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





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Client Microsoft

Certificate No: D2450V2-916\_Jul14

Accreditation No.: SCS 108

# CALIBRATION CERTIFICATE

D2450V2 - SN: 9	16	
QA CAL-05.v9 Calibration proce	dure for dipole validation kits abc	və 700 MHz
July 16, 2014		
nts the traceability to nation taken the traceability to nation tainties with confidence potentiated in the closed laborator	pnal standards, which realize the physical uni robability are given on the following pages an y facility: environment temperature $(22 \pm 3)$ °C	ts of measurements (SI). d are part of the certificate. ) and humidity < 70%.
E critical for calibration)		
ID#	Cal Date (Certificate No.)	Scheduled Calibration
GB37480704	09-Oct-13 (No. 217-01827)	Oct-14
US37292783	09-Oct-13 (No. 217-01827)	Oct-14
MY41092317	09-Oct-13 (No. 217-01828)	Oct-14
SN: 5058 (20k)	03-Apr-14 (No. 217-01918)	Apr-15
SN: 5047.2 / 06327	03-Apr-14 (No. 217-01921)	Apr-15
SN: 3205	30-Dec-13 (No. ES3-3205_Dec13)	Dec-14
SN: 601	30-Apr-14 (No. DAE4-601_Apr14)	Apr-15
ID #	Check Date (in house)	Scheduled Check
100005	04-Aug-99 (in house check Oct-13)	In house check: Oct-16
US37390585 S4206	18-Oct-01 (in house check Oct-13)	In house check: Oct-14
Name	Function	Signature
Michael Weber	Laboratory Technician	M. Hebes
Katja Pokovic	Technical Manager	fol lly-
	D2450V2 - SN: 9 QA CAL-05.v9 Calibration process July 16, 2014 Interference of the second	D2450V2 - SN: 916   QA CAL-05.v9   Calibration procedure for dipole validation kits abore   July 16, 2014   Ints the traceability to national standards, which realize the physical unitainties with confidence probability are given on the following pages and ed in the closed laboratory facility: environment temperature (22 ± 3)*C   E critical for calibration)   ID # Cal Date (Certificate No.)   GB37480704 09-Oct-13 (No. 217-01827)   US37292783 09-Oct-13 (No. 217-01921)   SN: 5058 (20k) 03-Apr-14 (No. 217-01921)   SN: 5058 (20k) 03-Apr-14 (No. DAE4-601_Apr14)   ID # Check Date (in house)   100005 04-Aug-99 (in house check Oct-13)   US37390585 S4206 18-Oct-01 (in house check Oct-13)   US37390585 S4206 18-Oct-01 (in house check Oct-13)   Name Function   Michael Weber Laboratory Technician

# **Calibration Laboratory of**

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





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S **Swiss Calibration Service** 

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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) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# **Additional Documentation:**

d) 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. ٠ 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 108

### **Measurement Conditions**

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

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

### **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.8 ± 6 %	1.85 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

## SAR result with Head TSL

SAR averaged over 1 $\text{cm}^3$ (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	52.1 W/kg ± 17.0 % (k=2)

SAR averaged over 10 $\text{cm}^3$ (10 g) of Head TSL	condition	-
SAR measured	250 mW input power	6.11 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.1 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	50.6 ± 6 %	2.03 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

## SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	51.7 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.11 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.0 W/kg ± 16.5 % (k=2)

### Appendix (Additional assessments outside the scope of SCS108)

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

Impedance, transformed to feed point	53.9 Ω + 1.6 jΩ
Return Loss	- 27.9 dB

### Antenna Parameters with Body TSL

Impedance, transformed to feed point	51.2 Ω + 3.7 jΩ
Return Loss	- 28.3 dB

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

Electrical Delay (one direction)	1.153 ns

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

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

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

### **Additional EUT Data**

Manufactured by	SPEAG
Manufactured on	December 19, 2012

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

Date: 07.07.2014

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 916

Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 1.85$  S/m;  $\epsilon_r = 37.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

### **DASY52** Configuration:

- Probe: ES3DV3 SN3205; ConvF(4.53, 4.53, 4.53); Calibrated: 30.12.2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 99.97 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 27.6 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.11 W/kg Maximum value of SAR (measured) = 17.2 W/kg



0 dB = 17.2 W/kg = 12.36 dBW/kg

# Impedance Measurement Plot for Head TSL



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

Date: 16.07.2014

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 916

Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 50.6$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

### DASY52 Configuration:

- Probe: ES3DV3 SN3205; ConvF(4.35, 4.35, 4.35); Calibrated: 30.12.2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 95.95 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 27.9 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.11 W/kg Maximum value of SAR (measured) = 17.6 W/kg



0 dB = 17.6 W/kg = 12.46 dBW/kg

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# Impedance Measurement Plot for Body TSL



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





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Accreditation No.: SCS 108

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Client Microsoft Certificate No: D5GHzV2-1158\_Jul14

# **CALIBRATION CERTIFICATE**

Object	D5GHzV2 - SN: 1	1158	
Calibration procedure(s)	QA CAL-22.v2 Calibration proce	dure for dipole validation kits bet	ween 3-6 GHz
	h.h. 45 0014		
Alidration date:	July 15, 2014		
This calibration certificate docume	ents the traceability to nati	onal standards, which realize the physical un	its of measurements (SI).
All calibrations have been conduc	ted in the closed laborator	y facility: environment temperature (22 $\pm$ 3)*(	d are part of the certificate. C and humidity < 70%.
Calibration Equipment used (M&T	E critical for calibration)		•
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
ower meter EPM-442A	GB37480704	09-Oct-13 (No. 217-01827)	Oct-14
ower sensor HP 8481A	US37292783	09-Oct-13 (No. 217-01827)	Oct-14
ower sensor HP 8481A	MY41092317	09-Oct-13 (No. 217-01828)	Oct-14
leference 20 dB Attenuator	SN: 5058 (20k)	03-Apr-14 (No. 217-01918)	Apr-15
ype-N mismatch combination	SN: 5047.2 / 06327	03-Apr-14 (No. 217-01921)	Apr-15
eference Probe EX3DV4	SN: 3503	30-Dec-13 (No. EX3-3503_Dec13)	Dec-14
DAE4	SN: 601	30-Apr-14 (No. DAE4-601_Apr14)	Apr-15
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator R&S SMT-06	100005	04-Aug-99 (in house check Oct-13)	In house check: Oct-16
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-13)	In house check: Oct-14
	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	Milleter
Approved by:	Katja Pokovic	Technical Manager	felle
i i			- /
			Issued July 16, 2014
This calibration certificate shall no	ot be reproduced except in	full without written approval of the laboratory	Issued: July 16, 20

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





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S Swiss Calibration Service

Accreditation No.: SCS 108

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

### **Glossary:**

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

## Calibration is Performed According to the Following Standards:

- a) IEC 62209-2, "Evaluation of Human Exposure to Radio Frequency Fields from Handheld and Body-Mounted Wireless Communication Devices in the Frequency Range of 30 MHz to 6 GHz: Human models, Instrumentation, and Procedures"; Part 2: "Procedure to determine the Specific Absorption Rate (SAR) for including accessories and multiple transmitters". March 2010
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"
- c) 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

## Additional Documentation:

d) 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 V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5200 MHz ± 1 MHz 5600 MHz ± 1 MHz 5800 MHz ± 1 MHz	

### Head TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	36.0	4.66 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.6 ± 6 %	4.46 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

### SAR result with Head TSL at 5200 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.05 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.8 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.30 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.7 W/kg ± 19.5 % (k=2)

### Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.0 ± 6 %	4.84 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

## SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.54 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	84.5 W / kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.43 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.0 W/kg ± 19.5 % (k=2)

## Head TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.3	5.27 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	33.8 ± 6 %	5.04 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

## SAR result with Head TSL at 5800 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.05 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.6 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.29 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.6 W/kg ± 19.5 % (k=2)

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## Body TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	49.0	5.30 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.7 ± 6 %	5.38 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

## SAR result with Body TSL at 5200 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.71 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.7 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.16 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.5 W/kg ± 19.5 % (k=2)

### Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.1 ± 6 %	5.91 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

### SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	8.35 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	83.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.32 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	23.0 W/kg ± 19.5 % (k=2)

## Body TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.2	6.00 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.7 ± 6 %	6.18 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL at 5800 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.67 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.3 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.12 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.0 W/kg ± 19.5 % (k=2)

## Appendix (Additional assessments outside the scope of SCS108)

### Antenna Parameters with Head TSL at 5200 MHz

Impedance, transformed to feed point	50.5 Ω - 8.6 jΩ
Return Loss	- 21.4 dB

### Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	55.1 Ω - 2.7 jΩ
Return Loss	- 25.2 dB

#### Antenna Parameters with Head TSL at 5800 MHz

Impedance, transformed to feed point	53.3 Ω - 3.8 jΩ
Return Loss	- 26.2 dB

### Antenna Parameters with Body TSL at 5200 MHz

Impedance, transformed to feed point	49.7 Ω - 6.4 jΩ
Return Loss	- 23.9 dB

### Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	55.4 Ω - 1.0 jΩ
Return Loss	- 25.7 dB

### Antenna Parameters with Body TSL at 5800 MHz

Impedance, transformed to feed point	54.9 Ω - 1.9 jΩ		
Return Loss	- 26.0 dB		

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

Electrical Delay (one direction)	1.205 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
1 +-	Manufactured on	June 06, 2013

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

Date: 15.07.2014

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1158

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz;  $\sigma = 4.46$  S/m;  $\varepsilon_r = 34.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>, Medium parameters used: f = 5600 MHz;  $\sigma = 4.84$  S/m;  $\varepsilon_r = 34$ ;  $\rho = 1000$  kg/m<sup>3</sup>, Medium parameters used: f = 5800 MHz;  $\sigma = 5.04$  S/m;  $\varepsilon_r = 33.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### **DASY52** Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.52, 5.52, 5.52); Calibrated: 30.12.2013, ConvF(4.86, 4.86, 4.86); Calibrated: 30.12.2013, ConvF(4.91, 4.91, 4.91); Calibrated: 30.12.2013;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

#### Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 66.12 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 29.3 W/kg SAR(1 g) = 8.05 W/kg; SAR(10 g) = 2.3 W/kg Maximum value of SAR (measured) = 18.2 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 65.52 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 33.8 W/kg SAR(1 g) = 8.54 W/kg; SAR(10 g) = 2.43 W/kg Maximum value of SAR (measured) = 20.0 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 62.97 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 33.2 W/kg SAR(1 g) = 8.05 W/kg; SAR(10 g) = 2.29 W/kg Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg = 12.83 dBW/kg

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## Impedance Measurement Plot for Head TSL



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

Date: 14.07.2014

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1158

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz;  $\sigma = 5.38$  S/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>, Medium parameters used: f = 5600 MHz;  $\sigma = 5.91$  S/m;  $\epsilon_r = 47.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>, Medium parameters used: f = 5800 MHz;  $\sigma = 6.18$  S/m;  $\epsilon_r = 46.7$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

### **DASY52** Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.01, 5.01, 5.01); Calibrated: 30.12.2013, ConvF(4.3, 4.3, 4.3); Calibrated: 30.12.2013, ConvF(4.47, 4.47, 4.47); Calibrated: 30.12.2013;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 59.14 V/m; Power Drift = -0.03 dBPeak SAR (extrapolated) = 30.4 W/kg SAR(1 g) = 7.71 W/kg; SAR(10 g) = 2.16 W/kg Maximum value of SAR (measured) = 18.5 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 59.30 V/m; Power Drift = 0.00 dB Peak SAR (extrapolated) = 36.8 W/kg SAR(1 g) = 8.35 W/kg; SAR(10 g) = 2.32 W/kg Maximum value of SAR (measured) = 20.7 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 55.64 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 35.7 W/kg SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.12 W/kg Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

## Impedance Measurement Plot for Body TSL



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# Dipole D5GHzV2-1159 Calibration Extension

The dipole D5GHzV2-1159 was used under an extended calibration by way of the rules of **FCC KDB 865664 D01 v01r03 Section 3.2.2**, which say:

However, instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements.

1) The test laboratory must ensure that the required supporting information and documentation are included in the SAR report to qualify for the three-year extended calibration interval; otherwise, the IEEE Std 1528-2003 recommended annual calibration applies.

2) Immediate re-calibration is required for the following conditions. a) After a dipole is damaged and properly repaired to meet required specifications.

b) When the measured SAR deviates from the calibrated SAR value by more than 10% due to changes in physical, mechanical, electrical or other relevant dipole conditions; i.e., the error is not introduced by incorrect measurement procedures or other issues relating to the SAR measurement system.

c) When the most recent return-loss result, measured at least annually, deviates by more than 20% from the previous measurement (i.e. value in dB X 0.2) or not meeting the required 20 dB minimum return-loss requirement.<sup>24</sup>

d) When the most recent measurement of the real or imaginary parts of the impedance, measured at least annually, deviates by more than 5  $\Omega$  from the previous measurement.

The required most recent return loss and impedance measurements of the dipole are compared to those of the calibration report below (See following Aug 13 Calibration Certificate). This dipole was only used for 5300 MHz and 5500 MHz system verifications, so only the parameters of those frequencies are listed.

Frog	Return Loss (dB)		Impedance Real Part (Ω)			Impedance Imaginary Part (jΩ)			
(MHZ)	Cal. Cert.	Meas. 2/10/15	% Diff. of dB values	Cal. Cert.	Meas. 2/10/15	Diff. in (Ω)	Cal. Cert.	Meas. 2/10/15	Diff. in (jΩ)
5300	-21.8	-22.27	2.16	46.8	45.63	1.17	-7.2	-4.94	2.26
5500	-31.1	-29.32	-5.72	52.9	48.04	4.86	-0.1	2.45	2.55

Dipole D5GHzV2-1159 Return Loss and Impedance Measurements – Body TSL

Measurements were made with the dipole at a spacing of 10mm from a flat phantom filled with 5 GHz muscle-tissue simulating liquid. (MBBL 3500-5800). Most recent measurements were made 2-10-2015. Cal. Cert. measurements are from Certificate No: D5GHzV2-1158\_Aug13

Frog	Return Loss (dB)		Impedance Real Part (Ω)			Impedance Imaginary Part (Ω)			
(MHZ)	Cal. Cert.	Meas. 2/10/15	% Diff. of dB values	Cal. Cert.	Meas. 2/10/15	Diff. in (Ω)	Cal. Cert.	Meas. 2/10/15	Diff. in (Ω)
5300	-21	-21.9	4.29	46.9	44.96	1.94	-8.1	-6.53	1.57
5500	-31.1	-29.47	-5.24	52.7	48.92	3.78	-0.9	1.88	2.78

Dipole D5GHzV2-1159 Return Loss and Impedance Measurements – Head TSL

Measurements were made with the dipole at a spacing of 10mm from a flat phantom filled with 5 GHz head-tissue simulating liquid. (HBBL 3500-5800). Most recent measurements were made 2-10-2015. Cal. Cert. measurements are from Certificate No: D5GHzV2-1158\_Aug13

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





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Accreditation No.: SCS 108

Schweizerischer Kalibrierdienst Service suisse d'étalonnage 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

