80.0	± 9.6 %
		Y	5.82	67.97	18.75		80.0	
		Z	6.19	69.17	19.41		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.72	70.11	20.48	4.96	80.0	± 9.6 %
		Y	6.33	68.61	19.48		80.0	
		Z	6.73	69.98	20.27		80.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	6.65	70.48	20.70	4.96	80.0	± 9.6 %
-		Y	6.20	68.74	19.57		80.0	
		Z	6.66	70.35	20.48		80.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	6.16	69.37	19.66	4.17	80.0	± 9.6 %
		Y	5.81	67.99	18.75		80.0	
		Z	6.16	69.23	19.45	·	80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	9.30	81.07	26.04	6.02	50.0	± 9.6 %
		Y	8.89	81.17	26.15		50.0	
40000		Z	9.30	80.60	25.61		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	7.60	74.94	23.58	6.02	50.0	±9.6 %
		Y	6.58	71.27	21.48		50.0	
10007		Z	7.65	74.77	23.31		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	7.89	76.12	23.89	6.02	50.0	±9.6 %
		Y	6.67	71.96	21.62		50.0	
10308-		Z	7.93	75.88	23.59		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	8.03	76.77	24.18	6.02	50.0	± 9.6 %
		Y	6.71	72.32	21.80		50.0	
10309-		Z	8.07	76.51	23.87		50.0	
AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	7.75	75.30	23.75	6.02	50.0	± 9.6 %
		Y	6.70	71.56	21.63		50.0	
10010	1555 000 40- WIMAY (00-40-40-	Z	7.79	75.10	23.47		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	7.67	75.32	23.64	6.02	50.0	± 9.6 %
		Y	6.59	71.48	21.48		50.0	
10011		Z	7.72	75.12	23.36		50.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.65	71.15	17.38	0.00	150.0	±9.6 %
		Y	3.40	69.80	16.59		150.0	
40040		Z	3.45	70.04	16.69		150.0	
10313- AAA	IDEN 1:3	X	8.19	79.62	19.75	6.99	70.0	± 9.6 %
		Y	7.93	79.22	19.41		70.0	
10044		Z	7.49	77.80	19.02		70.0	
10314- AAA	IDEN 1:6	X	9.48	83.29	23.38	10.00	30.0	±9.6 %
		Y	9.95	84.52	23.69		30.0	
40045		Z	8.48	80.77	22.38		30.0	
10315- AAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.25	66.08	16.91	0.17	150.0	± 9.6 %
		Y	1.20	64.89	15.87		150.0	
10010		Z	1.21	65.13	16.03		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.90	67.19	16.76	0.17	150.0	± 9.6 %
		Y	4.85	66.99	16.52		150.0	
40047		Z	4.87	67.02	16.55		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.90	67.19	16.76	0.17	150.0	± 9.6 %
		Y	4.85	66.99	16.52		150.0	
40400		Z	4.87	67.02	16.55		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	5.03	67.46	16.67	0.00	150.0	±9.6 %
		Y	4.97	67.23	16.42		150.0	
10101		Z	4.99	67.27	16.45		150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.60	67.40	16.67	0.00	150.0	± 9.6 %
		Y	5.56	67.25	16.46		150.0	
		Z	5.57	67.25	16.48		150.0	

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.93	68.04	16.82	0.00	150.0	± 9.6 %
		Y	5.88	67.87	16.62		150.0	
		Z	5.89	67.90	16.63		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.27	74.32	17.90	0.00	115.0	± 9.6 %
		Y	1.81	70.49	15.86		115.0	
		Z	1.87	70.91	16.13		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.27	74.32	17.90	0.00	115.0	± 9.6 %
•••		Y	1.81	70.49	15.86		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	Z X	1.87 100.00	70.91 127.40	16.13 33.82	0.00	115.0 100.0	± 9.6 %
		Y	100.00	122.61	31.43		100.0	
		Z	100.00	123.45	32.03		100.0	
10410- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	100.00	121.97	31.96	3.23	80.0	± 9.6 %
		Y	100.00	119.93	30.78		80.0	
		Ζ	100.00	120.31	31.22		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	Х	1.07	64.27	15.93	0.00	150.0	± 9.6 %
		Y	1.04	63.30	14.96		150.0	
		Z	1.04	63.46	15.09		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.79	67.01	16.59	0.00	150.0	± 9.6 %
		Y	4.74	66.82	16.35		150.0	
10117		Z	4.76	66.83	16.37		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.79	67.01	16.59	0.00	150.0	± 9.6 %
		Y	4.74	66.82	16.35		150.0	
40.440		Z	4.76	66.83	16.37		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	×	4.77	67.15	16.59	0.00	150.0	± 9.6 %
		Y	4.73	66.95	16.35		150.0	
		Z	4.74	66.96	16.37		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	Х	4.80	67.11	16.60	0.00	150.0	± 9.6 %
		Y	4.75	66.92	16.36		150.0	
		Z	4.76	66.93	16.38		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.93	67.11	16.61	0.00	150.0	± 9.6 %
		Ŷ	4.88	66.93	16.38		150.0	
10/-0		Z	4.90	66.94	16.40		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	5.16	67.53	16.76	0.00	150.0	± 9.6 %
		Y	5.10	67.33	16.53		150.0	
10/01		Z	5.12	67.36	16.55		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	5.06	67.46	16.72	0.00	150.0	± 9.6 %
		Y	5.01	67.26	16.49		150.0	
10425		Z	5.02	67.28	16.51		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.63	67.84	16.88	0.00	150.0	± 9.6 %
		Y	5.58	67.63	16.65		150.0	
10426-		Z	5.59	67.66	16.67		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.65	67.87	16.88	0.00	150.0	± 9.6 %
		Y	5.59	67.67	16.66		150.0	
		Z	5.60	67.69	16.68		150.0	

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10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.67	67.88	16.88	0.00	150.0	± 9.6 %
		Y	5.61	67.68	16.67		150.0	t
		Z	5.63	67.72	16.69		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.49	70.32	18.41	0.00	150.0	± 9.6 %
		Y	4.47	70.35	18.30		150.0	
		Z	4.43	69.94	18.10		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.57	67.64	16.73	0.00	150.0	± 9.6 %
		Y	4.50	67.37	16.44		150.0	
		Z	4.52	67.40	16.48		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.84	67.52	16.72	0.00	150.0	± 9.6 %
		Y	4.78	67.30	16.46		150.0	
40400		Z	4.81	67.32	16.49		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	5.08	67.52	16.75	0.00	150.0	± 9.6 %
		Y	5.02	67.32	16.52		150.0	
		Z	5.04	67.34	16.54		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.58	71.00	18.44	0.00	150.0	± 9.6 %
		Y	4.56	71.04	18.32		150.0	
40.105		Z	4.50	70.55	18.09		150.0	
10435- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.83	31.89	3.23	80.0	±9.6 %
		Y	100.00	119.78	30.72		80.0	
		Z	100.00	120.18	31.16		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.91	67.81	16.42	0.00	150.0	± 9.6 %
		Y	3.82	67.43	16.03		150.0	
		Z	3.85	67.45	16.10		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.37	67.41	16.59	0.00	150.0	±9.6 %
		Y	4.31	67.14	16.30		150.0	
		Z	4.33	67.16	16.33		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.61	67.35	16.62	0.00	150.0	±9.6 %
		Y	4.56	67.11	16.36		150.0	
		Z	4.57	67.13	16.39		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.78	67.27	16.62	0.00	150.0	± 9.6 %
		Y	4.73	67.06	16.37		150.0	
		Z	4.75	67.08	16.40		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.87	68.19	16.26	0.00	150.0	±9.6 %
		Y	3.76	67.74	15.84		150.0	
		Z	3.80	67.77	15.91		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.48	68.45	17.03	0.00	150.0	±9.6 %
		Y	6.43	68.27	16.83		150.0	
40457		Z	6.44	68.31	16.86		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.93	65.66	16.35	0.00	150.0	± 9.6 %
		Y	3.90	65.46	16.09		150.0	
10450		Z	3.90	65.49	16.13	0.00	150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.65	67.27	15.76	0.00	150.0	± 9.6 %
		Y	3.56	66.88	15.33		150.0	
40455		Z	3.59	66.88	15.43		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.75	65.30	16.25	0.00	150.0	± 9.6 %
		Y	4.56	64.61	15.72		150.0	
		Z	4.62	64.74	15.85		150.0	

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10460-	UMTS-FDD (WCDMA, AMR)	x	1.26	74.40	19.85	0.00	150.0	± 9.6 %
AAA		Y	0.00	69.11	16.94		450.0	
		Z	0.98	70.09	16.84 17.34	·	150.0 150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.67	33.28	3.29	80.0	± 9.6 %
		Y	100.00	122.71	32.15		80.0	
		Z	100.00	122.52	32.32		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	112.53	27.42	3.23	80.0	± 9.6 %
		Y	100.00	109.84	25.94		80.0	
		Z	100.00	110.74	26.63		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	110.09	26.24	3.23	80.0	± 9.6 %
		Y	100.00	107.30	24.71		80.0	
10464-		Z	100.00	108.46	25.52	0.00	80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.17	32.44	3.23	80.0	±9.6 %
		Y	100.00	121.02	31.22		80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	ZX	100.00 100.00	<u>121.02</u> 112.13	<u>31.48</u> 27.22	3.23	80.0	+0.6.0/
AAA	QAM, UL Subframe=2,3,4,7,8,9)	^ Y	100.00	109.39	25.71	3.23	80.0	± 9.6 %
		r Z	100.00	1109.39	25.71		80.0 80.0	
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	100.00	109.70	26.45	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)	Y	100.00	106.88	24.51	0.20	80.0	1 9.0 %
		Z	100.00	108.09	25.34		80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.35	32.52	3.23	80.0	±9.6 %
		Y	100.00	121.21	31.30		80.0	
		Ζ	100.00	121.18	31.55		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	112.26	27.27	3.23	80.0	± 9.6 %
		Y	100.00	109.52	25.77		80.0	
		Z	100.00	110.48	26.49		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	109.71	26.05	3.23	80.0	± 9.6 %