#### Client Microsoft (TDK)

Certificate No: D5GHzV2-1159\_Aug13

Object	D5GHzV2 - SN: 1	1159	
Calibration procedure(s)	QA CAL-22.v2 Calibration proce	dure for dipole validation kits bet	ween 3-6 GHz
Calibration date:	August 06, 2013		
This calibration certificate docume The measurements and the unce	ents the traceability to nati rtainties with confidence p	onal standards, which realize the physical un robability are given on the following pages an	its of measurements (SI). d are part of the certificate.
All calibrations have been conduc Calibration Equipment used (M&1	ted in the closed laborator	y facility: environment temperature (22 $\pm$ 3)°C	5 and numidity < 70%.
NI calibrations have been conduc Calibration Equipment used (M&T Primary Standards	ted in the closed laborator (E critical for calibration)	y tacility: environment temperature (22 ± 3)°C Cal Date (Certificate No.)	Scheduled Calibration
Il calibrations have been conduc alibration Equipment used (M&T 'rimary Standards ower meter EPM-442A	ted in the closed laborator TE critical for calibration) ID # GB37480704	y facility: environment temperature (22 ± 3)°C Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640)	Scheduled Calibration Oct-13
Il calibrations have been conduct calibration Equipment used (M&T 'rimary Standards 'ower meter EPM-442A ower sensor HP 8481A	ted in the closed laborator FE critical for calibration) ID # GB37480704 US37292783	y facility: environment temperature (22 ± 3)°C <u>Cal Date (Certificate No.)</u> 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640)	Scheduled Calibration Oct-13 Oct-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator	ted in the closed laborator FE critical for calibration) ID # GB37480704 US37292783 SN: 5058 (20k)	y facility: environment temperature (22 ± 3)°( Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01736)	Scheduled Calibration Oct-13 Oct-13 Apr-14
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination	ID #     GB37480704     US37292783     SN: 5058 (20k)     SN: 5047.3 / 06327	Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01736) 04-Apr-13 (No. 217-01739)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Pype-N mismatch combination Reference Probe EX3DV4	ted in the closed laborator FE critical for calibration) ID # GB37480704 US37292783 SN: 5058 (20k) SN: 5047.3 / 06327 SN: 3503	28-Dec-12 (No. 217-01730) 28-Dec-12 (No. 217-01730) 28-Dec-12 (No. 217-01730) 28-Dec-12 (No. 217-01730) 28-Dec-12 (No. EX3-3503_Dec12)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Fype-N mismatch combination Reference Probe EX3DV4 DAE4	ID #     GB37480704     US37292783     SN: 5058 (20k)     SN: 5047.3 / 06327     SN: 3503     SN: 601	Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01736) 04-Apr-13 (No. 217-01739) 28-Dec-12 (No. EX3-3503_Dec12) 25-Apr-13 (No. DAE4-601_Apr13)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards	ted in the closed laborator FE critical for calibration) ID # GB37480704 US37292783 SN: 5058 (20k) SN: 5047.3 / 06327 SN: 3503 SN: 601 ID #	Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01640) 04-Apr-13 (No. 217-01736) 04-Apr-13 (No. 217-01739) 28-Dec-12 (No. EX3-3503_Dec12) 25-Apr-13 (No. DAE4-601_Apr13) Check Date (in house)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Fype-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A	in the closed laborator   IE critical for calibration)   ID #   GB37480704   US37292783   SN: 5058 (20k)   SN: 5047.3 / 06327   SN: 601   ID #   MY41092317	Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01736) 04-Apr-13 (No. 217-01739) 28-Dec-12 (No. EX3-3503_Dec12) 25-Apr-13 (No. DAE4-601_Apr13) Check Date (in house) 18-Oct-02 (in house check Oct-11)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check In house check: Oct-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A RF generator R&S SMT-06	in the closed laborator   IE critical for calibration)   ID #   GB37480704   US37292783   SN: 5058 (20k)   SN: 5047.3 / 06327   SN: 3503   SN: 601   ID #   MY41092317   100005	Cal Date (Certificate No.) 01-Nov-12 (No. 217-01640) 01-Nov-12 (No. 217-01640) 04-Apr-13 (No. 217-01736) 04-Apr-13 (No. 217-01739) 28-Dec-12 (No. EX3-3503_Dec12) 25-Apr-13 (No. DAE4-601_Apr13) Check Date (in house) 18-Oct-02 (in house check Oct-11) 04-Aug-99 (in house check Oct-11)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check In house check: Oct-13 In house check: Oct-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A RF generator R&S SMT-06 Network Analyzer HP 8753E	in the closed laborator   ID #   GB37480704   US37292783   SN: 5058 (20k)   SN: 5047.3 / 06327   SN: 3503   SN: 601   ID #   MY41092317   100005   US37390585 S4206	Cal Date (Certificate No.)   01-Nov-12 (No. 217-01640)   01-Nov-12 (No. 217-01640)   04-Apr-13 (No. 217-01736)   04-Apr-13 (No. 217-01736)   04-Apr-13 (No. 217-01739)   28-Dec-12 (No. EX3-3503_Dec12)   25-Apr-13 (No. DAE4-601_Apr13)   Check Date (in house)   18-Oct-02 (in house check Oct-11)   04-Aug-99 (in house check Oct-12)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check In house check: Oct-13 In house check: Oct-13 In house check: Oct-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A RF generator R&S SMT-06 Network Analyzer HP 8753E	in the closed laborator   IE critical for calibration)   ID #   GB37480704   US37292783   SN: 5058 (20k)   SN: 5047.3 / 06327   SN: 3503   SN: 601   ID #   MY41092317   100005   US37390585 S4206	Cal Date (Certificate No.)   01-Nov-12 (No. 217-01640)   01-Nov-12 (No. 217-01640)   04-Apr-13 (No. 217-01736)   04-Apr-13 (No. 217-01739)   28-Dec-12 (No. EX3-3503_Dec12)   25-Apr-13 (No. DAE4-601_Apr13)   Check Date (in house)   18-Oct-02 (in house check Oct-11)   04-Aug-99 (in house check Oct-12)	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check In house check: Oct-13 In house check: Oct-13 In house check: Oct-13
All calibrations have been conduc Calibration Equipment used (M&T Primary Standards Power meter EPM-442A Power sensor HP 8481A Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A RF generator R&S SMT-06 Network Analyzer HP 8753E Calibrated by:	in the closed laborator   IE critical for calibration)   ID #   GB37480704   US37292783   SN: 5058 (20k)   SN: 5058 (20k)   SN: 5047.3 / 06327   SN: 5003   SN: 601   ID #   MY41092317   100005   US37390585 S4206	Cal Date (Certificate No.)   01-Nov-12 (No. 217-01640)   01-Nov-12 (No. 217-01640)   04-Apr-13 (No. 217-01736)   04-Apr-13 (No. 217-01739)   28-Dec-12 (No. EX3-3503_Dec12)   25-Apr-13 (No. DAE4-601_Apr13)   Check Date (in house)   18-Oct-02 (in house check Oct-11)   04-Aug-99 (in house check Oct-12)   Function   Laboratory Technician	Scheduled Calibration Oct-13 Oct-13 Apr-14 Apr-14 Dec-13 Apr-14 Scheduled Check In house check: Oct-13 In house check: Oct-13 In house check: Oct-13

## **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) IEC 62209-2, "Evaluation of Human Exposure to Radio Frequency Fields from Handheld and Body-Mounted Wireless Communication Devices in the Frequency Range of 30 MHz to 6 GHz: Human models, Instrumentation, and Procedures"; Part 2: "Procedure to determine the Specific Absorption Rate (SAR) for including accessories and multiple transmitters", March 2010
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### **Additional Documentation:**

c) 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	V52.8.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5200 MHz ± 1 MHz 5300 MHz ± 1 MHz 5500 MHz ± 1 MHz 5600 MHz ± 1 MHz 5800 MHz ± 1 MHz	

# Head TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	36.0	4.66 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.2 ± 6 %	4.46 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL at 5200 MHz

SAR averaged over 1 $\text{cm}^3$ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.00 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.5 W/kg ± 19.9 % (k=2)

SAR averaged over 10 $\text{cm}^3$ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.29 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.7 W/kg ± 19.5 % (k=2)

# Head TSL parameters at 5300 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.76 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.1 ± 6 %	4.55 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL at 5300 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.28 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	82.3 W / kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.5 W/kg ± 19.5 % (k=2)

### Head TSL parameters at 5500 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.6	4.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.8 ± 6 %	4.74 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

### SAR result with Head TSL at 5500 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.51 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	84.5 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.43 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.1 W/kg ± 19.5 % (k=2)

### Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.7 ± 6 %	4.85 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

## SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.42 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	83.6 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg ± 19.5 % (k=2)

## Head TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.3	5.27 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.4 ± 6 %	5.05 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

## SAR result with Head TSL at 5800 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.98 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.2 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.27 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.5 W/kg ± 19.5 % (k=2)

## Body TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	49.0	5.30 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.9 ± 6 %	5.40 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL at 5200 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.33 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	73.3 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.05 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	20.5 W/kg ± 19.5 % (k=2)

### Body TSL parameters at 5300 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.42 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.7 ± 6 %	5.53 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

## SAR result with Body TSL at 5300 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.50 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	75.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.10 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.0 W/kg ± 19.5 % (k=2)

# Body TSL parameters at 5500 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.6	5.65 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.4 ± 6 %	5.79 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

## SAR result with Body TSL at 5500 MHz

SAR averaged over 1 $\text{cm}^3$ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.81 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	78.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.17 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.7 W/kg ± 19.5 % (k=2)

### Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.2 ± 6 %	5.93 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	( <b>****</b> )	

### SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.99 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	79.9 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.21 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	22.1 W/kg ± 19.5 % (k=2)

# Body TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.2	6.00 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.9 ± 6 %	6.21 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

# SAR result with Body TSL at 5800 MHz

SAR averaged over 1 $cm^3$ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.40 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	74.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.05 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	20.5 W/kg ± 19.5 % (k=2)

## Appendix

## Antenna Parameters with Head TSL at 5200 MHz

Impedance, transformed to feed point	46.7 Ω - 7.1 jΩ
Return Loss	- 21.9 dB

# Antenna Parameters with Head TSL at 5300 MHz

Impedance, transformed to feed point	46.9 Ω - 8.1 jΩ	
Return Loss	- 21.0 dB	

### Antenna Parameters with Head TSL at 5500 MHz

Impedance, transformed to feed point	52.7 Ω - 0.9 jΩ
Return Loss	- 31.1 dB

# Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	50.6 Ω - 1.0 jΩ
Return Loss	- 39.0 dB

### Antenna Parameters with Head TSL at 5800 MHz

Impedance, transformed to feed point	55.7 Ω - 5.2 jΩ
Return Loss	- 22.8 dB

### Antenna Parameters with Body TSL at 5200 MHz

Impedance, transformed to feed point	46.6 Ω - 5.6 jΩ
Return Loss	- 23.4 dB

## Antenna Parameters with Body TSL at 5300 MHz

Impedance, transformed to feed point	46.8 Ω - 7.2 jΩ
Return Loss	- 21.8 dB

### Antenna Parameters with Body TSL at 5500 MHz

Impedance, transformed to feed point	52.9 Ω - 0.1 jΩ
Return Loss	- 31.1 dB

## Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	50.8 Ω + 0.7 jΩ	
Return Loss	- 39.2 dB	

### Antenna Parameters with Body TSL at 5800 MHz

Impedance, transformed to feed point	56.3 Ω - 3.7 jΩ	
Return Loss	- 23.3 dB	

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

Electrical Delay (one direction)	1.202 ns	
	1.202 115	

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	June 06, 2013

Date: 06.08.2013

Test Laboratory: SPEAG, Zurich, Switzerland

## DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1159

Communication System: UID 0 - CW ; Frequency: 5200 MHz, Frequency: 5300 MHz, Frequency: 5500 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz;  $\sigma$  = 4.46 S/m;  $\epsilon_r$  = 35.2;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5300 MHz;  $\sigma$  = 4.55 S/m;  $\epsilon_r$  = 35.1;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5500 MHz;  $\sigma$  = 4.74 S/m;  $\epsilon_r$  = 34.8;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5600 MHz;  $\sigma$  = 4.85 S/m;  $\epsilon_r$  = 34.7;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5600 MHz;  $\sigma$  = 5.05 S/m;  $\epsilon_r$  = 34.4;  $\rho$  = 1000 kg/m<sup>3</sup> , Medium parameters used: f = 5800 MHz;  $\sigma$  = 5.05 S/m;  $\epsilon_r$  = 34.4;  $\rho$  = 1000 kg/m<sup>3</sup> , Medium parameters used: f = 5800 MHz;  $\sigma$  = 5.05 S/m;  $\epsilon_r$  = 34.4;  $\rho$  = 1000 kg/m<sup>3</sup> ,

DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.41, 5.41, 5.41); Calibrated: 28.12.2012, ConvF(5.1, 5.1, 5.1); Calibrated: 28.12.2012, ConvF(4.91, 4.91, 4.91); Calibrated: 28.12.2012, ConvF(4.76, 4.76, 4.76); Calibrated: 28.12.2012, ConvF(4.81, 4.81, 4.81); Calibrated: 28.12.2012;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 25.04.2013
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 64.332 V/m; Power Drift = 0.07 dB Peak SAR (extrapolated) = 29.2 W/kg SAR(1 g) = 8 W/kg; SAR(10 g) = 2.29 W/kg Maximum value of SAR (measured) = 18.2 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 64.496 V/m; Power Drift = 0.07 dB Peak SAR (extrapolated) = 30.8 W/kg SAR(1 g) = 8.28 W/kg; SAR(10 g) = 2.37 W/kg Maximum value of SAR (measured) = 18.9 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5500 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 64.390 V/m; Power Drift = 0.08 dB Peak SAR (extrapolated) = 33.1 W/kg SAR(1 g) = 8.51 W/kg; SAR(10 g) = 2.43 W/kg Maximum value of SAR (measured) = 19.8 W/kg

# Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 64.023 V/m; Power Drift = 0.07 dB Peak SAR (extrapolated) = 32.8 W/kg SAR(1 g) = 8.42 W/kg; SAR(10 g) = 2.4 W/kg Maximum value of SAR (measured) = 19.6 W/kg

# Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 61.148 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 32.7 W/kg

SAR(1 g) = 7.98 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg = 12.81 dBW/kg


Date: 05.08.2013

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1159

Communication System: UID 0 - CW ; Frequency: 5200 MHz, Frequency: 5300 MHz, Frequency: 5500 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz;  $\sigma$  = 5.4 S/m;  $\varepsilon_r$  = 48.9;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5300 MHz;  $\sigma$  = 5.73 S/m;  $\varepsilon_r$  = 48.7;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5500 MHz;  $\sigma$  = 5.79 S/m;  $\varepsilon_r$  = 48.4;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5600 MHz;  $\sigma$  = 5.93 S/m;  $\varepsilon_r$  = 48.2;  $\rho$  = 1000 kg/m<sup>3</sup>, Medium parameters used: f = 5800 MHz;  $\sigma$  = 6.21 S/m;  $\varepsilon_r$  = 47.9;  $\rho$  = 1000 kg/m<sup>3</sup> Medium parameters used: f = 5800 MHz;  $\sigma$  = 6.21 S/m;  $\varepsilon_r$  = 47.9;  $\rho$  = 1000 kg/m<sup>3</sup>

DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(4.91, 4.91, 4.91); Calibrated: 28.12.2012, ConvF(4.67, 4.67, 4.67); Calibrated: 28.12.2012, ConvF(4.43, 4.43, 4.43); Calibrated: 28.12.2012, ConvF(4.22, 4.22, 4.22); Calibrated: 28.12.2012, ConvF(4.38, 4.38, 4.38); Calibrated: 28.12.2012;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 25.04.2013
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 57.936 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 28.5 W/kg SAR(1 g) = 7.33 W/kg; SAR(10 g) = 2.05 W/kg Maximum value of SAR (measured) = 17.1 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 58.193 V/m; Power Drift = -0.00 dB Peak SAR (extrapolated) = 30.0 W/kg SAR(1 g) = 7.5 W/kg; SAR(10 g) = 2.1 W/kg Maximum value of SAR (measured) = 17.7 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5500 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 57.981 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 33.4 W/kg SAR(1 g) = 7.81 W/kg; SAR(10 g) = 2.17 W/kg Maximum value of SAR (measured) = 19.0 W/kg

### Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan,

**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 57.897 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 34.9 W/kg **SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.21 W/kg** Maximum value of SAR (measured) = 19.5 W/kg

## Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan,

**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 54.838 V/m; Power Drift = -0.00 dB Peak SAR (extrapolated) = 34.1 W/kg **SAR(1 g) = 7.4 W/kg; SAR(10 g) = 2.05 W/kg** Maximum value of SAR (measured) = 18.3 W/kg



0 dB = 18.3 W/kg = 12.62 dBW/kg



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





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

Accreditation No.: SCS 108

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

Client Microsoft

Certificate No: EX3-3939\_Jul14

bject	EX3DV4 - SN:393	39	
alibration procedure(s)	QA CAL-01.v9, Q Calibration proce	A CAL-14.v4, QA CAL-23.v5, QA dure for dosimetric E-field probes	CAL-25.v6
alibration date:	July 17, 2014	A Constant of the second s	The second
his calibration certificate docum he measurements and the unco Il calibrations have been condu Calibration Equipment used (M8	nents the traceability to nation ertainties with confidence pr ucted in the closed laborator wTE critical for calibration)	onal standards, which realize the physical units obability are given on the following pages and a y facility: environment temperature (22 ± 3)*C a	of measurements (SI). are part of the certificate. and humidity < 70%.
		E	1
Primary Standards		Cal Date (Certificate No.)	Scheduled Calibration
Primary Standards	GB41293874	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911)	Scheduled Calibration Apr-15
Primary Standards Power meter E4419B Power sensor E4412A	ID GB41293874 MY41498087	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911)	Scheduled Calibration Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c)	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915)	Scheduled Calibration Apr-15 Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x)	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01919)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b)	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Apr-15
Primary Standards Power meter E44198 Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)	Scheduled Calibration       Apr-15       Apr-15       Apr-15       Apr-15       Apr-15       Dec-14       Dec-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01919) 03-Apr-14 (No. 217-01920) 30-Dec-13 (No. ES3-3013_Dec13) 13-Dec-13 (No. DAE4-660_Dec13) Check Date (in house)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US3642U01700 US37390585	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)	Scheduled Calibration         Apr-15         Apr-15         Apr-15         Apr-15         Dec-14         Dec-14         Scheduled Check         In house check: Apr-16         In house check: Oct-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US3642U01700 US37390585 Name	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16 In house check: Oct-14 Signature
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 20 dB Attenuator Reference 9 nobe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E Calibrated by:	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US37390585 Name Israe El-Naouq	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)           Function           Laboratory Technician	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16 In house check: Oct-14 Signature

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





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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	$\vartheta$ 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, "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

#### Methods Applied and Interpretation of Parameters:

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

Accreditation No.: SCS 108

# Probe EX3DV4

## SN:3939

Manufactured: Calibrated: May 2, 2013 July 17, 2014

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

#### Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) <sup>2</sup> ) <sup>A</sup>	0.41	0.38	0.41	± 10.1 %
DCP (mV) <sup>B</sup>	102.7	105.8	100.5	

#### Sensor Model Parameters

	C1	C2	α	T1	T2	T3	T4	T5	T6
	fF	fF	<b>V</b> <sup>−1</sup>	ms.V⁻²	ms.V <sup>−1</sup>	ms	V-2	V-1	
X	41.63	302.7	34.15	16.86	0.918	4.958	0.908	0.342	0.998
Y	50.01	372.2	34.8	16.32	0.586	5.043	0.796	0.307	1.003
Z	49.89	371.4	34.95	17.26	0.796	5.026	1.654	0.211	1.005

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

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

Numerical linearization parameter: uncertainty not required.