		Y	100.00	106.88	24.50		80.0	
		Z	100.00	108.10	25.34		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.38	32.53	3.23	80.0	± 9.6 %
		Y	100.00	121.23	31.30		80.0	
10171		Z	100.00	121.21	31.55		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	112.22	27.25	3.23	80.0	± 9.6 %
		Y	100.00	109.48	25.75		80.0	
10472-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-	Z X	100.00	110.44	26.46	0.00	80.0	
AAB	QAM, UL Subframe=2,3,4,7,8,9)	X Y	100.00	109.68	26.03	3.23	80.0	± 9.6 %
		Z	100.00 100.00	106.84	24.48		80.0	
10473-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	100.00	108.06 123.36	25.32	2.00	80.0	+0.0 %
AAB	QPSK, UL Subframe=2,3,4,7,8,9)	^ Y		123.36	32.52 31.29	3.23	80.0	± 9.6 %
		r Z	100.00 100.00	121.21	31.29		80.0 80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.23	27.26	3.23	80.0	± 9.6 %
		Y	100.00	109.49	25.75	· · · · · · · · · · · · · · · · · · ·	80.0	ļ
		Z	100.00	110.45	26.47		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	109.69	26.03	3.23	80.0	± 9.6 %
AAB		Y	100.00	106.85	24.48		80.0	
		I	100.00	100.00	24.45		1 2011	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.10	27.19	3.23	80.0	± 9.6 %
		Y	100.00	109.35	25.68		80.0	
		Z	100.00	110.33	26.40		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	109.65	26.01	3.23	80.0	± 9.6 %
		Y	100.00	106.81	24.47		80.0	
		Z	100.00	108.04	25.30		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	14.38	94.20	26.88	3.23	80.0	±9.6 %
		Y	12.62	91.51	25.59		80.0	
10100		Z	11.98	90.33	25.40		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	16.92	91.85	24.70	3.23	80.0	±9.6 %
		Y	16.07	90.43	23.78		80.0	
10481-		Z	14.43	88.66	23.48		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	15.52	89.82	23.79	3.23	80.0	± 9.6 %
		Y	14.42	88.14	22.78		80.0	
10400		Z	13.29	86.80	22.62		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.56	82.70	21.88	2.23	80.0	± 9.6 %
		Y	6.34	79.89	20.64		80.0	
10400		Z	6.13	78.95	20.35		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	10.42	84.68	22.62	2.23	80.0	±9.6 %
		Y	9.52	82.90	21.60		80.0	
40404		Z	9.24	82.26	21.60		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.76	83.43	22.21	2.23	80.0	± 9.6 %
·		Y	8.92	81.70	21.20		80.0	
		Z	8.78	81.26	21.26		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.43	82.48	22.31	2.23	80.0	± 9.6 %
		Y	6.34	79.89	21,17		80.0	
		Z	6.26	79.21	20.92		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.54	75.02	19.37	2.23	80.0	±9.6 %
		Y	5.16	73.91	18.72		80.0	
		Z	5.15	73.47	18.58		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.49	74.50	19.17	2.23	80.0	±9.6 %
		Y	5.13	73.46	18.54		80.0	
		Z	5.13	73.07	18.42		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.90	79.78	21.64	2.23	80.0	±9.6 %
		Y	6.14	77.86	20.75		80.0	
40.400		Z	6.18	77.51	20.58		80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.38	73.43	19.44	2.23	80.0	± 9.6 %
		Y	5.09	72.55	18.91		80.0	
10.107		Z	5.16	72.40	18.83		80.0	ļ
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	5.41	72.95	19.27	2.23	80.0	± 9.6 %
		Y	5.14	72.16	18.78		80.0	
		Z	5.21	72.02	18.71		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.32	76.48	20.47	2.23	80.0	±9.6 %
		Y	5.85	75.21	19.82		80.0	
		Z	5.92	75.01	19.70		80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.50	72.00	19.03	2.23	80.0	± 9.6 %
		Y	5.27	71.31	18.59		80.0	
		Z	5.36	71.28	18.56		80.0	

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.54	71.72	18.94	2.23	80.0	± 9.6 %
		Y	5.32	71.08	18.52		80.0	
		Z	5.41	71.05	18.49		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.25	78.81	21.14	2.23	80.0	± 9.6 %
		Y	6.59	77.27	20.41		80.0	1
		Z	6.62	76.95	20.25		80.0	1
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.65	72.70	19.29	2.23	80.0	± 9.6 %
		Y	5.39	71.95	18.83		80.0	
		Z	5.48	71.90	18.78		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	5.64	72.15	19.11	2.23	80.0	± 9.6 %
		Y	5.41	71.48	18.68		80.0	
		Z	5.50	71.45	18.64		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.62	80.74	20.69	2.23	80.0	± 9.6 %
		Y	5.48	77.81	19.35		80.0	
		Z	5.31	76.98	19.14		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.90	73.48	17.22	2.23	80.0	± 9.6 %
		Y	4.27	71.53	16.16	····· ·	80.0	<u> </u>
		Z	4.35	71.46	16.28		80.0	t
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.83	72.93	16.89	2.23	80.0	± 9.6 %
		Y	4.21	71.00	15.82		80.0	
		Z	4.31	71.03	15.99		80.0	<u> </u>
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.85	80.51	21.77	2.23	80.0	± 9.6 %
		Y	6.00	78.35	20.77		80.0	
		Z	6.00	77.87	20.57		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.43	74.16	19.30	2.23	80.0	± 9.6 %
		Y	5.10	73.18	18.71		80.0	
		Z	5.13	72.87	18.60		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.44	73.80	19.13	2.23	80.0	± 9.6 %
		Y	5.13	72.89	18.57		80.0	
		Z	5.15	72.59	18.46		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.81	79.57	21.56	2.23	80.0	± 9.6 %
		Υ	6.06	77.64	20.66		80.0	
		Z	6.11	77.33	20.51		80.0	
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.36	73.36	19.40	2.23	80.0	± 9.6 %
		Y	5.07	72.47	18.86		80.0	
		Z	5.14	72.33	18.79		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.38	72.87	19.23	2.23	80.0	±9.6%
		Y	5.11	72.07	18.73		80.0	
(0=0-		Z	5.19	71.95	18.67	· · · ···	80.0	
10506- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	78.66	21.07	2.23	80.0	± 9.6 %
		Y	6.54	77.11	20.34		80.0	
		Z	6.57	76.81	20.18		80.0	
10507- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.63	72.64	19.26	2.23	80.0	± 9.6 %
		Y	5.37	71.89	18.79		00.0	<u> </u>
		1	0.07	11.05	10.78		80.0	

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.63	72.09	19.07	2.23	80.0	± 9.6 %
		Y	5.39	71.41	18.64	1	80.0	
		Z	5.49	71.39	18.61	-	80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.80	75.80	19.99	2.23	80.0	±9.6 %
		Y	6.40	74.81	19.47		80.0	
		Z	6.44	74.60	19.35		80.0	· · · · · · · · · · · · · · · · · · ·
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.00	71.87	18.97	2.23	80.0	± 9.6 %
		Y	5.78	71.27	18.59		80.0	
40544		Z	5.87	71.27	18.56		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.98	71.43	18.84	2.23	80.0	± 9.6 %
		Y	5.78	70.88	18.48		80.0	
		Z	5.87	70.89	18.46		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.65	78.39	20.81	2.23	80.0	± 9.6 %
		Y	7.04	77.04	20.17		80.0	
40540		Z	7.05	76.73	20.01		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.99	72,54	19.22	2.23	80.0	± 9.6 %
		Y	5.74	71.83	18.79		80.0	
		Z	5.84	71.84	18.77		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.89	71.84	19.00	2.23	80.0	± 9.6 %
		Y	5.67	71.22	18.61		80.0	
		Z	5.77	71.23	18.59		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.04	64.60	16.09	0.00	150.0	± 9.6 %
		Y	1.01	63.51	15.03		150.0	
		Z	1.00	63.69	15.18		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1.58	89.32	26.18	0.00	150.0	±9.6 %
		Y	0.68	71.98	18.30		150.0	
10517-		Z	0.78	74.89	19.62	0.0-	150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.96	68.28	17.72	0.00	150.0	±9.6 %
		Y	0.87	65.73	15.83		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	0.88 4.79	66.23 67.10	16.14 16.58	0.00	150.0 150.0	± 9.6 %
		Y	4.74	66.90	16.34		150.0	
		Z	4.76	66.92	16.34		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	5.03	67.42	16.72	0.00	150.0	± 9.6 %
		Y	4.98	67.22	16.49	·	150.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.00	67.24	16.51		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.88	67.42	16.66	0.00	150.0	± 9.6 %
		Y	4.82	67.20	16.42		150.0	
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	Z X	<u>4.84</u> 4.81	67.23 67.44	16.44 16.66	0.00	150.0 150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)	Y	4.75	67.21	16.40		150.0	
		Z	4.77	67.24	16.43		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.84	67.34	16.65	0.00	150.0	±9.6 %
		Y	4.7 9	67.14	16.41		150.0	
		Z	4.81	67.14	16.43		150.0	

10523-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.72	67.29	16.53	0.00	150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)]		0.00	100.0	20.0 /0
		Y	4.66	67.07	16.29		150.0	
		Z	4.68	67.09	16.31		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	Х	4.80	67.32	16.65	0.00	150.0	± 9.6 %
		Y	4.75	67.12	16.41		150.0	
10505		Z	4.77	67.13	16.43		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duly cycle)	X	4.74	66.35	16.23	0.00	150.0	± 9.6 %
		Y	4.69	66.14	16.00		150.0	
10500		Z	4.71	66.16	16.01		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.97	66.77	16.38	0.00	150.0	± 9.6 %
		Y	4.91	66.56	16.14		150.0	
40507		Z	4.92	66.58	16.16		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.88	66.77	16.35	0.00	150.0	± 9.6 %
		Y	4.82	66.54	16.10		150.0	