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. (k=2)
750	41.9	0.89	9.40	9.40	9.40	0.80	0.50	± 12.0 %
835	41.5	0.90	9.20	9.20	9.20	0.45	0.77	± 12.0 %
900	41.5	0.97	8.99	8.99	8.99	0.33	0.94	± 12.0 %
1750	40.1	1.37	8.32	8.32	8.32	0.47	0.81	± 12.0 %
1900	40.0	1.40	7.86	7.86	7.86	0.42	0.82	± 12.0 %
2000	40.0	1.40	7.74	7.74	7.74	0.78	0.59	± 12.0 %
2300	39.5	1.67	7.34	7.34	7.34	0.48	0.72	± 12.0 %
2450	39.2	1.80	6.86	6.86	6.86	0.31	0.93	± 12.0 %
2600	39.0	1.96	6.74	6.74	6.74	0.51	0.73	± 12.0 %
3500	37.9	2.91	7.22	7.22	7.22	1.00	0.52	± 13.1 %
5200	36.0	4.66	5.21	5.21	5.21	0.30	1.80	± 13.1 %
5300	35.9	4.76	5.03	5.03	5.03	0.30	1.80	± 13.1 %
5500	35.6	4.96	4.75	4.75	4.75	0.35	1.80	± 13.1 %
5600	35.5	5.07	4.48	4.48	4.48	0.40	1.80	± 13.1 %
5800	35.3	5.27	4.56	4.56	4.56	0.40	1.80	± 13.1 %

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

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

<sup>1</sup> At frequencies below 3 GHz, the validity of tissue parameters (c and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (c and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. (k=2)
750	55.5	0.96	9.15	9.15	9.15	0.80	0.50	± 12.0 %
835	55.2	0.97	9.31	9.31	9.31	0.67	0.69	± 12.0 %
900	55.0	1.05	9.12	9.12	9.12	0.76	0.65	± 12.0 %
1750	53.4	1.49	7.65	7.65	7.65	0.61	0.71	± 12.0 %
1900	53.3	1.52	7.45	7.45	7.45	0.29	1.05	<u>± 12.0 %</u>
2000	53.3	1.52	7.51	7.51	7.51	0.40	0.87	± 12.0 %
2300	52.9	1.81	7.17	7.17	7.17	0.30	1.04	± 12.0 %
2450	52.7	1.95	6.90	6.90	6.90	0.65	0.68	± 12.0 %
2600	52.5	2.16	6.75	6.75	6.75	0.65	0.66	± 12.0 %
3500	51.3	3.31	6.65	6.65	6.65	0.75	0.74	± 13.1 %
5200	49.0	5.30	4.38	4.38	4.38	0.40	1.90	± 13.1 %
5300	48.9	5.42	4.11	4.11	4.11	0.40	1.90	± 13.1 %
5500	48.6	5.65	3.99	3.99	3.99	0.45	1.90	± 13.1 %
5600	48.5	5.77	3.72	3.72	3.72	0.50	1.90	± 13.1 %
5800	48.2	6.00	3.93	3.93	3.93	0.50	1.90	± 13.1 %

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

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

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

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



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

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



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

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



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



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	-37.6
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

## Appendix: Modulation Calibration Parameters (Additional assessments outside the scope of SCS108)

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	X	0.00	0.00	1.00	0.00	145.5	± 3.5 %
		Y	0.00	0.00	1.00		137.6	
		Ζ	0.00	0.00	1.00		147.9	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	4.19	76.93	18.57	10.00	20.0	±9.6 %
		Y	2.76	69.37	12.90		20.0	
		Z	3.16	72.54	16.20		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.28	69.28	17.17	0.00	150.0	± 9.6 %
		Y	0.68	61.04	9.81		150.0	
		Z	0.86	61.95	11.36	0.44	150.0	
10012- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.37	64.76	16.02	0.41	150.0	± 9.0 %
		<u> </u>	0.98	60.76	11.75		150.0	
		Z	1.15	61.35	12.65	4.40	150.0	100%
10013- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	4.94	66.85	17.08	1.46	150.0	± 9.6 %
		Y 7	4.68	65.70	15.98		150.0	
40004	COM EDD (TDMA, OMSK)		4.8/	00.92	10.20	0.20	50.0	+96%
10021- DAB	GSM-FDD (TDMA, GMSK)		100.00	117.49	29.09	9.39	50.0	19.0 %
		Y 7	5.67	74.67	14.76		50.0	
40000	ODDO EDD (TDMA, OMOK, TMO)		100.00	115.80	20.09	0.57	50.0	+06%
10023- DAB	GPRS-FDD (TDMA, GMSK, TN U)		100.00	75.09	29.70	9.57	50.0	± 9.0 %
		7	0.09	116.14	14.99	<u> </u>	50.0	<u> </u>
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	117.25	28.48	6.56	60.0	± 9.6 %
		Y	3.80	71.73	12.59	1	60.0	
		Z	100.00	113.64	26.68		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	4.64	70.06	25.58	12.57	50.0	± 9.6 %
		Y	7.18	85.19	32.91		50.0	
		Z	4.62	70.20	25.64		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	×	8.07	86.30	29.88	9.56	60.0	± 9.6 %
		Y	10.19	92.02	31.36	1	60.0	
		Z	7.90	85.20	29.13		60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	119.30	28.68	4.80	80.0	± 9.6 %
		Y 7	2.36	68.52	10.62		80.0	
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	123.70	30.00	3.55	100.0	± 9.6 %
		Y	1.36	65.36	8.73		100.0	1
	P. Shawara and a state of the s	Ż	63.06	107.90	23.91	1	100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	×	5.75	79.09	25.93	7.80	80.0	± 9.6 %
		Y	6.27	81.33	26.08		80.0	
		Z	5.60	77.87	24.99		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	115.17	27.06	5.30	70.0	± 9.6 %
		Y	2.22	67.10	10.16		70.0	
		Z	21.10	93.79	20.92		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	129.83	31.37	1.88	100.0	± 9.6 %
		Y	0.41	60.00	4.79	-	100.0	
		Z	1.69	72.48	13.03		100.0	

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10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	х	100.00	144.78	36.84	1.17	100.0	±9.6 %
CAA		Y	0.27	60.00	3.86		100.0	
· · ·		Ż	0.73	67.81	11.23		100.0	
10033-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	6.59	83.31	21.52	5.30	70.0	± 9.6 %
0/11		Y	3.99	74.83	17.06		70.0	
		7	4 26	76.27	18 79		70.0	
10034-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	X	3.45	77.84	18.67	1.88	100.0	±9.6 %
		V	1 12	65.04	11.45		100.0	
		7	1.42	66.80	13 38		100.0	
10025	IEEE 202 15 1 Plustoath (PI/A DOPSK	~	2.70	75.95	17.95	1 17	100.0	+96%
CAA	DH5)	$\hat{}$	2.10	10.00	40.04	1.17	100.0	10.0 //
		7	1.10	64.01	10.31		100.0	
10000		2	1.30	04.91	12.22	E 20	70.0	+06%
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	^	1.15	86.03	22.52	5.30	70.0	± 9.0 %
		Y	4.41	76.32	17.69		70.0	
		Z	4.64	77.76	19.43		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	3.18	76.78	18.25	1.88	100.0	±9.6 %
		Y	1.38	64.87	11.33		100.0	
		Z	1.67	66.57	13.25		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	2.69	76.15	18.14	1.17	100.0	±9.6 %
		Y	1.09	63.39	10.43		100.0	
		Z	1.34	64.96	12.32		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	3.53	82.20	20.60	0.00	150.0	± 9.6 %
		Y	0.92	62.12	9.46		150.0	
		Z	1.17	63.82	11.41		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DOPSK, Halfrate)	x	100.00	115.10	27.74	7.78	50.0	± 9.6 %
		Y	2.83	67.79	10.96		50.0	
		Ż	49.94	103.75	24.22		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.14	60.00	18.01	0.00	150.0	± 9.6 %
		Y	0.00	75.53	19.28		150.0	
		Z	0.05	60.00	8.39		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	x	36.29	101.84	27.02	13.80	25.0	± 9.6 %
		Y	4.87	70.52	14.66		25.0	
		Z	26.74	97.33	25.56	;	25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	57.11	108.96	27.77	10.79	40.0	± 9.6 %
		Y	4.89	72.05	14.03		40.0	
		Z	26.80	97.72	24.44		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	12.05	88.74	23.79	9.03	50.0	± 9.6 %
		Y	8.11	80.93	19.81		50.0	
-		Z	9.49	85.02	22.58	-	50.0	
10058- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.66	75.33	23.67	6.55	100.0	± 9.6 %
		Y	4.72	75.95	23.07		100.0	
		Z	4.50	73.89	22.51		100.0	
10059- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.42	65.69	16.44	0.61	110.0	± 9.6 %
		Y	1.00	61.39	12.05		110.0	
		Z	1.17	61.94	12.96		110.0	
10060- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	4.09	88.78	24.18	1.30	110.0	± 9.6 %
		Y	1.00	66.18	11.64		110.0	T
		Ż	1.21	67.63	13.96		110.0	
			1	000	1 .0.00	L		

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10061- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	2.62	76.08	20.45	2.04	110.0	± 9.6 %
0/01	нырэ)		1.60	68.01	14 75		110.0	
		+ + +	1.00	68.10	15.72		110.0	
10062	IEEE 902 11a/b WiEi 5 CHz (OEDM 6	5	4.77	67.00	16.69	040	100.0	+96%
CAA	Mbps)	^	4.77	07.00	10.00	0.45	100.0	± 3.0 /a
	2000 2000 C	Y	4.46	65.56	15.34		100.0	
		Z	4.65	65.84	15.66		100.0	
10063-	IEEE 802 11a/b WiEi 5 GHz (OEDM 9		4 78	67.04	16.74	0.72	100.0	+96%
CAA	Mhns)			01.01		ФП Е	10010	
U.V.	Тербу		4 47	65 65	15.43		100.0	
		+ + +	4.67	65.00	15.75		100.0	
10064			<u>4.07</u>	67.34	16.01	0.96	100.0	+0.6%
10064-		^	5.04	07.24	10.91	0.00	100.0	± 9.0 %
CAA	MDps)	++	4 77	05.00	45.70		400.0	
		<u> </u>	4.11	00.99	15.72		100.0	
10000		<u> </u>	4.97	66.24	16.02		100.0	10.0.0
10065- CAA	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps)	X	4.90	67.08	16.95	1.21	100.0	± 9.6 %
		Y	4.65	65.88	15.80		100.0	
		Z	4.84	66.12	16.09		100.0	
10066-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.91	67.04	17.06	1.46	100.0	± 9.6 %
5/01			4 67	65.93	15.98		100.0	
			4.07	66 15	16.35		100.0	
40067			4.00	67.10	10.23	2.04	100.0	10.0%
10067- CAA	Mbps)	<b>^</b>	5.19	67.19	17.44	2.04	0.00	± 9.0 %
		Y	4.97	66.16	16.48		100.0	
		Z	5.16	66.34	16.72		100.0	
10068- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.22	67.13	17.58	2.55	100.0	±9.6 %
		Y	5.04	66.30	16.74		100.0	
		7	5.22	66.46	16.97		100.0	
10069- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.30	67.12	17.74	2.67	100.0	± 9.6 %
		Y	5.12	66.31	16.95		100.0	
		7	5.31	66.46	17 16		100.0	
10071- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.03	66.87	17.31	1.99	100.0	± 9.6 %
	Concern Concerns and an	Y	4.78	65.83	16.31		100.0	
		Z	4.97	66.03	16.57		100.0	-
10072- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.00	67.12	17.48	2.30	100.0	± 9.6 %
		t y	4 76	66 12	16 49		100.0	
		+	4.95	66.30	16.10	· · · · · ·	100.0	
10073- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OEDM_18 Mbps)	X	5.05	67.24	17.74	2.83	100.0	± 9.6 %
		V	4.83	66 30	16.83		100.0	
		7	5.01	66.45	17.06		100.0	
10074		2 V	5.05	67.45	17.00	2 20	100.0	+0.6.9/
CAA	(DSSS/OFDM, 24 Mbps)		5.05	07.15	17.07	3.30	100.0	± 9.0 %
		Y	4.82	66.24	17.00		100.0	
		Z	5.00	66.38	17.23		100.0	
10075- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.09	67.21	18.12	3.82	90.0	± 9.6 %
		Y	4.87	66.42	17.34		90.0	
		Z	5.05	66.53	17.55		90.0	
10076- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.11	67.05	18.24	4.15	90.0	± 9.6 %
		V	4 88	66.24	17.48		90.0	
		7	5.07	66 25	17.69		00.0	
10077		2 V	5.07	67.10	19.24	1 20	00.0	+0.6.0/
CAA	(DSSS/OFDM, 54 Mbps)	^	J.14	07.12	10.34	4.30	90.0	± 9.0 %
		Y	4.91	66.31	17.58		90.0	
		Z	5.09	66.41	17.77		90.0	

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10081-	CDMA2000 (1xRTT, RC3)	X	1.34	71.93	16.59	0.00	150.0	± 9.6 %
CAD		Y	0.52	60.00	7.49		150.0	
		Ż	0.02	61.36	9.65		150.0	
10082-	IS-54 / IS-136 EDD (TDMA/EDM_PI/4-	X	0.99	60.53	6.07	4.77	80.0	±9.6 %
CAB	DQPSK, Fullrate)		0.00		0.01			
	0 V D.2.	Y	0.83	60.00	4.27		80.0	
	in the second	Z	0.85	59.33	4.92		80.0	
10090-	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	117.15	28.45	6.56	60.0	±9.6 %
DAB								
		Y	3.86	71.87	12.66		60.0	
		Ζ	100.00	113.64	26.70		60.0	
10097-	UMTS-FDD (HSDPA)	X	2.14	69.69	17.13	0.00	150.0	± 9.6 %
CAB								
		Y	1.38	62.80	11.80		150.0	
		Z	1.59	63.64	12.85		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	X	2.10	69.63	17.11	0.00	150.0	±9.6 %
CAB					44.80		450.0	
		Υ_	1.35	62.72	11.72		150.0	
		Z	1.56	63.56	12.79	0.50	150.0	100%
10099- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	8.11	86.37	29.90	9.56	60.0	± 9.6 %
		Y	10.26	92.13	31.40		60.0	
		Z	7.94	85.28	29.16		60.0	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.40	71.55	17.74	0.00	150.0	±9.6 %
-	State (1974)	Y	2.41	65.64	13.36		150.0	
		Z	2.66	66.42	14.23		150.0	
10101- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.43	68.24	16.57	0.00	150.0	± 9.6 %
		Y	2.84	64.98	13.75		150.0	
		Z	3.06	65.49	14.35		150.0	
10102- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz 64-QAM)	X	3.53	68.22	16.65	0.00	150.0	±9.6 %
0.10		Y	2.96	65.08	13.94		150.0	
		Ż	3.17	65.57	14.51		150.0	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.33	74.75	19.86	3.98	65.0	± 9.6 %
		Y	5.23	71.43	17.71		65.0	
		Z	5.76	72.49	18.53		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	x	6.60	73.67	20.10	3.98	65.0	± 9.6 %
		Y	6.00	72.04	18.87		65.0	
		Z	6.25	72.19	19.18	3	65.0	
10105- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	6.05	71.87	19.60	3.98	65.0	± 9.6 %
		Y	5.50	70.37	18.45		65.0	
		Z	5.85	70.84	18.87		65.0	
10108- CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.97	70.77	17.58	0.00	150.0	±9.6 %
		Y	2.12	64.92	13.10		150.0	
		Z	2.35	65.68	13.98		150.0	
10109- CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.09	68.27	16.57	0.00	150.0	± 9.6 %
		Y	2.50	64.52	13.43		150.0	
		Z	2.71	65.08	14.09		150.0	
10110- CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.45	70.02	17.28	0.00	150.0	±9.6 %
		Y	1.70	63.87	12.46		150.0	
		Z	1.92	64.65	13.42		150.0	
10111- CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.90	69.84	17.25	0.00	150.0	± 9.6 %
		Y	2.14	64.34	13.13		150.0	
[		Z	2.36	65.06	13.94		150.0	
2.00		-	_					