40500		Z	4.84	66.57	16.13		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.90	66.79	16.38	0.00	150.0	± 9.6 %
		Y	4.84	66.56	16.14		150.0	
10500		Z	4.86	66.59	16.16		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.90	66.79	16.38	0.00	150.0	± 9.6 %
		Y	4.84	66.56	16.14		150.0	
		Z	4.86	66.59	16.16		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.93	66.97	16.42	0.00	150.0	±9.6 %
		Y	4.86	66.72	16.17		150.0	
		Z	4.88	66.75	16.19		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.77	66.86	16.39	0.00	150.0	± 9.6 %
		Y	4.71	66.60	16.12		150.0	
		Z	4.73	66.64	16.15		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.92	66.80	16.36	0.00	150.0	± 9.6 %
		Y	4.86	66.58	16.11		150.0	
		Z	4.87	66.60	16.13		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.41	66.95	16.41	0.00	150.0	± 9.6 %
		Y	5.35	66.75	16.19		150.0	
		Z	5.37	66.78	16.21		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.48	67.09	16.46	0.00	150.0	± 9.6 %
		Y	5.43	66.89	16.25		150.0	
		Z	5.44	66.92	16.26		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.35	67.09	16.45	0.00	150.0	± 9.6 %
		Y	5.29	66.87	16.23		150.0	
		Z	5.30	66.90	16.24		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.41	67.05	16.43	0.00	150.0	± 9.6 %
		Y	5.36	66.85	16.22		150.0	· · · ···
		Z	5.37	66.87	16.23		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.54	67.15	16.52	0.00	150.0	± 9.6 %
		Y	5.48	66.94	16.30		150.0	
		Z	5.50	66.97	16.32		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.43	67.07	16.50	0.00	150.0	± 9.6 %
		Y	5.37	66.86	16.28		150.0	
		Z	5.38	66.89	16.29	I	150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	×	5.42	67.03	16.48	0.00	150.0	± 9.6 %
		Y	5.36	66.81	16.25		150.0	
		Z	5.38	66.86	16.28		150.0	·
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.56	67.00	16.48	0.00	150.0	± 9.6 %
· .		Y	5.50	66.81	16.26		150.0	
		Z	5.52	66.84	16.28		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.65	67.02	16.49	0.00	150.0	± 9.6 %
		Y	5.60	66.83	16.28		150.0	
		Z	5.62	66.87	16.31		150.0	1
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.67	67.03	16.38	0.00	150.0	± 9.6 %
		Y	5.62	66.85	16.18		150.0	
		Z	5.63	66.88	16.19		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.89	67.44	16.51	0.00	150.0	± 9.6 %
		Y	5.84	67.25	16.31		150.0	
		Z	5.84	67.26	16.32		150.0	
10546- AAA	IEEE 802.11ac WIFI (80MHz, MCS2, 99pc duty cycle)	X	5.78	67.35	16.50	0.00	150.0	±9.6 %
		Y	5.73	67.16	16.29		150.0	
		Z	5.74	67.19	16.30		150.0	
10547- AAA	IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle)	X	5.88	67.44	16.53	0.00	150.0	± 9.6 %
		Y	5.82	67.23	16.31		150.0	
		Z	5.84	67.28	16.34		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.24	68.68	17.12	0.00	150.0	± 9.6 %
		Y	6.15	68.36	16.84		150.0	
		Z	6.16	68.38	16.86		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.80	67.28	16.46	0.00	150.0	± 9.6 %
		Y	5.75	67.09	16.26		150.0	
		Z	5.76	67.12	16.27		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.83	67.43	16.50	0.00	150.0	± 9.6 %
		Y	5.77	67.22	16.29		150.0	
	·····	Z	5.78	67.25	16.30		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.72	67.16	16.39	0.00	150.0	±9.6 %
		Y	5.67	66.97	16.18		150.0	
		Z	5.68	67.00	16.20		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.81	67.18	16.42	0.00	150.0	± 9.6 %
		Y	5.76	67.00	16.22		150.0	
		Z	5.77	67.03	16.23		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.07	67.41	16.47	0.00	150.0	±9.6 %
		Y	6.02	67.24	16.28		150.0	
		Z	6.02	67.27	16.29		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.25	67.82	16.64	0.00	150.0	± 9.6 %
		Y	6.19	67.62	16.43		150.0	
		Z	6.20	67.66	16.46		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.24	67.77	16.61	0.00	150.0	± 9.6 %
		Y	6.19	67.59	16.41		150.0	
		Z	6.19	67.61	16.43		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.24	67.78	16.64	0.00	150.0	± 9.6 %
		Y	6.18	67.59	16.43		150.0	
		Z	6.19	67.62	16.45		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.31	68.00	16.76	0.00	150.0	± 9.6 %
		Y	6.25	67.79	16.55		150.0	
		Z	6.26	67.82	16.57		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.30	67.81	16.70	0.00	150.0	± 9.6 %
		Y	6.24	67.61	16.50		150.0	
		Z	6.26	67.66	16.52		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.20	67.76	16.72	0.00	150.0	±9.6 %
		Y	6.15	67.55	16.51		150.0	
		Z	6.16	67.60	16.53		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.39	68.33	17.01	0.00	150.0	± 9.6 %
		Y	6.32	68.08	16.77		150.0	
		Z	6.34	68.13	16.81		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.65	68.60	17.09	0.00	150.0	± 9.6 %
		Y	6.59	68.41	16.88		150.0	
		Z	6.58	68.40	16.88		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.14	67.24	16.77	0.46	150.0	± 9.6 %
		Y	5.09	67.04	16.53		150.0	
		Z	5.10	67.08	16.57		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	Х	5.42	67.73	17.08	0.46	150.0	± 9.6 %
		Y	5.36	67.55	16.86		150.0	
		Z	5.38	67.58	16.89		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.25	67.63	16.93	0.46	150.0	± 9.6 %
		Υ	5.19	67.42	16.69		150.0	
		Ζ	5.21	67.47	16.73		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.27	67.98	17.24	0.46	150.0	± 9.6 %
		Y	5.22	67.81	17.03		150.0	
		Ζ	5.23	67.81	17.03		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	Х	5.15	67.34	16.68	0.46	150.0	± 9.6 %
		Y	5.09	67.11	16.43		150.0	
		Z	5.12	67.17	16.48		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.20	67.97	17.24	0.46	150.0	± 9.6 %
		Y	5.15	67.81	17.04		150.0	
		Ζ	5.16	67.80	17.04		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.25	67.80	17.18	0.46	150.0	±9.6 %
		Y	5.20	67.64	16.98		150.0	
		Z	5.21	67.63	16.98		150.0	·
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.47	67.75	17.68	0.46	130.0	± 9.6 %
		Y	1.40	66.34	16.57		130.0	1
		Z	1.42	66.69	16.76		130.0	1
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.51	68.57	18.12	0.46	130.0	± 9.6 %
		Y	1.43	67.03	16.96		130.0	1
		Z	1.45	67.37	17.14		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	149.09	40.35	0.46	130.0	± 9.6 %
		Y	5.48	98.07	27.02		130.0	
		Z	8.77	105.39	29.04		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	2.10	78.38	22.53	0.46	130.0	± 9.6 %
		Y	1.75	74.27	20.33	1	130.0	
		Z	1.81	74.78	20.52	i	130.0	i

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.95	67.11	16.87	0.46	130.0	± 9.6 %
		Y	4.91	66.91	16.63	·	130.0	
		Z	4.93	66.95	16.67		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.98	67.26	16.93	0.46	130.0	± 9.6 %
		Y	4.93	67.07	16.70		130.0	
		Z	4.95	67.11	16.73		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	5.23	67.61	17.11	0.46	130.0	± 9.6 %
		Y	5.18	67.42	16.88		130.0	
40570		Z	5.21	67.46	16.91		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	5.13	67.79	17.20	0.46	130.0	± 9.6 %
		Y	5.07	67.60	16.98		130.0	
10570		Z	5.10	67.62	17.00		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.92	67.26	16.64	0.46	130.0	± 9.6 %
		Y	4.85	66.98	16.35		130.0	
40500		Z	4.89	67.08	16.43	ļ	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.96	67.18	16.62	0.46	130.0	± 9.6 %
		<u>Y</u>	4.89	66.92	16.33		130.0	
10504		Z	4.93	67.01	16.41		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	5.04	67.92	17.18	0.46	130.0	± 9.6 %
		Y	4.98	67.70	16.95		130.0	
40500		Z	5.01	67.74	16.97		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.88	67.01	16.45	0.46	130.0	± 9.6 %
		Y	4.81	66.72	16.14		130.0	
		Z	4.85	66.84	16.24		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.95	67.11	16.87	0.46	130.0	±9.6 %
		Y	4.91	66.91	16.63		130.0	
		Z	4.93	66.95	16.67		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.98	67.26	16.93	0.46	130.0	± 9.6 %
		Y	4.93	67.07	16.70		130.0	
		Z	4.95	67.11	16.73		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.23	67.61	17.11	0.46	130.0	± 9.6 %
		Y	5.18	67.42	16.88		130.0	
40500		Z	5.21	67.46	16.91		130.0	
10586- AAA	IEEE 802.11a/h WIFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	5.13	67.79	17.20	0.46	130.0	±9.6 %
		Y	5.07	67.60	16.98		130.0	
40507		Z	5.10	67.62	17.00		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.92	67.26	16.64	0.46	130.0	± 9.6 %
		Y	4.85	66.98	16.35		130.0	
40500		Z	4.89	67.08	16.43		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.96	67.18	16.62	0.46	130.0	± 9.6 %
		Y	4.89	66.92	16.33		130.0	
10500		Z	4.93	67.01	16.41		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	5.04	67.92	17.18	0.46	130.0	± 9.6 %
		Y	4.98	67.70	16.95	ļ	130.0	
40500		Z	5.01	67.74	16.97		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.88	67.01	16.45	0.46	130.0	± 9.6 %
		Y	4.81	66.72	16.14		130.0	
	1	Z	4.85	66.84	16.24		130.0	

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	5.10	67.15	16.94	0.46	130.0	± 9.6 %