#### EX3DV4- SN:3939

USD         Mitz, Ureanity         Y         263         64-68         13.60         1500           10113.         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)         X         3.05         69.97         17.34         0.00         150.0         ± 9.8 %           64-QAM)         Y         2.29         64.63         13.38         150.0         ± 9.8 %           10114.         LEEE do2.11n (HT Greenfield, 13.5         X         5.25         67.62         16.76         0.00         150.0         ± 9.8 %           CAA         Mpps, BPSK)         Y         4.87         66.09         15.29         150.0           CAA         16.0AM)         Y         4.87         66.35         15.75         150.0         ± 9.8 %           CAA         16.0AM)         Y         5.39         66.66         15.79         150.0         ± 9.6 %           CAA         40.4M)         Y         4.96         66.28         15.31         150.0         ± 9.6 %           CAA         16.20.11n (HT Mixed, 13.5 Mbps,         X         5.23         67.51         16.77         150.0         ± 9.6 %           CAA         BEE 802.11n (HT Mixed, 13.5 Mbps, 64         X         5.58         67.82         16.86	10112-	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.22	68.28	16.62	0.00	150.0	± 9.6 %
Z         285         95.20         1423         1500           CAB         G4-QAM)         100% RB, 5 MHz,         X         3.05         69.97         17.34         0.00         150.0         ±9.6 %,           CAB         CAB         Z         2.51         65.32         14.16         150.0         ±9.6 %,           CAA         Mbps, BPSK)         Y         4.27         66.61         15.64         150.0         ±9.6 %,           CAA         Mbps, BPSK)         Y         4.87         66.09         15.29         150.0         ±9.6 %,           CAA         Mbps, BPSK)         Y         4.87         66.09         15.29         150.0         ±9.6 %,           CAA         16-GAM)         Y         5.51         67.66         16.78         0.00         150.0         ±9.6 %,           CAA         64-GAM)         Y         4.96         66.28         15.31         150.0         ±9.6 %,           CAA         64-GAM)         Y         4.85         66.01         15.27         150.0         ±9.6 %,           CAA         62.21 ft, (HT Mixed, 13.5 Mbps,         X         5.23         67.51         16.70         150.0         ±9.6 %,	CAB			2.63	64 66	13.60		150.0	
10113. CAB         LTE-FDD (SC-FDMA, 100% RB, 5 MHz, GAB         X         3.00         90.00         17.34         0.00         190.0         2.9.6 %           CAB         4-CAM         Y         2.20         64.63         13.38         150.0			+ + +	2.05	65.20	14.23		150.0	
Intro-B         Effer Diright Biol Prot Biol (10)         Y         2.00         0.00         1.00         2.00	10112		<del>\</del>	3.05	69.97	17.34	0.00	150.0	+96%
Y         2.29         64.63         13.38         160.0           Z         2.51         65.52         14.16         150.0         -           10114.         IEEE B02.11n (HT Greenfield, 13.5         X         5.25         67.62         16.76         0.00         150.0 $\pm$ 9.6 %           CAA         Mbps, BPSK)         Y         4.87         66.09         15.29         150.0         -           CA         167.6         0.00         150.0         ± 9.8 %         5.51         67.62         16.78         0.00         150.0         ± 9.8 %           CA         16-QAM         Y         5.19         66.35         15.79         150.0         -         -           10116         IEEE 802.11n (HT Greenfield, 135 Mbps, 5.73         5.34         67.51         16.78         0.00         150.0         -           CAA         64-QAM         Y         4.96         66.28         15.31         150.0         -           CAA         BFSK)         Y         4.85         66.01         15.27         150.0         -           10118-         IEEE 802.11n (HT Mixed, 31 Mbps, 16-         X         5.58         67.82         16.66         150.0         - <td>CAB</td> <td>64-QAM)</td> <td>  ^  </td> <td>3.05</td> <td>03.37</td> <td>17.54</td> <td>0.00</td> <td>100.0</td> <td>10.0 /0</td>	CAB	64-QAM)	^	3.05	03.37	17.54	0.00	100.0	10.0 /0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	2.29	64.63	13.38		150.0	
10114.         LEEE 802.11n (HT Greenfield, 13.5         X         5.25         67.62         16.76         0.00         150.0         ± 9.8 %           CAA         Mbps, BPSK)         Y         4.87         66.09         15.29         150.0           10115.         IEEE 802.11n (HT Greenfield, 81 Mbps, X         5.51         67.68         16.78         0.00         150.0         ± 9.6 %           CAA         16 GAM)         Y         5.19         66.65         15.79         150.0         150.0         ± 9.6 %           CAA         64-GAM)         Y         4.96         66.28         15.31         150.0         150.0         ± 9.6 %           10116-         IEEE 802.11n (HT Mixed, 13.5 Mbps, CA         X         5.23         67.71         16.78         0.00         150.0         ± 9.6 %           CAA         BPSK)         Y         4.85         66.01         15.27         150.0         150.0         10117-           IEEE 802.11n (HT Mixed, 13.5 Mbps, CA         X         5.23         67.75         16.77         0.00         150.0         ± 9.6 %           CAA         GAM)         Y         4.85         66.01         15.27         150.0         ± 9.6 %           CAA <td></td> <td></td> <td>Z</td> <td>2.51</td> <td>65.32</td> <td>14.16</td> <td></td> <td>150.0</td> <td></td>			Z	2.51	65.32	14.16		150.0	
CAA         Mps, BPSK)         Y         4.87         66.09         15.28         150.0           CAA         IEEE 802.11n (HT Greenfield, 81 Mbps, IEEE 802.11n (HT Greenfield, 135 Mbps, CAA         X         5.51         67.66         16.78         0.00         150.0         ±9.6 %           CAA         IEEE 802.11n (HT Greenfield, 135 Mbps, CAA         X         5.34         67.79         16.78         0.00         150.0         ±9.6 %           CAA         64-QAM)         Y         4.96         66.28         15.31         150.0         ±9.6 %           CAA         64-QAM)         Y         4.96         66.28         15.31         150.0         ±9.6 %           CAA         BPSK)         X         5.23         67.51         16.72         0.00         150.0         ±9.6 %           CAA         BPSK)         Y         4.85         66.01         15.27         150.0         ±9.6 %           CAA         GAM)         Y         5.25         66.50         15.54         150.0         ±9.6 %           CAA         GAM)         Y         5.25         66.50         15.54         150.0         ±9.6 %           CAA         GAM)         Y         9.25         66.50	10114-	IEEE 802.11n (HT Greenfield, 13.5	X	5.25	67.62	16.76	0.00	150.0	± 9.6 %
1         4-50         10.25         15.26         1500           10115:         IEEE 802.11n (HT Greenfield, 81 Mbps, 16-0AM)         X         5.51         67.66         16.78         0.00         150.0         ±9.6 %           CAA         16-0AM)         Y         5.19         66.35         15.45         150.0         ±9.6 %           CAA         64-0AM)         Y         5.39         66.65         15.78         150.0         ±9.6 %           CAA         64-0AM)         Y         4.96         66.28         15.31         150.0         ±9.6 %           CAA         64-0AM)         Y         4.96         66.28         15.31         150.0         ±9.6 %           CAA         64-0AM)         Y         4.85         66.01         15.27         150.0         ±9.6 %           CAA         DPSk)         Y         4.85         66.61         15.87         150.0         ±9.6 %           CAA         GAM         Y         4.85         66.01         15.87         150.0         ±9.6 %           CAA         GAM         Y         4.94         66.22         15.30         150.0         ±9.6 %           CAA         GAM         Y	CAA	Mbps, BPSK)		4.07	66.00	15.20		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				4.07	00.09	15.25		150.0	
ID115- ID12- CAA         IEEE 802.11n (HT Greenfield, 136 Mbps, Z         X         5.51         67.66         16.76         0.00         130.0         2.9.9 /r 2.9.9 /r           ID16- CAA         IEEE 802.11n (HT Greenfield, 136 Mbps, GAA         Y         5.39         66.66         15.78         150.0         150.0         2.9.6 %           CAA         64-QAM)         Y         4.96         66.28         15.31         150.0         2.9.6 %           CAA         64-QAM)         Y         4.96         66.29         15.31         150.0         2.9.6 %           CAA         64-QAM)         Y         4.86         66.01         15.27         150.0         2.9.6 %           CAA         BFSK)         Y         4.85         66.01         15.27         150.0         2.9.6 %           CAA         QAM)         Y         5.25         66.50         15.54         150.0         2.9.6 %           10118-         IEEE 802.11n (HT Mixed, 135 Mbps, 64-         X         5.32         67.75         16.77         0.00         150.0         2.9.6 %           CAA         QAM)         Y         4.94         66.22         15.30         150.0         2.9.6 %           CAA         GAM				5.00	00.41	10.04	0.00	150.0	+06%
Y         5.19         66.35         15.45         150.0           10116- CAA         IEEE 802.11n (HT Greenfield, 135 Mbps, 64-OAM)         X         5.34         67.79         16.78         0.00         150.0         ± 9.6 %           10117- IO117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         4.96         66.28         15.81         150.0         -           10117- IO117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         4.85         66.01         15.27         160.0         -         -           10118- CAA         IEEE 802.11n (HT Mixed, 81 Mbps, 16- Z         X         5.58         67.82         16.86         0.00         150.0         ± 9.6 %           CAA         QAM         Y         4.95         66.50         15.54         150.0         -         -           10118- CAA         QAM         Y         5.25         66.50         15.54         150.0         -         -           10119- CAA         QAM         Y         4.94         66.22         15.30         160.0         ± 9.6 %           CAA         QAM         Y         4.94         66.24         15.30         150.0         ± 9.6 %           CAA         GAM <td< td=""><td>10115- CAA</td><td>IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)</td><td><b>^</b></td><td>5.51</td><td>07.00</td><td>10.78</td><td>0.00</td><td>150.0</td><td>I 9.0 %</td></td<>	10115- CAA	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	<b>^</b>	5.51	07.00	10.78	0.00	150.0	I 9.0 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.19	66.35	15.45		150.0	
10116- CAA         IEEE 802.11n (HT Greenfield, 135 Mbps, 64-OAM)         X         5.34         67.79         16.78         0.00         150.0         ± 9.6 %           CAA         64-OAM)         Y         4.96         66.28         15.31         150.0         -           10117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         4.85         66.01         15.27         150.0         -           10118- CAA         IEEE 802.11n (HT Mixed, 81 Mbps, 16- CAA         Z         5.06         66.32         15.61         150.0         -         -         9.6 %           CAA         QAM         Y         5.25         67.75         16.77         0.00         150.0         ± 9.6 %           CAA         QAM         Y         5.25         66.50         15.54         150.0         -         -           10118- CAA         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         Y         5.32         67.75         16.77         0.00         150.0         ± 9.6 %           CAA         QAM)         Y         4.94         66.22         15.30         150.0         ± 9.6 %           CAA         QAM         Y         2.99         65.10         156.0         150.0         ± 9.6 % <td></td> <td></td> <td>Z</td> <td>5.39</td> <td>66.65</td> <td>15.79</td> <td></td> <td>150.0</td> <td></td>			Z	5.39	66.65	15.79		150.0	
Y         4.96         66.28         15.37         1500           10117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         Y         4.85         66.01         15.27         150.0         ± 9.6 %           CAA         BPSK)         Y         4.85         66.01         15.27         150.0         ± 9.6 %           CAA         GAM         Y         4.85         66.01         15.27         150.0         ± 9.6 %           CAA         GAM         Y         4.85         66.01         15.27         150.0         ± 9.6 %           CAA         GAM         Y         5.25         66.50         15.54         150.0         ± 9.6 %           CAA         QAM         Y         5.25         66.50         15.54         150.0         ± 9.6 %           CAA         QAM         Y         4.94         66.22         15.30         150.0         ± 9.6 %           CAB         Hiz, 16-QAM         Y         Y 2.99         66.11         13.88         150.0         ± 9.6 %           CAB         Hiz, 16-QAM         Y         3.21         65.60         14.46         150.0         ± 9.6 %           CAB         Hiz, 64-QAM         Y <t< td=""><td>10116- CAA</td><td>IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)</td><td>X</td><td>5.34</td><td>67.79</td><td>16.78</td><td>0.00</td><td>150.0</td><td>±9.6 %</td></t<>	10116- CAA	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.34	67.79	16.78	0.00	150.0	±9.6 %
Z         5.17         66.59         15.67         150.0           10117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         X         5.23         67.51         16.72         0.00         150.0 $\pm$ 9.6 %           CAA         BPSK)         Y         4.85         66.01         15.27         150.0 $\pm$ 9.6 %           CAA         CAA         CAA         CAA         66.52         15.61         150.0 $\pm$ 9.6 %           CAA         QAM)         Y         5.25         66.50         15.54         150.0 $\pm$ 9.6 %           CAA         QAM)         Y         5.25         66.50         15.54         150.0 $\pm$ 9.6 %           CAA         QAM)         Y         5.25         66.50         15.54         150.0 $\pm$ 9.6 %           CAA         GAM         Y         4.94         66.22         15.30         150.0 $\pm$ 9.6 %           CAA         GAM         Y         2.99         65.11         13.88         150.0 $\pm$ 9.6 %           CAB         MHz, 16-QAM         Y         2.99         65.76         14.46         150.0 $\pm$ 9.6 %           CAB         MHz, 64-QA			Y	4.96	66.28	15.31		150.0	
10117- CAA         IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)         X         5.23         67.51         16.72         0.00         150.0         ± 9.6 %           CAA         BPSK)         Y         4.85         66.01         15.27         150.0			z	5.17	66.59	15.67		150.0	
The second sec	10117- CAA	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.23	67.51	16.72	0.00	150.0	± 9.6 %
2         5.06         66.32         15.61         150.0           10118- CAA QAM)         EEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)         X         5.58         67.62         16.86         0.00         150.0         ±9.6 %           10119- CAA QAM)         Y         5.25         66.50         15.54         150.0         ±9.6 %           10119- CAA QAM)         Y         5.22         67.75         18.77         0.00         150.0         ±9.6 %           10119- CAA         TE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.23         16.57         0.00         150.0         ±9.6 %           CAB         MHz, 16-QAM)         Y         2.99         65.11         13.88         150.0         ±9.6 %           CAB         MHz, 16-QAM)         Y         2.92         65.16         14.46         150.0         ±9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ±9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ±9.6 %           CAB         MHz, 64-QAM)         Y         1.47         63.32         150.0         ±9.6 %		1	Y	4.85	66.01	15.27		150.0	
10118- CAA         IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)         X         5.58         67.62         16.86         0.00         150.0         ± 9.6 %           CAA         QAM)         Y         5.25         66.50         15.54         150.0		/	Ż	5.06	66.32	15.61		150.0	
CAA         QAM)         Y         5.25         66.50         15.54         150.0           10119- CAA         IEEE 802.11n (HT Mixed. 135 Mbps, 64- QAM)         X         5.32         67.75         16.77         0.00         150.0         ±9.6 %           CAA         QAM)         Y         4.94         66.22         15.30         150.0         ±9.6 %           CAA         QAM)         Y         4.94         66.22         15.30         150.0         ±9.6 %           CAA         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.23         16.57         0.00         150.0         ±9.6 %           MHz, 16-QAM)         Y         2.99         65.11         13.88         150.0         160.0         150.0         ±9.6 %           CAB         MHz, 64-QAM)         Y         3.69         68.35         16.73         0.00         150.0         ±9.6 %           CAB         QPSK)         Y         3.12         65.29         14.11         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0 <td< td=""><td>10118-</td><td>IEEE 802.11n (HT Mixed, 81 Mbps, 16-</td><td>X</td><td>5.58</td><td>67.82</td><td>16.86</td><td>0.00</td><td>150.0</td><td>± 9.6 %</td></td<>	10118-	IEEE 802.11n (HT Mixed, 81 Mbps, 16-	X	5.58	67.82	16.86	0.00	150.0	± 9.6 %
Z         5.46         66.81         15.7         150.0           10119- CAA         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         X         5.32         67.75         16.77         0.00         150.0         ± 9.6 %           Z         5.15         66.81         15.87         150.0         ± 9.6 %           Z         5.15         66.54         155.0         150.0         ± 9.6 %           Z         5.15         66.54         15.65         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         4.94         66.22         16.57         0.00         ± 9.6 %           CAB         MHz, 16-QAM)         Y         2.99         65.11         13.88         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.76         14.66         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         ICE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.91         71.65         17.44 <td>CAA</td> <td>QAM)</td> <td></td> <td>5 25</td> <td>66.50</td> <td>15.54</td> <td></td> <td>150.0</td> <td></td>	CAA	QAM)		5 25	66.50	15.54		150.0	
10119- CAA         IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)         Z         5.32         67.75         16.77         0.00         150.0         ± 9.6 %           CAA         QAM)         Y         4.94         66.22         15.30         150.0         ± 9.6 %           CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.23         16.57         0.00         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         2.99         65.11         13.88         150.0          ± 9.6 %           CAB         MHz, 16-QAM)         Y         2.99         65.11         13.88         150.0          ± 9.6 %           CAB         MHz, 64-QAM)         Y         2.321         65.60         14.46         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.59         68.35         16.73         0.00         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         GPSK) <td< td=""><td></td><td></td><td>+ <del>;</del>  </td><td>5.46</td><td>66.81</td><td>15.87</td><td></td><td>150.0</td><td></td></td<>			+ <del>;</del>	5.46	66.81	15.87		150.0	
Over         Over         Y         4.94         66.22         15.30         150.0           ID140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.54         15.65         150.0           V         2.99         65.11         13.88         150.0         ±9.6 %           CAB         MHz, 16-QAM)         Y         2.99         66.11         13.88         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.69         68.35         16.73         0.00         150.0         ±9.6 %           10141- CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ±9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ±9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ±9.6 %           CAB         QPSK         Y         1.47         63.32         11.79         150.0         ±9.6 %           CAB         QPSK         Y         1.489         64.06         12.33         150.0         ±9.6 %           CAB         GPSK         Y         1.8	10119- CAA	IEEE 802.11n (HT Mixed, 135 Mbps, 64-	X	5.32	67.75	16.77	0.00	150.0	± 9.6 %
Z         5.15         66.54         15.65         150.0           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.23         16.57         0.00         150.0         ± 9.6 %           10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.56         68.23         16.57         0.00         150.0         ± 9.6 %           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.69         68.35         16.73         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.70         14.46         150.0         ± 9.6 %           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.28         70.64         17.25         0.00         150.0         ± 9.6 %           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         Y         1.89         64.06         12.33         150.0         ± 9.6 %           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         Y         1.89         64.06         12.33         150.0			Y	4 94	66.22	15.30		150.0	
10140- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)         Z         3.56         68.23         16.57         0.00         150.0         ± 9.6 %           CAB         Y         2.99         65.11         13.88         150.0         ± 9.6 %           CAB         Y         2.99         65.11         13.88         150.0         ± 9.6 %           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.69         68.35         16.73         0.00         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ± 9.6 %           CAB         QPSK)         Z         3.34         65.76         14.66         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         ITE-FDD (SC-FDMA, 100% RB, 3 MHz, X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.89         64.06         12.33			$\frac{1}{7}$	5 15	66.54	15.65		150.0	
MB         MIL         Y         2.99         65.11         13.88         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         Z         3.21         65.60         14.46         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         3.12         65.76         14.66         150.0         ± 9.6 %           CAB         QPSK)         Y         3.12         65.76         14.66         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.32         11.79         150.0         ± 9.6 %           CAB         QPSK)         Y         1.47         63.22         11.79         150.0         ± 9.6 %           CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           CAB         64.06         12.33         150.0         150.0         ± 9.6 %         64.06         12.33         150.0         10143-         150.0         10143-         150.0         150.0         ± 9.6 %         64.06         12.33	10140- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	x	3.56	68.23	16.57	0.00	150.0	± 9.6 %
Z         3.21         65.60         14.46         150.0           10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15         X         3.69         68.35         16.73         0.00         150.0         ± 9.6 %           10141- CAB         MHz, 64-QAM)         Y         3.12         65.29         14.11         150.0         ± 9.6 %           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.28         70.64         17.25         0.00         150.0         ± 9.6 %           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.28         70.64         17.25         0.00         150.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAB         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88			Y	2.99	65.11	13.88		150.0	-
10141- CAB         LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)         X         3.69         68.35         16.73         0.00         150.0         ± 9.6 %           CAB         Y         3.12         65.29         14.11         150.0         1			17	3.21	65.60	14 46		150.0	
Y         3.12         65.29         14.11         150.0           CAB         QPSK)         Z         3.34         65.76         14.66         150.0           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         X         2.28         70.64         17.25         0.00         150.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AM)         Y         1.47         63.32         11.79         150.0         100.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AM)         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, AGB         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10144- CAB         GE-GAM)         Y         1.89         64.06         12.33         150.0         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         150.0         ± 9.6 %           CAB         MHz, QPSK)         Y         1.84         63.16         11.47         150.0         150.0         ± 9.6 %           CAB	10141- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.69	68.35	16.73	0.00	150.0	± 9.6 %
Z         3.34         65.76         14.66         150.0           10142- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)         X         2.28         70.64         17.25         0.00         150.0         ± 9.6 %           2         1.69         64.22         12.90         150.0         150.0         ± 9.6 %           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           10143- CAB         16-QAM)         Y         1.89         64.06         12.33         150.0         150.0           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           10144- CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           10145- CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           10146- CAB         MHz, 16-QAM)         Y			Y	3.12	65.29	14.11		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	3.34	65.76	14.66		150.0	
Y         1.47         63.32         11.79         150.0           2         1.69         64.22         12.90         150.0           10143- CAB         16-QAM         Y         1.89         64.06         12.33         150.0           10144- CAB         Y         1.89         64.06         12.33         150.0         150.0           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         Y         1.89         64.06         12.33         150.0           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.70         64.54         10.05         150.0         ± 9.6 %           10146- CAB         MHz, 16-QAM)         Y         1.31         61.49         8.22         150.0         ± 9.6 %	10142- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.28	70.64	17.25	0.00	150.0	±9.6 %
Z         1.69         64.22         12.90         150.0           10143- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)         X         2.91         71.65         17.44         0.00         150.0         ± 9.6 %           CAB         I6-QAM)         Y         1.89         64.06         12.33         150.0            CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           CAB         MHz, QPSK)         Y         1.88         60.78         8.33         150.0         ± 9.6 %           CAB         MHz, QPSK)         Y         0.88         60.78         8.33         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         1.31         61.49         8.22         150.0         ± 9.6 %     <			Y	1.47	63.32	11.79		150.0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			Z	1.69	64.22	12.90		150.0	
Y         1.89         64.06         12.33         150.0           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           CAB         CAM)         Y         1.84         63.16         11.47         150.0         ± 9.6 %           CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88         12.42         150.0	10143- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.91	71.65	17.44	0.00	150.0	± 9.6 %
Z         2.13         65.00         13.35         150.0           10144- CAB         LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)         X         2.49         68.28         15.31         0.00         150.0         ± 9.6 %           Z         2.06         63.98         12.42         150.0         10145-           LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           MHz, QPSK)         Y         0.88         60.78         8.33         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10146- CAB         MHz, 16-QAM)         Y         1.31         61.49         8.22         150.0         ± 9.6 %           CAB         MHz, 16-QAM)         Y         1.31         61.49         8.22         150.0         ± 9.6 %           CAB         MHz, 64-QAM)         Y         1.37         63.70         10.16         150.0         ± 9.6 %     <			Y	1.89	64.06	12.33		150.0	
10144- CAB       LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)       X       2.49       68.28       15.31       0.00       150.0       ± 9.6 %         Y       1.84       63.16       11.47       150.0       150.0       10145-         LTE-FDD (SC-FDMA, 100% RB, 1.4       Z       2.06       63.98       12.42       150.0       150.0         10145- CAB       LTE-FDD (SC-FDMA, 100% RB, 1.4       X       1.75       69.88       14.70       0.00       150.0       ± 9.6 %         10146- CAB       LTE-FDD (SC-FDMA, 100% RB, 1.4       X       1.75       69.88       10.05       150.0         10146- CAB       MHz, 16-QAM)       Y       0.88       60.78       8.33       150.0       ± 9.6 %         10146- CAB       MHz, 16-QAM)       Y       1.31       61.49       8.22       150.0       ± 9.6 %         10147- CAB       MHz, 16-QAM)       Y       1.31       61.49       8.22       150.0       150.0       10.16       150.0       150.0       10.16       150.0       10.16       150.0       10.16       150.0       10.16       150.0       10.16       150.0       10.16       150.0       10.6 %       10.43       0.00       150.0       10.6 %       10.44			Z	2.13	65.00	13.35		150.0	
Y         1.84         63.16         11.47         150.0           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         Z         2.06         63.98         12.42         150.0           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           10146- CAB         Z         1.11         62.16         10.05         150.0         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         MHz, 64-QAM)         Y         1.31         61.49         8.22         150.0         ± 9.6 %           10147- CAB         MHz, 64-QAM)         Y         1.37         61.88         8.55         150.0         ± 9.6 %           Z         1.85         64.45         10.67         150.0         ± 9.6 %         150.0         ± 9.6 %	10144- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.49	68.28	15.31	0.00	150.0	± 9.6 %
Z         2.06         63.98         12.42         150.0           10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           0         MHz, QPSK)         Y         0.88         60.78         8.33         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.70         65.87         11.21         0.00         150.0         ± 9.6 %           10147- CAB         MHz, 64-QAM)         Y         1.37         61.88         8.55         150.0         ± 9.6 %			Y	1.84	63.16	11.47		150.0	
10145- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)         X         1.75         69.88         14.70         0.00         150.0         ± 9.6 %           0         Y         0.88         60.78         8.33         150.0         150.0         ± 9.6 %           10146- CAB         Z         1.11         62.16         10.05         150.0         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.90         65.87         11.21         0.00         150.0         ± 9.6 %           10147- CAB         MHz, 64-QAM)         Y         1.37         61.88         8.55         150.0         ± 9.6 %			Z	2.06	63.98	12.42	1	150.0	
Y         0.88         60.78         8.33         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           10147- CAB         Y         1.31         61.49         8.22         150.0         ± 9.6 %           10147- CAB         Y         1.31         61.49         8.22         150.0         ± 9.6 %           10147- CAB         MHz, 64-QAM)         Y         1.31         61.49         8.22         150.0           10147- CAB         MHz, 64-QAM)         Y         1.37         63.70         10.16         150.0           10147- CAB         MHz, 64-QAM)         Y         1.37         61.88         8.55         150.0           10147- CAB         Y         1.37         61.88         8.55         150.0	10145- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.75	69.88	14.70	0.00	150.0	± 9.6 %
Z         1.11         62.16         10.05         150.0           10146- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)         X         1.70         64.54         10.43         0.00         150.0         ± 9.6 %           V         1.31         61.49         8.22         150.0			Y	0.88	60.78	8.33		150.0	
10146- CAB       LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)       X       1.70       64.54       10.43       0.00       150.0       ± 9.6 %         Y       1.31       61.49       8.22       150.0			Z	1.11	62.16	10.05		150.0	
Y         1.31         61.49         8.22         150.0           Z         1.73         63.70         10.16         150.0           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.90         65.87         11.21         0.00         150.0         ± 9.6 %           Image: CAB         MHz, 64-QAM         Y         1.37         61.88         8.55         150.0           Image: CAB         Z         1.85         64.45         10.67         150.0	10146- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.70	64.54	10.43	0.00	150.0	± 9.6 %
Z         1.73         63.70         10.16         150.0           10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.90         65.87         11.21         0.00         150.0         ± 9.6 %           Image: CAB         MHz, 64-QAM)         Y         1.37         61.88         8.55         150.0           Image: CAB         Z         1.85         64.45         10.67         150.0			Y	1.31	61.49	8.22		150.0	
10147- CAB         LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)         X         1.90         65.87         11.21         0.00         150.0         ± 9.6 %             Y         1.37         61.88         8.55         150.0            Z         1.85         64.45         10.67         150.0			Z	1.73	63.70	10.16		150.0	
Y         1.37         61.88         8.55         150.0           Z         1.85         64.45         10.67         150.0	10147- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	1.90	65.87	11.21	0.00	150.0	± 9.6 %
Z 1.85 64.45 10.67 150.0			Y	1.37	61.88	8.55		150.0	
	-		Z	1.85	64.45	10.67		150.0	