		Y	5.06	66.97	16.72		130.0	
		Z	5.07	67.00	16.75		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.29	67.50	17.06	0.46	130.0	± 9.6 %
		Y	5.24	67.32	16.84		130.0	
		Z	5.26	67.35	16.87		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.23	67.49	16.99	0.46	130.0	± 9.6 %
		Y	5.17	67.29	16.76		130.0	
(050)		Z	5.20	67.34	16.80		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.27	67.61	17.11	0.46	130.0	± 9.6 %
		Y	5.22	67.43	16.89		130.0	
40505		Z	5.25	67.46	16.92		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.26	67.62	17.04	0.46	130.0	± 9.6 %
		<u> </u>	5.20	67.41	16.81		130.0	
10500		Z	5.23	67.46	16.84		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.19	67.61	17.04	0.46	130.0	± 9.6 %
		<u>Y</u>	5.14	67.40	16.80		130.0	
		Z	5.17	67.44	16.84		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	5.15	67.57	16.97	0.46	130.0	±9.6 %
		Y	5.09	67.35	16.72		130.0	
		Z	5.12	67.41	16.76		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.13	67.83	17.22	0.46	130.0	± 9.6 %
		Y	5.07	67.62	16.99		130.0	
		Z	5.10	67.66	17.02		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.77	67.78	17.12	0.46	130.0	± 9.6 %
		Y	5.72	67.60	16.91		130.0	
		Z	5.74	67.64	16.94		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	6.05	68.62	17.52	0.46	130.0	± 9.6 %
		Y	5.98	68.34	17.26		130.0	
		Z	6.00	68.41	17.31		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.86	68.09	17.27	0.46	130.0	±9.6%
		Y	5.80	67.88	17.04		130.0	
		Z	5.82	67.93	17.07		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.98	68.19	17.24	0.46	130.0	± 9.6 %
		Y	5.90	67.93	16.99		130.0	
		Z	5.94	68.03	17.05		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	6.09	68.56	17.54	0.46	130.0	± 9.6 %
		Y	6.02	68.33	17.31		130.0	
		Z	6.05	68.40	17.35		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.79	67.78	17.15	0.46	130.0	± 9.6 %
		Y	5.74	67.59	16.93		130.0	
		Z	5.76	67.64	16.97		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.91	68.09	17.31	0.46	130.0	± 9.6 %
		Y	5.85	67.88	17.08		130.0	
		Z	5.87	67.94	17.12		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.67	67.56	16.92	0.46	130.0	± 9.6 %
		Y	5.62	67.36	16.69		130.0	
		Z	5.63	67.40	16.73	1	130.0	• • • • • • • • • • • • • • • • • • • •

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.93	66.44	16.55	0.46	130.0	± 9.6 %
		Y	4.88	66.25	16.33		130.0	
		Z	4.90	66.28	16.35		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.16	66.88	16.71	0.46	130.0	± 9.6 %
·····		Y	5.11	66.69	16.49	<u> </u>	130.0	
• .		Z	5.13	66.71	16.51		130.0	
10609-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	5.05	66.80	16.60	0.46		100%
AAA	90pc duty cycle)	Y	4.99	66.58	16.36	0.40	130.0	± 9.6 %
		Z			÷		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.02 5.11	66.62 66.94	16.39 16.74	0.46	130.0 130.0	± 9.6 %
		Υ	5.05	66.74	16.51		130.0	
		Z	5.07	66.77	16.54		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	5.04	66.82	16.63	0.46	130.0	± 9.6 %
		Y	4.98	66.59	16.39		130.0	
		Z	5.01	66.64	16.42		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	5.06	66.96	16.66	0.46	130.0	± 9.6 %
		Y	4.99	66.72	16.41		130.0	
	······	Z	5.02	66.77	16.45		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	5.08	66.91	16.58	0.46	130.0	± 9.6 %
		Y	5.01	66.66	16.32		130.0	
		Z	5.04	66.72	16.37		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	5.00	67.09	16.80	0.46	130.0	± 9.6 %
		Y	4.94	66.86	16.56		130.0	
		Z	4.96	66.90	16.59		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	5.04	66.62	16.41	0.46	130.0	± 9.6 %
		Y	4.98	66.38	16.15		130.0	
		Z	5.01	66.45	16.20	-	130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.59	67.05	16.74	0.46	130.0	± 9.6 %
		Y	5.54	66.86	16.53		130.0	
		Z	5.56	66.89	16.55		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.66	67.16	16.76	0.46	130.0	± 9.6 %
		Y	5.60	66.97	16.55		130.0	
		Z	5.62	67.01	16.57		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.55	67.23	16.82	0.46	130.0	± 9.6 %
		Y	5.50	67.04	16.61		130.0	
		Z	5.51	67.07	16.62		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.57	67.04	16.66	0.46	130.0	± 9.6 %
		Y	5.51	66.84	16.44		130.0	
		Z	5.53	66.88	16.47		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.71	67.21	16.79	0.46	130.0	± 9.6 %
		Y	5.65	66.99	16.56		130.0	