#### EX3DV4-SN:3939

S.G.         D. String         Y         2.51         64.56         13.46         150.0           10150- CAB         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-GAM)         X         3.23         68.34         16.67         0.00         150.0         ± 9.6 %           CAB         64-GAM)         Y         2.64         64.69         13.63         150.0	10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-0AM)	X	3.10	68.34	16.63	0.00	150.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0/10	10 do inty	Y	2.51	64.56	13.46		150.0	
10160.         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, X         3.23         98.34         16.67         0.00         150.0         ± 9.6 %,           GAB         Y         2.64         94.69         13.63         150.0         .           10161.         LTE-TDD (SC-FDMA, 50%, RB, 20 MHz, X         6.64         77.49         21.01         3.98         65.0         ± 9.6 %,           CAB         OPSK)         Y         5.67         73.98         18.79         65.0         .           10152.         LTE-TDD (SC-FDMA, 50%, RB, 20 MHz, X         6.09         73.46         19.68         3.98         65.0         .           10163.         LTE-TDD (SC-FDMA, 50%, RB, 20 MHz, X         6.02         74.58         20.52         3.99         65.0         .           10163.         LTE-TDD (SC-FDMA, 50%, RB, 10 MHz, X         6.52         74.58         20.52         3.99         65.0         .           10164.         LTE-FDD (SC-FDMA, 50%, RB, 10 MHz, X         2.51         70.55         17.59         0.00         150.0         .           CAB         OPSK)         Y         1.72         46.63         13.58         150.0         .           CAB         OPSK)         Y         1.72         9.0			z	2.72	65.12	14.12		150.0	
Y         2.64         64.69         13.63         (150.0)           CAB         CPSK)         Y         2.25         65.23         14.26         150.0           CAB         OPSK)         Y         5.67         73.98         18.79         65.0         ± 9.6 %           CAB         OPSK)         Y         5.67         73.98         18.79         65.0         1.9.6 %           CAB         IG-OAM         Som RB, 20 MHz,         X         6.09         73.46         19.88         3.98         65.0         ± 9.6 %           CAB         IG-OAM         Som RB, 20 MHz,         X         6.02         77.78         18.71         65.0         1.9.6 %           CAB         64-QAM         Y         5.45         71.67         19.47         65.0         1.9.6 %           CAB         64-QAM         Y         5.82         72.56         19.47         65.0         1.9.6 %           CAB         OPSK)         Y         1.72         64.05         12.81         150.0         1.9.6 %           CAB         OPSK         Y         1.72         64.05         13.84         150.0         1.9.6 %           CAB         OPSK         Y	10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	3.23	68.34	16.67	0.00	150.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0.10		Y	2.64	64.69	13.63		150.0	
10161- CAB         CF-TDD (SC-FDMA, 50% RB, 20 MHz, CAB         X         6.64         77.49         21.01         3.98         65.0         ± 9.6%           CAB         OPSK)         Y         5.67         73.98         18.79         66.0			Z	2.85	65.23	14.26		150.0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	x	6.84	77.49	21.01	3.98	65.0	± 9.6 %
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	5.67	73.98	18.79		65.0	
10162         LTE-TDD (SC-FDMA, 50%, RB, 20 MHz, GAB         X         6.09         73.46         19.68         3.98         65.0         \$\$2.8, %           CAB         16-QAM)         Y         5.46         71.81         18.77         65.0         \$\$5.0         \$\$5.0         \$\$5.0         \$\$5.0         \$\$5.0         \$\$\$5.0         \$\$\$\$5.0         \$			Z	5.93	74.25	19.30		65.0	
Y         5.46         71.61         16.37         65.0           10153         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         X         6.52         74.58         20.52         3.98         65.0         ±9.6%           CAB         64-QAM, 64-QAM,         Y         5.82         72.56         19.16         65.0         -           10154- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         2.51         70.55         17.59         0.00         150.0         ±9.6%           10155- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         2.90         69.86         17.26         0.00         150.0         ±9.6%           10155- CAB         16-QAM)         Y         2.14         64.35         13.14         150.0         ±9.6%           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         2.18         71.27         17.33         0.00         150.0         ±9.6%           CAB         OPSK,         Y         1.31         62.93         11.29         150.0         ±9.6%           CAB         OPSK,         Y         1.31         62.93         11.29         150.0         ±9.6%           CAB         OPSK,         Y         2.1	10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	6.09	73.46	19.68	3.98	65.0	± 9.6 %
10153- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         X         6.52         74.58         20.52         3.98         65.0         ± 9.6 %           10154- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         Y         5.82         72.56         19.16         65.0         ± 9.6 %           10154- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         Y         2.51         70.55         17.59         0.00         150.0         ± 9.6 %           CAB         GPSK)         Y         1.72         64.05         12.61         150.0         ± 9.6 %           CAB         IG-CAM, 50% RB, 10 MHz, CAB         Y         2.14         64.35         13.14         150.0         ± 9.6 %           CAB         IG-CAM)         Y         2.14         64.35         13.14         150.0         ± 9.6 %           CAB         GAM)         Y         2.14         64.35         13.14         150.0         ± 9.6 %           CAB         GAM)         Y         1.31         62.93         11.29         150.0         ± 9.6 %           CAB         IG-CAM)         Y         1.61         62.94         11.04         150.0         ± 9.6 %           CAB         IG-EPDM (SC-FDMA, 50% RB, 5 MHz,			Y	5.46	71.61	18.37		65.0	
10153- CAB         CHE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         Y         5.82         74.58         20.52         3.98         65.0         ± 9.6 %           CAB         64-QAM)         Y         5.82         72.56         19.16         65.0         -           10154- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         2.51         70.55         17.59         0.00         150.0         ± 9.6 %           10155- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         2.90         69.86         17.26         0.00         150.0         ± 9.6 %           10155- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.18         71.27         17.33         0.00         150.0         ± 9.6 %           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.18         71.27         17.33         0.00         150.0         ± 9.6 %           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.43         69.81         15.76         0.00         150.0         ± 9.6 %           10157- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.43         69.81         15.76         0.00         150.0         ± 9.6 %           CAB			Z	5.71	71.78	18.71		- 65.0	
Y         5.82         72.56         19.47         65.0           10154         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         2.51         70.55         17.59         0.00         150.0         ±9.6 %           10155         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         2.96         64.85         13.58         150.0         10150           10155         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         2.90         69.86         17.26         0.00         150.0         ±9.6 %           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.18         71.27         17.33         0.00         150.0         ±9.6 %           CAB         QPSK)         Y         1.31         62.93         11.29         150.0         ±9.6 %           CAB         QPSK)         Y         1.31         62.93         11.29         150.0         ±9.6 %           CAB         GAQMI         Y         1.61         62.94         10.04         150.0         ±9.6 %           CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz,         X         2.48         63.93         11.24         150.0         ±9.6 %           CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz,         X	10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	6.52	74.58	20.52	3.98	65.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.82	72.56	19.16		65.0	
10154- CAB         CF-FDD (SC-FDMA, 50% RB, 10 MHz, PSK)         X         2.51         70.55         17.59         0.00         150.0         ±9.6 % ±9.6 %           10155- CAB         IT-FDD (SC-FDMA, 50% RB, 10 MHz, IG-QAM)         X         2.90         69.86         17.26         0.00         150.0         ±9.6 %           10155- CAB         ITE-FDD (SC-FDMA, 50% RB, 10 MHz, IG-QAM)         X         2.90         69.86         17.26         0.00         150.0         ±9.6 %           10156- CAB         ITE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.18         71.27         17.33         0.00         150.0         ±9.6 %           10157- CAB         ICE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.43         69.81         15.76         0.00         150.0         ±9.6 %           10157- CAB         ICE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.43         69.81         15.76         0.00         150.0         ±9.6 %           10158- CAB         ITE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.29         64.66         13.41         150.0         ±9.6 %           10158- CAB         ITE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         2.52         65.35         14.19         150.0         ±9.6 %			Ζ	6.07	72.69	19.47		65.0	
Y         1.72         64.05         12.61         150.0           10155- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         2.90         69.86         17.26         0.00         150.0         ± 9.6 %           10166- CAB         CTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         Y         2.14         64.35         13.14         150.0         ± 9.6 %           CAB         QPSK)         Y         2.13         62.93         11.29         150.0         ± 9.6 %           CAB         QPSK)         Y         1.31         62.93         11.29         150.0         ± 9.6 %           CAB         GCS-FDMA, 50% RB, 5 MHz,         X         2.43         69.61         15.76         0.00         150.0         ± 9.6 %           CAB         GC-QAM)         Y         1.61         62.93         11.29         150.0         ± 9.6 %           CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         2.43         69.61         13.41         150.0         ± 9.6 %           CAB         64-QAM)         Y         2.29         64.66         13.41         150.0         ± 9.6 %           CAB         64-QAM)         Y         2.29         64.66         13.41	10154- CAB	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.51	70.55	17.59	0.00	150.0	±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		/	Y	1.72	64.05	12.61		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Ζ	1.94	64.85	13.58		150.0	
Y         2.14         64.35         13.14         150.0           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         2.18         71.27         17.33         0.00         150.0 $\pm 9.6$ %           10156- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         Y         1.31         62.93         11.29         150.0         150.0           10157- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         X         2.43         69.61         15.76         0.00         150.0 $\pm 9.6$ %           CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, CAB         K         2.43         69.61         17.40         0.00         150.0 $\pm 9.6$ %           10158- CAB         G4-QAM)         Y         1.61         62.94         11.04         150.0 $\pm 9.6$ %           10158- CAB         G4-QAM)         Y         2.29         64.66         13.41         150.0 $\pm 9.6$ %           CAB         64-QAM)         Y         2.29         64.66         13.41         150.0 $\pm 9.6$ %           CAB         64-QAM)         Y         2.29         64.66         13.41         150.0 $\pm 9.6$ %           CAB         0.80-FDMA, 50% RB, 15 MHz,	10155- CAB	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.90	69.86	17.26	0.00	150.0	± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	2.14	64.35	13.14		150.0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-		Z	2.36	65.06	13.95		150.0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	10156- CAB	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.18	71.27	17.33	0.00	150.0	± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	1.31	62.93	11.29		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	1.53	63.93	12.52		150.0	
Y         1.61         62.94         11.04         150.0           10158- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         3.06         70.06         17.40         0.00         150.0         ± 9.6 %           2         2.29         64.66         13.41         150.0         ± 9.6 %           2         2.22         65.35         14.19         150.0         ± 9.6 %           10159- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         2.59         70.32         16.13         0.00         150.0         ± 9.6 %           10159- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         Y         1.68         63.19         11.25         150.0           10160- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         X         2.95         69.69         17.20         0.00         150.0         ± 9.6 %           10161- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         3.13         68.37         16.63         0.00         150.0         ± 9.6 %           10161- LTE-FDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         2.22         64.69         13.26         150.0         ± 9.6 %           CAB         16-QAM)         Y         2.53         64.54	10157- CAB	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	×	2.43	69.61	15.76	0.00	150.0	± 9.6 %
Z         1.85         63.93         12.17         150.0           10158- CAB         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         3.06         70.06         17.40         0.00         150.0         ± 9.6 %           10159- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         Y         2.29         64.66         13.41         150.0         150.0           10159- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         2.52         65.35         14.19         150.0         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.68         63.19         11.25         150.0 <td></td> <td></td> <td>Y</td> <td>1.61</td> <td>62.94</td> <td>11.04</td> <td></td> <td>150.0</td> <td></td>			Y	1.61	62.94	11.04		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	1.85	63.93	12.17		150.0	
Y         2.29         64.66         13.41         150.0           CAB         64-QAM)         Z         2.52         65.35         14.19         150.0           CAB         64-QAM)         Y         2.59         70.32         16.13         0.00         150.0         ± 9.6 %           CAB         64-QAM)         Y         1.68         63.19         11.25         150.0         ± 9.6 %           CAB         CPD (SC-FDMA, 50% RB, 15 MHz, QPSK)         Y         1.68         63.19         11.25         150.0         ± 9.6 %           10160-         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         Y         2.22         64.69         13.26         150.0         ± 9.6 %           CAB         QPSK)         Y         2.22         64.69         13.26         150.0         ± 9.6 %           CAB         IE-FDD (SC-FDMA, 50% RB, 15 MHz, APS)         X         3.13         68.37         16.63         0.00         150.0         ± 9.6 %           CAB         16-QAM)         Y         2.53         64.54         13.49         150.0         150.0         150.0         150.0         150.0         150.0         160.0         150.0         150.0         150.0         150.0 <t< td=""><td>10158- CAB</td><td>LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)</td><td>×</td><td>3.06</td><td>70.06</td><td>17.40</td><td>0.00</td><td>150.0</td><td>± 9.6 %</td></t<>	10158- CAB	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	3.06	70.06	17.40	0.00	150.0	± 9.6 %
Image: Constraint of the system         Z         2.52         65.35         14.19         150.0           10159- CAB         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         2.59         70.32         16.13         0.00         150.0         ± 9.6 %           CAB         M         Y         1.68         63.19         11.25         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         160.0         150.0         14.16         150.0 </td <td></td> <td></td> <td>Y</td> <td>2.29</td> <td>64.66</td> <td>13.41</td> <td></td> <td>150.0</td> <td></td>			Y	2.29	64.66	13.41		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	2.52	65.35	14.19		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10159- CAB	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.59	70.32	16.13	0.00	150.0	± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	1.68	63.19	11.25		150.0	
10160- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         X         2.95         69.69         17.20         0.00         150.0         ± 9.6 %           Image: CAB         QPSK)         Y         2.22         64.69         13.26         150.0         150.0           Image: CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         3.13         68.37         16.63         0.00         150.0         ± 9.6 %           Image: CAB         16-QAM)         Y         2.53         64.54         13.49         150.0<			Z	1.92	64.22	12.38	4	150.0	
Y         2.22         64.69         13.26         150.0           Z         2.44         65.35         14.04         150.0           10161- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         3.13         68.37         16.63         0.00         150.0         ± 9.6 %           CAB         16-QAM)         Y         2.53         64.54         13.49         150.0         ±         9.6 %           CAB         C         Z         2.75         65.10         14.15         150.0         150.0           10162- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         3.24         68.54         16.74         0.00         150.0         ± 9.6 %           CAB         64-QAM)         Y         2.64         64.72         13.65         150.0         ± 9.6 %           CAB         G4-QAM,         Y         2.64         64.72         13.65         150.0         ± 9.6 %           CAB         QPSK)         Y         3.11         66.66         18.52         3.01         150.0         ± 9.6 %           CAB         QPSK)         Y         3.11         66.48         16.52         150.0         ± 9.6 %           CAB	10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	×	2.95	69.69	17.20	0.00	150.0	± 9.6 %
Z         2.44         65.35         14.04         150.0           10161- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         3.13         68.37         16.63         0.00         150.0         ± 9.6 %           0         2         2.53         64.54         13.49         150.0         150.0         160.0           10162- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         3.24         68.54         16.74         0.00         150.0         ± 9.6 %           10162- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         Y         2.64         64.72         13.65         150.0			Y	2.22	64.69	13.26		150.0	
10161- CAB       LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)       X       3.13       68.37       16.63       0.00       150.0       ± 9.6 %         Image: CAB       16-QAM)       Y       2.53       64.54       13.49       150.0       Image: CAB       Image: CAB       16.74       0.00       150.0       Image: SA       150.0       Image: CAB       Image: CAB			Z	2.44	65.35	14.04		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	3.13	68.37	16.63	0.00	150.0	± 9.6 %
Z         2.75         65.10         14.15         150.0           10162- CAB         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         3.24         68.54         16.74         0.00         150.0         ± 9.6 %           V         2.64         64.72         13.65         150.0			Y	2.53	64.54	13.49		150.0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	2.75	65.10	14.15		150.0	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	3.24	68.54	16.74	0.00	150.0	± 9.6 %
Z         2.85         65.27         14.29         150.0           10166- CAB         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         X         3.47         68.66         18.52         3.01         150.0         ± 9.6 %           V         3.11         66.48         16.52         150.0         ±         9.6 %           Intersection         Y         3.11         66.48         16.52         150.0         ±           Intersection         Z         3.44         67.44         17.40         150.0         ±           Intersection         Z         3.44         67.44         17.40         150.0         ±           Intersection         Y         3.61         68.38         16.62         150.0         ±           Intersection         Y         3.61         68.38         16.62         150.0         ±           Intersection         Z         4.13         70.04         17.82         150.0         150.0			Y_	2.64	64.72	13.65		150.0	
10166- CAB       LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)       X       3.47       68.66       18.52       3.01       150.0       ± 9.6 %         Y       3.11       66.48       16.52       150.0			Z	2.85	65.27	14.29		150.0	
Y         3.11         66.48         16.52         150.0           Z         3.44         67.44         17.40         150.0           10167- CAB         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         X         4.17         71.43         18.98         3.01         150.0         ± 9.6 %           Y         3.61         68.38         16.62         150.0         ±         16.0           Z         4.13         70.04         17.82         150.0         ±         9.6 %	10166- CAB	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.47	68.66	18.52	3.01	150.0	± 9.6 %
Z         3.44         67.44         17.40         150.0           10167- CAB         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         X         4.17         71.43         18.98         3.01         150.0         ± 9.6 %           Y         3.61         68.38         16.62         150.0         ±           Z         4.13         70.04         17.82         150.0         ±			Y	3.11	66.48	16.52		150.0	
10167- CAB         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         X         4.17         71.43         18.98         3.01         150.0         ± 9.6 %            Y         3.61         68.38         16.62         150.0         ±         150.0         ±         9.6 %            Z         4.13         70.04         17.82         150.0         150.0			Z	3.44	67.44	17.40		150.0	
Y         3.61         68.38         16.62         150.0           Z         4.13         70.04         17.82         150.0	10167- CAB	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	4.17	71.43	18.98	3.01	150.0	± 9.6 %
Z 4.13 70.04 17.82 150.0			Y	3.61	68.38	16.62		150.0	
			Z	4.13	70.04	17.82		150.0	

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	0.061		69.91	86.80	3.14	7		
	0.061		90.01	04.00	09.2	1		
	0.031		30 31	07 55	09.0			
0/ 0:0 T	0.001	10.0		00100			(MAO-99	AAA
%95+	0.021	301	1971	<u> </u>	312	X	LTE-FDD (SC-FDMA, 1 RB, 15 MHz	-68101
	120.0		90.61	90.27	3.75	Z		
	150.0		17.29	69.22	3.04	Å		
								avo
% 9.6 ∓	0.061	10.6	00.02	67.01	+0.6			-701.01
70 3 0 .	0.001	PU C	30.00	23.30	3 64	<u></u>	11E-EDD (SC-EDMA 1 BB 16 MHz	10182-
	160.0		66.91	26.99	58.0	2		
	150.0		68.61	65.52	5.48	X		
							(jpsk)	CAB
%96∓	0.031	10.5	96°21	99.78	68'Z	X	2HM 6L '9H L '9M04-0S) 004-910	-18101
	0.061		09.91	00.80	61.6	7		10101
	0.001		10.01	14:00	10.2			
	0.031		20.31	11.99	190	<b>^</b>		
~ ~ ~ ~							(MAQ	CAB
% 9 <sup>.</sup> 6 Ŧ	0.031	10.5	11.62	<b>96.35</b>	3,18	X	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-	-08101
	150.0		77.71	70.25	3.43	Z		
	0.061	-	10.81	61.13	08.2	<u> </u>		
				02.20			(141)-(22-40	
W 0'6 T	0.001	10.0	70'01	07.14	04:0			SAR S
70 9 0 +	0.091	3.04	18 02	8612	57.5	X	LTE-FDD (SC-FDMA 1 RR 10 MHz	-62101
	120.0		80.01	72.08	97.6	Z		
	150.0		12.30	69.24	3.04			
			1					aAJ
% 9.6 ∓	0.061	10.6	15.02	70.01	C0.6	V		-0110
70 3 0 1	0.001	100	2000	22.20	3 86	<u>+</u>	31 THAR 89 1 AMOR-22100-211	-87101
	0.021		00 21	96 99	98.2	Z		
	120.0		15.84	65.53	2.48	<b>X</b>		
							(Ch2K)	ວ∀ວີ
%96∓	0.021	10.5	96.71	89.79	68'Z	X		-77101
	0.001		07.61	67.71	00.0	7-		LLFOF
	0.001		00.01	00.07	10:0	<u> </u>		
	0.021		12 40	65.69	20 8	<u> </u>		
							(MAO-81	CAB
% 9 <sup>·</sup> 6∓	120.0	3 01	20.48	73.52	3.68	X	LTE-FDD (SC-FDMA, 1 RB, 10 MHz,	-92101
	150.0		16.91	66.83	2.84	Z	· · · · · · · · · · · · · · · · · · ·	
	0.061		9/ 91	24.CO	977	<u> </u>		
	0.011		02 37	01 10		- ^		<b>a</b> 10
0/ 0°C T	0.001	100	10.11	00110	1017			840
%96+	0.021	301	7871	EE 78	78.2	X	LTE-FDD (SC-FDMA, 1 RB, 10 MHz	-52101
	0.23		21.28	80.25	19'9	Z		
	0.88		18.23	74.25	97.4	L V		
							(MAU)-40	BAJ
% 9.6 ∓	0.60	20.0	55.02	84.11	14.0			-+/101
7000.	0.00	000	+0:07	00.00	00:0	<del>-</del>		12101
	0.88		19 50	85.80	908	2	,	
	0.28		21.26	62,18	178.9	×		
							(MAO-81	CAB
%96∓	0.29	20.8	55'66	17.68	27.7	X	LIE-TDD (SC-FDMA, 1 RB, 20 MHz,	-67101
	0.68	_	70.67	65.61	25.0	7		02707
	0.00		7/17	10.11	70'5	1		
			02 10	77 E7	691			
D/ 010 -	0.00	-					OPSK)	CAB
%96∓	0.29	6.02	55.22	<u>91.77</u>	4.62	X	LTE-TDD (SC-FDMA, 1 RB, 20 MHz.	10172-
	150.0		<b>99.91</b>	99.89	3.16	Z		
	120.0		11.01	97.99	19.2	Å		
							(ININD-HO	~~~
% 0'6 T	0.001	10.0	10:11	14:00	61.0	V		
/0 9 0 +	0.001	FUE	29 21	FN 09	510	+· <u>^</u>	TTE-EDD (SC-EDMA 1 RB 20 MHz	-12101
	0.021		0101	LCCL	67.6	Z		
	120.0		95.71	85.69	<u>30.</u> £	L L		
							(MAD-81	CAB
%96∓	0.081	3.01	20.47	73.50	88.5	X	2HM 02 '88 L 'AMOH-08) (10-11	-0/101
	0.061		81.71	60.70	19.7	7		02707
	0.001		00'01	00.79	28.6	4		
	150.0		90.21	NA 2A	076	A		
							(CPSK)	CAB
% 9′6 ∓	150.0	3.01	18.15	£8.7ð	2.91	X	LTE-FDD (SC-FDMA, 1 RB, 20 MHz,	-69101
	120.0		10.61	£6°12	4.52	Z		
	0.061		89.71	86.60	16.5	1		
-	4600		0020	00.03	100	<u>^</u>	line on the	<b>m</b> ( <b>c</b>
1 0/ 010 -	0.001	1.010					(WAO-46	RAC
%96+	0.021	3 01	20.47	96°82	29.4	X	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz	-89101

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10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	2.90	67.70	17.98	3.01	150.0	± 9.6 %
CAB	QPSK)	$\overline{\mathbf{v}}$	2.40	65 55	15.85		150.0	
		-	2.45	66.00	17.01		150.0	
10105	TE EDD (SC EDMA 1 PR 3 MHz 16	$\frac{2}{x}$	3.86	73 37	20.40	3.01	150.0	+9.6 %
CAB		^	5.00	70.01	20.40	0.01		/
0.10		Y	3.05	69.27	17.33		150.0	
		Z	3.77	72.13	19.10		150.0	
10186-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-	х	3.19	69.38	17.65	3.01	150.0	±9.6 %
		Y	2.61	66.45	15.09		150.0	
		7	3.16	68.63	16.62		150.0	
10197	LTE-EDD (SC-EDMA 1 RB 14 MHz	X	2 91	67 75	18.04	3.01	150.0	± 9.6 %
CAB	QPSK)		2.01					
		Y	2.49	65.59	15.91		150.0	
		Z	2.87	67.03	17.07		150.0	
10188- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.98	74.02	20.78	3.01	150.0	± 9.6 %
		Y	3.13	69.75	17.64		150.0	
		Z	3.89	72.74	19.47		150.0	
10189-	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X	3.25	69.78	17.91	3.01	150.0	±9.6 %
AAA	64-QAM)			00.70	45.04	<u> </u>	450.0	
		- Y~~	2.66	66.73	15.31		150.0	
		<u>Z</u>	3.22	68.99	10.87	0.00	150.0	+06%
10193- CAA	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.66	67.18	16.52	0.00	150.0	± 9.0 %
		Y	4.29	65.42	14.92		150.0	
		Z	4.49	65.75	15.29		150.0	
10194- CAA	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.82	67.45	16.63	0.00	150.0	±9.6 %
		Y	4.45	65.73	15.05		150.0	
		Z	4.65	66.06	15.41		150.0	
10195-	IEEE 802.11n (HT Greenfield, 65 Mbps,	X	4.86	67.48	16.65	0.00	150.0	± 9.6 %
CAA	04-QAW)	v	1 19	65.77	15.07		150.0	
			4.70	66 10	15.43	+	150.0	
10196-	IEEE 802.11n (HT Mixed, 6.5 Mbps,	x	4.66	67.21	16.52	0.00	150.0	± 9.6 %
CAA	BPSK)	+ <del></del>	4.00	05.47	44.02		150.0	
		Y	4.29	65.47	14.93	ļ	150.0	
			4.49	65.80	15.30	0.00	150.0	+06%
10197- CAA	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.83	67.46	16.64	0.00	150.0	± 9.0 %
		Y	4.46	65.76	15.06	1	150.0	ļ
		Z	4.67	66.08	15.42	1	150.0	
10198- CAA	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.86	67.49	16.66	0.00	150.0	± 9.6 %
		Y	4.50	65.79	15.08		150.0	
		Z	4.70	66.11	15.44		150.0	
10219-	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.61	67.25	16.50	0.00	150.0	± 9.6 %
		Y	4.23	65.45	14.87		150.0	
		Z	4.43	65.78	15.24	1	150.0	
10220-	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-	X	4.82	67.43	16.63	0.00	150.0	± 9.6 %
		Y	4.46	65.74	15.05		150.0	
		Z	4.66	66.06	15.42		150.0	-
10221-	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-	X	4.87	67.41	16.64	0.00	150.0	± 9.6 %
UNA		Y	4 51	65.74	15.08		150.0	
		7	4 71	66.06	15.44	1	150.0	
10222-	IEEE 802.11n (HT Mixed, 15 Mbps,	X	5.20	67.51	16.71	0.00	150.0	± 9.6 %
CAA	BPSK)	V	4.00	66.04	15.00	+	160.0	
		7	4.03	66.32	15.20		150.0	
L		<u> </u>	0.03	1 00.32	15.00	1	100.0	