		Z	5.67	67.05	16.60		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.67	67.21	16.90	0.46	130.0	± 9.6 %
		Y	5.61	67.05	16.70		130.0	
		Z	5.63	67.07	16.71		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.66	67.33	16.95	0.46	130.0	± 9.6 %
		Y	5.61	67.14	16.74		130.0	
		Z	5.63	67.17	16.76		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.58	67.03	16.70	0.46	130.0	± 9.6 %
		Y	5.51	66.79	16.46		130.0	1
	· · · · · · · · · · · · · · · · · · ·	Z	5.54	66.88	16.51		130.0	ł
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.74	67.07	16.77	0.46	130.0	± 9.6 %
		Y	5.68	66.89	16.57		130.0	
·		Z	5.70	66.92	16.59			
10625-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	6.12			0.40	130.0	1000
AAA	90pc duty cycle)	Ì I		68.00	17.28	0.46	130.0	± 9.6 %
		Y	6.07	67.85	17.09		130.0	
10626-		Z	6.06	67.78	17.06		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.83	67.05	16.65	0.46	130.0	± 9.6 %
		Y	5.78	66.88	16.46		130.0	
		Z	5.79	66.91	16.47		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.10	67.59	16.86	0.46	130.0	±9.6 %
		Y	6.05	67.42	16.67		130.0	
		Z	6.05	67.42	16.67		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.92	67.28	16.66	0.46	130.0	± 9.6 %
		Y	5.86	67.08	16.45		130.0	t
		Z	5,88	67.13	16.48		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	6.03	67.42	16.72	0.46	130.0	± 9.6 %
		Y	5.97	67.19	16.49		130.0	}
		z	5.99	67.27	16.54		130.0	
10630-	IEEE 802.11ac WiFi (80MHz, MCS4,	X	6.68	69.49		0.40		100%
AAA	90pc duty cycle)				17.76	0.46	130.0	± 9.6 %
		Y	6.56	69.10	17.44		130.0	
		Z	6.58	69.15	17.48		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.50	69.03	17.69	0.46	130.0	± 9.6 %
		Y	6.41	68.76	17.46		130.0	
		Z	6.44	68.80	17.47		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.08	67.69	17.04	0.46	130.0	±9.6 %
		Y	6.03	67.54	16.87		130.0	
		Z	6.05	67.55	16.87		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	6.06	67.65	16.87	0.46	130.0	± 9.6 %
		Y	5.99	67.42	16.64		130.0	
		Ż	6.01	67.48	16.68		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	6.02	67.58	16.89	0.46	130.0	± 9.6 %
		Y	5.96	67.38	16.68		130.0	
		Ż	5.98	67.43	16.71		130.0	· · · · ·
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.89	66.92	16.32	0.46	130.0	± 9.6 %
		Y	5.83	66.68	16.08		120.0	Į
							130.0	ļ!
10636-	IEEE 1602 1100 MIE: (160MU- MOOO	Z	5.86	66.78	16.14	0.40	130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.23	67.45	16.75	0.46	130.0	± 9.6 %
		Y	6.19	67.29	16.56		130.0	
		Z	6.20	67.31	16.57		130.0	
10637-	IEEE 1602.11ac WIFI (160MHz, MCS1, 90pc duty cycle)	X	6.44	67.93	16.96	0.46	130.0	± 9.6 %
AAA	sope duty cycle)			67.70	16.75		130.0	
		Y	6.38	67.73	1 10.10		1 100.0	1 .
AAA 10638-	IEEE 1602.11ac WiFi (160MHz, MCS2,	Y Z X	6.38 6.40 6.41	67.78 67.82	16.78 16.88	0.46	130.0 130.0	± 9.6 %
ΑΑΑ		Z	6.40	67.78	16.78	0.46	130.0	± 9.6 %

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.43	67.88	16.96	0.46	130.0	± 9.6 %
		Y	6.38	67.70	16.77		130.0	
		Z	6.39	67.74	16.79		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.48	68.03	16.99	0.46	130.0	± 9.6 %
		Y	6.42	67.80	16.76		130.0	
		Z	6.43	67.86	16.80		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.45	67.69	16.83	0.46	130.0	± 9.6 %
		Y	6.39	67.49	16.62		130.0	
		Z	6.41	67.55	16.66		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.53	68.02	17.15	0.46	130.0	± 9.6 %
		Y	6.47	67.85	16.96		130.0	
		Z	6.49	67.89	16.98		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.36	67.74	16.93	0.46	130.0	± 9.6 %
		Y	6.30	67.53	16.71		130.0	
		Z	6.31	67.59	16.75		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.64	68.58	17.37	0.46	130.0	± 9.6 %
		Y	6.55	68.29	17.12		130.0	
		Z	6.58	68.38	17.17		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.88	68.81	17.43	0.46	130.0	± 9.6 %
		Y	6.82	68.61	17.21		130.0	
		Z	6.82	68.61	17.22		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	25.26	106.71	35.56	9.30	60.0	± 9.6 %
		Y	24.21	105.83	35.01		60.0	
		Z	22.77	103.47	34.30		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	26.48	108.55	36.25	9.30	60.0	± 9.6 %
		Y	24.67	107.00	35.49		60.0	
		Z	23.62	105.03	34.91		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	1.07	68.58	14.85	0.00	150.0	± 9.6 %
		Y	0.88	65.28	12.75		150.0	
		Z	0.91	65.79	13.10		150.0	

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