#### EX3DV4- SN:3939

CAA         QAM)         Y         5.13         66.26         15.42         160.0           10224-         IEEE 802.11n (HT Mixed, 150 Mbps, 64-         X         5.54         67.65         16.71         0.00         150.0         ± 9.6 %           CAA         OAM)         Y         4.87         66.11         15.23         150.0         -           10225-         UMTS-FDD (HSPA+)         X         2.99         67.11         15.96         0.00         150.0         ± 9.6 %           10225-         UMTS-FDD (SC-FDMA, 1 RB, 1.4 MHz,         X         8.11         84.61         13.39         6.02         65.0         ± 9.6 %           10226-         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,         X         7.83         83.13         22.34         6.02         65.0         12.9 %           10227-         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,         X         6.99         84.35         22.97         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0         12.8 %         65.0 </th <th>10223-</th> <th>IEEE 802.11n (HT Mixed, 90 Mbps, 16-</th> <th>X</th> <th>5.49</th> <th>67.70</th> <th>16.82</th> <th>0.00</th> <th>150.0</th> <th>± 9.6 %</th>	10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.49	67.70	16.82	0.00	150.0	± 9.6 %
2         5:34         66:55         15:76         150.0         ±9.6 %           CAA         OAM)         Y         4:76         15:76         150.0         ±9.6 %           CAA         OAM)         Y         4:76         15:58         150.0         ±9.6 %           CAB         Z         5:07         66:42         15:58         150.0         ±9.6 %           CAB         V         2:49         63:82         13:26         150.0         ±9.6 %           CAB         V         2:49         63:82         13:26         150.0         ±9.6 %           CAB         V         2:49         63:82         13:26         150.0         ±9.6 %           CAA         16:GAM)         Y         7:18         82.14         21:65         65.0         ±9.6 %           CAA         16:GAM, 1 RB, 1.4 MHz,         X         6:80         22.37         65.0         ±9.6 %           CAA         CAA         6:00         82.37         82.31         6:00         ±9.6 %           CAA         CAB         Y         5.91         81:90         23.34         6:02         65.0           C2226         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, K	CAA	QAM)	V V	5 13	66 25	15.42		150.0	
10224- OAM         IEEE 802.11n (HT Mixed, 150 Mbps, 64- OAM)         X         5.24         97.83         16.71         0.00         150.0         ± 9.8 %           10225- CAB         UMTS-FDD (HSPA+)         X         2.99         67.11         15.96         0.00         150.0         ± 9.6 %           10225- CAB         UMTS-FDD (HSPA+)         X         2.99         67.11         15.96         0.00         150.0         ± 9.6 %           10226- CAA         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 54-QAM)         X         8.11         84.61         23.39         6.02         65.0         ± 9.6 %           10227- CAA         16-CAM)         Y         7.18         92.14         21.65         65.0         -         -         -         2.9         45.0         65.0         -         -         -         6.02         65.0         -         -         -         7.83         83.13         22.34         6.02         65.0         -         -         -         2.6         6.9         6.45.0         -         -         -         6.5.0         -         -         6.5.0         -         -         6.5.0         -         -         6.5.0         -         -         6.5.0         -         -<			+ <del>;</del> +	5.34	66.55	15.76		150.0	
Data         CAA         CAA <td>10224-</td> <td>IEEE 802 11n (HT Mixed 150 Mbps 64-</td> <td>x</td> <td>5.24</td> <td>67.63</td> <td>16.71</td> <td>0.00</td> <td>150.0</td> <td>± 9.6 %</td>	10224-	IEEE 802 11n (HT Mixed 150 Mbps 64-	x	5.24	67.63	16.71	0.00	150.0	± 9.6 %
Grin         Display         Y         4.87         66.11         15.23         150.0           10225.         UMTS-FDD (HSPA+)         X         2.99         67.11         15.96         0.00         150.0         2 9.8 %           CAB         Y         2.49         63.82         13.26         150.0         150.0           10226.         LTE-TDD (5C-FDMA, 1 RB, 1.4 MHz,         X         8.11         84.61         23.39         6.02         65.0         ± 9.6 %           CAA         16-QAM)         Y         7.18         82.14         21.65         65.0         150.0           10227.         LTE-TDD (5C-FDMA, 1 RB, 1.4 MHz,         X         7.83         83.13         22.34         6.02         65.0           10228.         LTE-TDD (5C-FDMA, 1 RB, 1.4 MHz,         X         6.99         82.37         24.25         6.02         65.0           10228.         LTE-TDD (5C-FDMA, 1 RB, 3 MHz, 16-         X         7.77         83.80         23.03         60.2         65.0           CAB         OAM)         Y         6.89         81.39         21.30         65.0         19.6 %           CAB         OAM)         Y         6.89         81.39         21.30	CAA	OAM)		0.21	•				
Z         507         66.42         15.89         15.90 $\pm$ CAB         X         2.99         67.11         15.96         0.00         150.0 $\pm$ 9.6 %           CAB         Y         2.49         63.82         13.26         150.0         150.0           10226         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,         X         8.11         84.61         23.39         6.02         65.0 $\pm$ 9.6 %           CAA         46-QAM)         X         7.18         82.14         21.65         65.0         150.0         160.		<u>ua (17)</u>	Y	4.87	66.11	15.23		150.0	
10225.         UMTS-FDD (HSPA+)         X         2.99         67.11         15.86         0.00         150.0         ± 9.6 %           CAB         Y         2.49         63.82         13.26         150.0         -           10226.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-GAM)         X         8.11         84.61         23.39         6.02         65.0         ± 9.6 %           10227.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, CAA         Y         7.18         82.13         22.34         6.02         65.0         ± 9.6 %           10227.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, CAA         X         7.83         83.13         22.34         6.02         65.0         ± 9.6 %           10228.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, CAA         X         6.09         82.37         24.25         6.02         65.0         ± 9.6 %           10228.         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16         X         7.77         83.02         23.03         6.02         65.0         ± 9.6 %           CAB         QAM)         Y         6.37         82.17         24.31         65.0         ± 9.6 %           CAB         QAM)         Y         6.34         7.914         19.95         65.0         ± 9.6	_		Z	5.07	66.42	15.58		150.0	
CAB         Y         2.49         63.82         13.26         150.0           10226         TE-TDD (SC-FDMA, 1 RB, 1.4 MHz, X         8.11         84.61         23.39         6.02         65.0         ±9.6 %           CAA         16-QAM)         Z         9.45         86.60         24.06         65.0         ±9.6 %           CAA         64-QAM)         Z         9.45         86.80         24.06         65.0         ±9.6 %           CAA         64-QAM)         Z         9.45         86.80         24.06         65.0         ±9.6 %           CAA         64-QAM)         X         7.83         83.13         22.34         6.02         65.0           CAA         QPSK)         Z         8.96         84.85         22.87         65.0         ±9.6 %           CAA         QPSK)         Y         5.91         81.90         23.34         65.0         ±9.6 %           CAA         QPSK)         Z         6.37         82.37         24.31         65.0         ±9.6 %           CAA         QPSK         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 18         X         7.77         83.80         23.03         60.2         65.0         ±9.6 % <t< td=""><td>10225-</td><td>UMTS-FDD (HSPA+)</td><td></td><td>2.99</td><td>67.11</td><td>15.96</td><td>0.00</td><td>150.0</td><td>± 9.6 %</td></t<>	10225-	UMTS-FDD (HSPA+)		2.99	67.11	15.96	0.00	150.0	± 9.6 %
V         2.4         63.82         13.26         150.0           10226.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, X         8.11         84.61         23.39         6.02         65.0         ± 9.6%           10227.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, X         7.88         68.00         24.06         65.0	CAB								
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	2.49	63.82	13.26		150.0	
10226.         LTE-TDD (SC-FDMA, 1 RB, 14 MHz, 16-QAM)         X         8.11         84.61         23.39         6.02         65.0         ± 9.6%           CAA         16-QAM)         Y         7.18         82.14         21.65         65.0            CAA         64-QAM)         Y         7.18         83.13         22.34         6.02         65.0         ± 9.6%           CAA         64-QAM)         Y         6.61         79.82         20.27         65.0             10228-         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         Y         6.09         82.37         24.25         6.02         65.0         ± 9.6%           CAA         QPSK         Y         5.91         91.90         23.34         66.0           66.0           65.0         19.6%           66.0           66.0           65.0         19.6%          65.0         19.6%          65.0         19.6%          65.0         19.6%          65.0         19.6%          65.0         19.6%          65.0         19.6%         65.0         19.6			Z	2.70	64.34	13.86		150.0	
CAA         16-QAM)         Y         7.18         82.14         21.65         65.0           10227.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, GAA         X         7.83         83.13         22.34         6.02         65.0         ± 9.6%           CAA         64-QAM)         X         7.83         83.13         22.34         6.02         65.0         ± 9.6%           CAA         64-QAM)         X         7.83         83.13         22.34         6.02         65.0         ± 9.6%           CAA         QPSK)         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, Z         X         6.09         82.37         24.25         6.02         65.0         ± 9.6%           CAA         QPSK)         Y         5.91         81.90         23.34         65.0         ± 9.6%         23.04         66.0         ± 9.6%         23.04         66.0         ± 9.6%         23.04         66.0         ± 9.6%         23.04         66.0         ± 9.6%         23.04         65.0         ± 9.6%         23.02         65.0         ± 9.6%         23.92         65.0         ± 9.6%         23.92         65.0         ± 9.6%         24.84         22.00         6.02         65.0         ± 9.6%         25.6%         25.1 <td< td=""><td>10226-</td><td>LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,</td><td>X</td><td>8.11</td><td>84.61</td><td>23.39</td><td>6.02</td><td>65.0</td><td>± 9.6 %</td></td<>	10226-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	8.11	84.61	23.39	6.02	65.0	± 9.6 %
Y         7,18         82,14         21,65         65,0           10227-         LTE-TDD (SC-FDMA, 1 RB, 14 MHz, 64-QAM)         X         7,83         83,13         22,34         6.02         65,0         ± 9.6 %           CAA         64-QAM)         Y         6.61         79,82         20,27         65,0         1           10228-         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         X         6.09         82,37         24,25         6.02         65,0         ± 9.6 %           10229-         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-         X         7.77         83,80         21,30         65,0         ± 9.6 %           CAB         QAM)         Y         6.89         81,39         21,30         65,0         ± 9.6 %           CAB         QAM)         Y         6.89         81,39         21,30         65,0         ± 9.6 %           CAB         QAM)         Y         6.34         49.14         19.85         66,0         19.6 %           CAB         QAM)         Y         6.34         98.169         23.92         6.02         65,0         ± 9.6 %           CAB         QAM)         Y         5.70         81.33         23.02         65,0         ± 9.	CAA	16-QAM)							
Z         9.45         86.80         24.06         85.0           CAA         64-QAM)         Y         7.83         83.13         22.34         6.02         65.0         ± 9.6 %           CAA         64-QAM)         Y         6.61         79.82         20.27         65.0            10228-         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, X         6.09         82.37         24.25         6.02         65.0         ± 9.6 %           CAA         QPSK)         Y         5.91         81.90         23.34         65.0          29.6%           CAA         QPSK         Y         5.91         81.90         23.34         65.0          29.6%           CAB         QAM)         Y         6.89         81.39         21.30         65.0           6.60           29.02         66.0          2.0.0         6.02         65.0           9.02         65.91         2.36         65.0           9.02         65.0          2.05         65.0          2.05         65.0           2.05         65.0          2.06 % <t< td=""><td></td><td></td><td>Y</td><td><u>7.1</u>8</td><td>82.14</td><td>21.65</td><td></td><td>65.0</td><td></td></t<>			Y	<u>7.1</u> 8	82.14	21.65		65.0	
10227.         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, GAA         X         7.83         83.13         22.34         6.02         65.0         £9.6 %           CAA         64-GAM)         Y         6.61         79.82         20.27         65.0         1           10228- CAA         GPSK)         Y         5.91         81.96         84.85         22.87         6.02         65.0         \$			Z	9.45	86.80	24.06		65.0	
CAA         64-QAM)         Y         6.61         79.82         20.27         65.0           ID228- CAA         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         X         6.09         82.37         24.25         6.02         65.0         ± 9.6 %           CAA         QPSK)         Y         6.91         81.90         23.34         65.0          ± 9.6 %           CAB         QAM)         Y         6.91         81.90         23.34         65.0         ± 9.6 %           CAB         QAM)         Y         6.89         81.39         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.89         81.39         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.84         79.14         19.95         65.0         ± 9.6 %           CAB         QAM)         Y         5.89         81.69         23.92         6.02         65.0         ± 9.6 %           CAB         QAM)         Y         5.89         81.69         23.92         6.02         65.0         ± 9.6 %           CAB         QAM)         Y         5.70         81.23         23.02         6.02         65.	10227-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	7.83	83.13	22.34	6.02	65.0	± 9.6 %
Y         6.61         76.82         20.27         65.0           22.87         65.0         ±9.6 %           10224         LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, V         5.91         81.90         23.34         65.0           10229         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-         X         7.7         83.80         23.03         60.2         65.0           10229         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-         X         7.77         83.80         21.30         65.0           10230-         CAB         OAM)         Y         6.89         81.39         21.30         65.0         ±9.6 %           CAB         OAM)         Y         6.89         81.39         23.08         65.0         ±9.6 %           CAB         OAM)         Y         6.84         82.34         22.00         60.2         65.0         ±9.6 %           CAB         OAM)         Y         6.34         49.02         22.51         65.0         ±9.6 %           CAB         OAM)         Y         5.70         81.23         23.02         60.2         65.0         ±9.6 %           CAB         OPSK)         Y         5.70         81.23         23.99         65.0	CAA	64-QAM)							
Z         8.96         8.85         22.87         24.25         6.02         65.0         ± 9.6 %           CAA         QPSK)         Y         5.91         81.90         23.34         65.0          ± 9.6 %           CAA         QPSK)         Y         5.91         81.90         23.34         65.0          ± 9.6 %           CAB         QAM         Y         6.99         81.39         21.30         60.2         65.0         ± 9.6 %           CAB         QAM         Y         6.89         81.39         21.30         65.0         ± 9.6 %           CAB         QAM         Y         6.89         81.39         21.30         65.0         ± 9.6 %           CAB         QAM         Y         6.84         79.14         19.95         65.0         ± 9.6 %           CAB         QAM         Y         6.34         79.14         19.95         65.0         ± 9.6 %           CAB         QAM         Y         5.70         81.23         23.02         65.0         ± 9.6 %           CAB         QPSK         Y         5.70         81.33         21.30         65.0         ± 9.6 %           CAB			Y	6.61	79.82	20.27		65.0	
10226- CAA         CFT-TDD (SC-FDMA, 1 RB, 1,4 MHz, OPSK)         X         6.09         82.37         24.25         6.02         65.0         29.5%           10229- CAB         CFT         6.37         82.71         24.31         65.0         102.0         102.0         65.0         19.6%           10229- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)         X         7.77         83.80         23.03         6.02         65.0         19.6%           10230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         X         7.48         82.34         22.00         60.2         65.0         19.6%           CAB         QAM)         Y         6.34         79.14         19.95         65.0         10.0         19.6%           CAB         QAM)         Y         6.34         79.14         19.95         65.0         10.0         19.6%         65.0         10.0         19.6%         65.0         10.0         10.0         10.0         10.0         19.6%         65.0         10.0         19.6%         65.0         10.0         19.6%         65.0         10.0         10.0         19.6%         65.0         10.0         19.6%         10.0         19.6%         65.0         19.6%         10.0 <td></td> <td></td> <td>Z</td> <td>8.96</td> <td>84.85</td> <td>22.87</td> <td></td> <td>65.0</td> <td>1001</td>			Z	8.96	84.85	22.87		65.0	1001
CAN         GR Sty         Y         5.91         81.90         23.34         66.0           ID229- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)         X         7.77         83.80         23.34         66.0         ±9.6 %           ID230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)         Y         6.89         81.39         21.30         65.0         ±9.6 %           ID230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         Y         6.34         79.14         19.95         65.0         ±9.6 %           ID231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         Y         5.89         81.69         23.92         6.02         65.0         ±9.6 %           ID231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QPSK)         Y         5.70         81.23         23.02         65.0         ±9.6 %           CAB         QAM)         Y         5.70         81.23         23.02         65.0         ±9.6 %           CAB         QAM)         Y         6.83         81.37         21.30         65.0         ±9.6 %           CAB         QAM)         Y         6.88         81.37         21.30         65.0         ±9.6 %           CAB         QAM)         Y	10228-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	6.09	82.37	24.25	6.02	65.0	±9.0%
Z         6.37         82.71         24.31         66.0           10229- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- GAM)         Y         6.89         91.39         21.30         6.02         65.0         ± 9.6 %           10230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- GAM)         Y         6.34         79.14         19.95         65.0         ± 9.6 %           10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- GAM)         Y         5.34         79.14         19.95         65.0         ± 9.6 %           10231- CAB         CAF-TDD (SC-FDMA, 1 RB, 3 MHz, CAB         Y         5.70         81.23         23.02         6.02         65.0         ± 9.6 %           10231- CAB         CAF-TDD (SC-FDMA, 1 RB, 5 MHz, 18- QAM)         Y         5.70         81.23         23.02         6.02         65.0         ± 9.6 %           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         Y         6.88         81.37         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.88         81.37         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.88         81.37         21.30         65.0         ± 9.6 %           CAB	000		Y	5.91	81,90	23.34		65.0	
10229- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)         X         7.77         83.80         23.03         6.02         65.0         ± 9.6 %           10230- CAB         ITE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         Y         6.89         81.39         21.30         65.0         -           10230- CAB         QAM         Y         6.84         77.48         82.34         22.00         6.02         65.0         ± 9.6 %           CAB         QAM         Y         6.34         79.14         19.95         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         65.0         -         -         -         65.0         -         -         65.0         -         -         -         65.0         -         -         -         -<			Ż	6.37	82.71	24.31		65.0	
CAB         CAM         Y         6.89         81.39         21.30         65.0           CAB         Z         9.02         85.91         23.68         65.0	10229-	LTE-TDD (SC-EDMA, 1 RB, 3 MHz, 16-		7.77	83.80	23.03	6.02	65.0	± 9.6 %
Y         6.89         81.39         21.30         65.0           10230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         X         7.48         82.34         22.00         6.02         65.0         ± 9.6 %           10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         Y         6.34         79.14         19.95         65.0         -           10231- CAB         CPSK)         Y         5.70         81.23         23.02         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         65.0         -         -         -         -         -         65.0         -         -         -         -         65.0         -         -         -         -         65.0         -	CAB	QAM)							
Z         9.02         85.91         23.68         65.0           10230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         X         7.48         82.34         22.00         6.02         85.0         ± 9.6 %           CAB         QAM,         Y         6.34         79.14         19.95         65.0			Y	6.89	81.39	21.30		65.0	
10230- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)         X         7.48         82.34         22.00         6.02         65.0         ± 9.6 %           10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)         Y         6.34         79.14         19.95         65.0         -           10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)         X         5.89         81.69         23.92         6.02         65.0         ± 9.6 %           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         5.70         81.23         23.02         65.0         -           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         66.0         ± 9.6 %           10233- CAB         QAM         Y         6.88         81.37         21.30         65.0         -           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QPSK)         X         7.47         82.32         21.99         65.0         -           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 7         X         5.72 <td< td=""><td></td><td></td><td>Z</td><td>9.02</td><td>85.91</td><td>23.68</td><td></td><td>6<u>5.0</u></td><td></td></td<>			Z	9.02	85.91	23.68		6 <u>5.0</u>	
Y         6.34         79.14         19.95         66.0           10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, OPSK)         X         5.89         81.69         23.92         6.02         65.0         ± 9.6 %           CAB         OPSK)         Y         5.70         81.23         23.92         6.02         65.0         ± 9.6 %           CAB         CAB         CF-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         6.02         65.0         ± 9.6 %           CAB         QAM)         Y         6.86         81.37         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.88         81.37         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.88         81.37         21.30         65.0         ± 9.6 %           CAB         QAM)         Y         6.83         79.12         19.95         65.0         ± 9.6 %           CAB         QAM)         Y         5.52         80.55         22.66         65.0         ± 9.6 %           CAB         QPSK)         Y         5.52         80.55         22.66         65.0         ± 9.6 %	10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	7.48	82.34	22.00	6.02	65.0	± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	6.34	79.14	19.95		65.0	
10231- CAB         LTE-TDD (SC-FDMA, 1 RB, 3 MHz, OPSK)         X         5.89         81.69         23.92         6.02         65.0         ± 9.6 %           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         Y         5.70         81.23         23.02         65.0         -           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         60.2         65.0         ± 9.6 %           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         Y         6.88         81.37         21.30         65.0         -           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         -           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         -           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, CA- QPSK)         X         5.72         81.06         23.58         6.02         65.0         -           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, Z         X         5.72         81.05         22.66         65.0         -           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10			Z	8.54	84.02	22.51		65.0	
Y         5.70         81.23         23.02         65.0           ID232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         6.02         65.0           ID232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         Y         6.88         81.37         21.30         65.0           ID233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0           ID233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0           ID234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QPSK)         X         5.72         81.06         23.58         6.02         65.0           ID234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, X         5.72         81.06         23.58         6.02         65.0         ± 9.6 %           ID235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           ID236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           CAB         64-QAM)	10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, OPSK)	X	5.89	81.69	23.92	6.02	65.0	±9.6 %
Z         6.17         82.05         23.99         65.0           10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         6.02         65.0         ± 9.6 %           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         Y         6.88         81.37         21.30         65.0         10233-           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         Y         6.33         79.12         19.95         65.0         19.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QPSK)         Y         6.33         79.12         19.95         65.0         19.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QPSK)         Y         5.52         80.55         22.60         65.0         19.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 7         Y         5.52         80.55         22.66         65.0         10.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 7         Y         5.52         80.55         22.66         65.0         19.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 7         Y         6.87         81.37         21.30         65.0         10.23.6 %         65.0 <td>0.10</td> <td></td> <td>Y</td> <td>5.70</td> <td>81.23</td> <td>23.02</td> <td></td> <td>65.0</td> <td></td>	0.10		Y	5.70	81.23	23.02		65.0	
10232- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)         X         7.76         83.78         23.02         6.02         65.0         ± 9.6 %           CAB         Y         6.88         81.37         21.30         65.0         50         50           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 74         X         5.72         81.06         23.58         6.02         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 74         X         5.72         81.06         23.58         6.02         65.0         ± 9.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 74         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 74         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD			Z	6.17	82.05	23.99		65.0	
Y         6.88         81.37         21.30         65.0           Z         9.00         85.89         23.67         65.0           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         ± 9.6 %           2         8.52         84.00         22.50         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)         X         5.72         81.06         23.58         6.02         65.0         ± 9.6 %           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)         X         5.72         80.55         22.66         65.0         ± 9.6 %           2         5.99         81.43         23.65         65.0         ± 9.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB         X         7.52         82.40         22.02         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB         X         5.89         81.70         23.93         6.02         65.0 <td>10232- CAB</td> <td>LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)</td> <td>X</td> <td>7.76</td> <td>83.78</td> <td>23.02</td> <td>6.02</td> <td>65.0</td> <td>± 9.6 %</td>	10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	7.76	83.78	23.02	6.02	65.0	± 9.6 %
Z         9.00         85.89         23.67         65.0           10233- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)         X         7.47         82.32         21.99         6.02         65.0         ± 9.6 %           CAB         QAM         Y         6.33         79.12         19.95         65.0         ± 9.6 %           CAB         Z         8.52         84.00         22.50         65.0         ±           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)         X         5.72         81.06         23.58         6.02         65.0         ±         9.6 %           CAB         QPSK)         Y         5.52         80.55         22.66         65.0         ±         9.6 %           CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)         X         7.76         83.79         23.03         6.02         65.0         ±         9.6 %           CAB         16-QAM)         Y         6.87         81.37         21.30         65.0         ±         9.6 %           CAB         64-QAM)         Y         6.37         79.20         19.97         65.0         ±         9.6 %           CAB         64-QAM)         Y         6.37			Y	6.88	81.37	21.30		65.0	
10233- CAB       LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)       X       7.47       82.32       21.99       6.02       65.0       ± 9.6 %         2       8.52       84.00       22.50       65.0           65.0       ± 9.6 %          10234- CAB       LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       X       5.72       81.06       23.58       6.02       65.0       ± 9.6 %         10235- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)       Y       5.52       80.55       22.66       65.0       ± 9.6 %         10235- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)       X       7.76       83.79       23.03       6.02       65.0       ± 9.6 %         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB       X       5.70       81.25       23.02       65.0       ± 9.6 %         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB       X       5.70       81.25			Z	9.00	85.89	23.67		65.0	
Y         6.33         79.12         19.95         65.0           Z         8.52         84.00         22.50         65.0           10234- CAB         LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)         X         5.72         81.06         23.58         6.02         65.0         ±9.6 %           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)         Y         5.52         80.55         22.66         65.0          5.0           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         X         7.52         82.40         22.02         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         X         5.89         81.70         23.93         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         X         5.89         81.70         23.93         6.02         65.0         ± 9.6 %	10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	7.47	82.32	21.99	6.02	65.0	±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	6.33	79.12	19.95		65.0	
10234- CAB       LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       X       5.72       81.06       23.58       6.02       65.0       ± 9.6 %         Image: CAB       Image: CAB       Y       5.52       80.55       22.66       65.0       65.0         Image: CAB       Image: CAB       Z       5.99       81.43       23.65       65.0       10236-         10235- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)       X       7.76       83.79       23.03       6.02       65.0       ± 9.6 %         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB       X       7.76       83.79       23.08       65.0       10230-         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, CAB       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       Y       6.37       79.20       19.97       65.0       1023.93       6.02       65.0       10.6			Z	8.52	84.00	22.50	1	65.0	
Y         5.52         80.55         22.66         65.0           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         16-QAM)         Y         6.87         81.37         21.30         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         Y         6.87         81.37         21.30         65.0         ± 9.6 %           10236- CAB         64-QAM)         Y         6.87         81.37         21.30         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         Y         6.37         79.20         19.97         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         Y         5.89         81.70         23.93         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         Y         5.70         81.25         23.02         65.0         ± 9.6 %           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         Y         5.70         81.25         23.01         6.02         65.0         ± 9.6 %	10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	5.72	81.06	23.58	6.02	65.0	± 9.6 %
Z         5.99         81.43         23.65         65.0           10235- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)         X         7.76         83.79         23.03         6.02         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         Y         6.87         81.37         21.30         65.0         ± 9.6 %           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         X         7.52         82.40         22.02         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         Y         6.37         79.20         19.97         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         X         5.89         81.70         23.93         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         Y         5.70         81.25         23.02         65.0         ± 9.6 %           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         Y         6.86         81.34         21.28         65.0         ± 9.6 %           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         Y         6.86         81.34         21.28         <			Y	5.52	80.55	22.66		65.0	
10235- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)       X       7.76       83.79       23.03       6.02       65.0       ± 9.6 %         Y       6.87       81.37       21.30       65.0       -         U       Y       6.87       81.37       21.30       65.0       -         U       Y       6.87       81.37       21.30       65.0       -         U       Y       6.87       81.37       21.30       65.0       -         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       Y       6.37       79.20       19.97       65.0       -         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       X       5.89       81.70       23.93       6.02       65.0       ± 9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, CAB       Y       5.70       81.25       23.02       65.0       -         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, CAB       Y       6.86       81.34       21.28       65.0       -         10238- CAB       16-QAM)       Y			Z	5.99	81.43	23.65		65.0	
Y       6.87       81.37       21.30       65.0         10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10237- CAB       Y       6.37       79.20       19.97       65.0       -	10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	7.76	83.79	23.03	6.02	65.0	± 9.6 %
Z         9.00         85.90         23.68         65.0           10236- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)         X         7.52         82.40         22.02         6.02         65.0         ± 9.6 %           10237- CAB         Y         6.37         79.20         19.97         65.0         10237           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         X         5.89         81.70         23.93         6.02         65.0         ± 9.6 %           10237- CAB         LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         Y         5.70         81.25         23.02         65.0         ± 9.6 %           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         Y         5.70         81.25         23.01         65.0         ± 9.6 %           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         Y         6.86         81.34         21.28         65.0         ± 9.6 %			Y	6.87	81.37	21.30		65.0	
10236- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       X       7.52       82.40       22.02       6.02       65.0       ± 9.6 %         10237- CAB       Y       6.37       79.20       19.97       65.0       10.0         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       X       5.89       81.70       23.93       6.02       65.0       ± 9.6 %         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       Y       5.70       81.25       23.02       65.0       ± 9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, AB       X       7.74       83.76       23.01       6.02       65.0       ± 9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, AB       X       7.74       83.76       23.01       6.02       65.0       ± 9.6 %         10238- CAB       16-QAM)       Y       6.86       81.34       21.28       65.0       ± 9.6 %			Z	9.00	85.90	23.68		65.0	
Y       6.37       79.20       19.97       65.0         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       Z       8.58       84.09       22.53       65.0         10237- CAB       QPSK)       Y       5.89       81.70       23.93       6.02       65.0         10237- CAB       Y       5.70       81.25       23.02       65.0       ± 9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       X       7.74       83.76       23.01       6.02       65.0       ± 9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       Y       6.86       81.34       21.28       65.0       ± 9.6 %	10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.52	82.40	22.02	6.02	65.0	± 9.6 %
Z       8.58       84.09       22.53       65.0         10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       X       5.89       81.70       23.93       6.02       65.0       ± 9.6 %         Y       5.70       81.25       23.02       65.0       ±       9.6 %         Z       6.16       82.07       23.99       65.0       ±       9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       X       7.74       83.76       23.01       6.02       65.0       ±       9.6 %         Y       6.86       81.34       21.28       65.0       ±       9.6 %         Y       6.86       81.34       21.28       65.0       ±       9.6 %			Y	6.37	79.20	19.97		65.0	
10237- CAB       LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       X       5.89       81.70       23.93       6.02       65.0       ± 9.6 %         Y       5.70       81.25       23.02       65.0       ±       10238- CAB       Z       6.16       82.07       23.99       65.0       ±       9.6 %         10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, AB       X       7.74       83.76       23.01       6.02       65.0       ±       9.6 %         10238- CAB       16-QAM)       Y       6.86       81.34       21.28       65.0       ±       9.6 %         Z       8.98       85.86       23.66       65.0       ±       9.6 %			Z	8.58	84.09	22.53		65.0	
Y         5.70         81.25         23.02         65.0           Z         6.16         82.07         23.99         65.0           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         X         7.74         83.76         23.01         6.02         65.0           Y         6.86         81.34         21.28         65.0         ± 9.6 %           Z         8.98         85.86         23.66         65.0         ±	10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	5.89	81.70	23.93	6.02	65.0	± 9.6 %
Z         6.16         82.07         23.99         65.0           10238- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)         X         7.74         83.76         23.01         6.02         65.0         ± 9.6 %           Y         6.86         81.34         21.28         65.0         ±         9.6 %           Z         8.98         85.86         23.66         65.0         ±         9.6 %			Y	5.70	81.25	23.02		65.0	
10238- CAB       LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       X       7.74       83.76       23.01       6.02       65.0       ± 9.6 %         Y       6.86       81.34       21.28       65.0       ±         Z       8.98       85.86       23.66       65.0       ±			Z	6.16	82.07	23.99		65.0	
Y         6.86         81.34         21.28         65.0           Z         8.98         85.86         23.66         65.0	10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	7.74	83.76	23.01	6.02	65.0	± 9.6 %
Z 8.98 85.86 23.66 65.0			Y	6.86	81.34	21.28		65.0	
			Z	8.98	85.86	23.66		65.0	I

#### EX3DV4- SN:3939

CHB         OF-CM0         Y         6.31         79.09         109.31         65.0           10240- CAB         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSN)         X         5.87         81.67         23.91         6.02         65.0           10240- CAB         QPSN)         Y         5.69         81.67         23.91         6.02         65.0           10241- CAA         TE-TDD (SC-FDMA, 50% RB, 1.4 MHz, X         X         7.04         77.93         23.43         6.98         65.0           10242- CAA         16-GAM)         Y         6.51         72.7         22.49         65.0         25.0           10242- CAA         64-GAM)         Y         5.59         73.23         21.09         65.0         25.0           10242- CAA         64-GAM)         Y         5.59         73.23         21.09         65.0         25.0           10243- CAA         69CFAMA, 50% RB, 1.4 MHz, A         X         5.51         71.84         22.18         65.0         12.65.0           10244- CAB         10F-TDD (SC-FDMA, 50% RB, 3 MHz, A         4.78         70.68         15.40         3.98         65.0         2.9.6           CAA         QPSK)         Y         4.33         69.76         14.94 <th>10239-</th> <th>LTE-TDD (SC-FDMA, 1 RB, 15 MHz,</th> <th>  X  </th> <th>7.44</th> <th>82.28</th> <th>21.98</th> <th>6.02</th> <th>65.0</th> <th>± 9.6 %</th>	10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	7.44	82.28	21.98	6.02	65.0	± 9.6 %
Z         8.40         83.96         72.49         65.0         19.6           10240.         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)         Y         5.67         81.67         23.91         6.02         65.0         19.6           10241.         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         X         7.04         77.93         23.93         6.98         65.0         19.6           10242.         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         X         7.04         77.93         22.43         6.98         65.0         19.6           10242.         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         X         6.06         74.96         22.11         6.98         65.0         19.6           10243.         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         X         5.51         73.07         21.97         6.98         65.0         19.6           10244.         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         X         5.70         73.18         22.21         65.0         19.6           10245.         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, Z         5.70         73.18         22.10         65.0         19.6           10245.         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, Z         5.15         71.99         16.51 <t< th=""><th>CAD</th><th>04-0/AIVI)</th><th>v</th><th>6 31</th><th>79.09</th><th>19.93</th><th></th><th>65.0</th><th></th></t<>	CAD	04-0/AIVI)	v	6 31	79.09	19.93		65.0	
LIQ240.         LTE-TDD (SC-FDMA, 1 RB, 15 MHz, OPSK)         X         5.69         61.67         23.91         6.02         65.0           10241         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         Y         5.69         61.21         23.96         65.0         -           10241         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         Y         6.61         76.95         22.13         650         29.6           10242         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         Y         5.59         73.23         21.09         650         29.6           10242         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, CAA         Y         5.59         73.23         21.09         650         29.6           10243         LTE-TDD (SC-FDMA, 50% RB, 3.4Hz, CAA         Y         5.73         74.18         22.28         65.0         -           10244         LTE-TDD (SC-FDMA, 50% RB, 3.MHz, CAB         Y         5.73         74.18         22.10         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         65.0         -         -         - </th <th></th> <th></th> <th></th> <th>8.40</th> <th>83.06</th> <th>22.49</th> <th></th> <th>65.0</th> <th></th>				8.40	83.06	22.49		65.0	
Lite: JD (G2, FDMA, FB), I JMF2,         X         J.37         C/A         C/A <thc a<="" th="">         C/A         C/A         <thc <="" td=""><td>40040</td><td></td><td></td><td><u> </u></td><td>81.67</td><td>22.75</td><td>6.02</td><td>65.0</td><td>+96%</td></thc></thc>	40040			<u> </u>	81.67	22.75	6.02	65.0	+96%
Y         5.69         81.21         23.01         65.0           10241         LTE-TDD [SC-FDMA, 50%, RB, 14 MHz]         X         7.04         77.93         23.43         6.98         65.0           10242         LTE-TDD [SC-FDMA, 50%, RB, 14 MHz]         X         7.04         77.93         23.43         6.98         65.0           10242         LTE-TDD [SC-FDMA, 50%, RB, 14 MHz]         X         6.06         74.98         22.11         6.98         65.0           10243         LTE-TDD [SC-FDMA, 50%, RB, 14 MHz]         X         5.61         73.07         21.97         6.98         65.0           10244         LTE-TDD (SC-FDMA, 50%, RB, 14 MHz]         X         5.61         73.07         21.97         6.98         65.0           10244         LTE-TDD (SC-FDMA, 50%, RB, 3 MHz,         X         4.78         70.86         15.40         3.98         65.0         2.9.6           10245         LTE-TDD (SC-FDMA, 50%, RB, 3 MHz,         X         4.78         70.86         15.40         3.98         65.0         2.9.6           10245         LTE-TDD (SC-FDMA, 50%, RB, 3 MHz,         X         4.72         70.45         15.17         3.98         65.0         2.9.6           10246         LTE-TD	10240- CAB	QPSK)	^	5.67	01.07	23.91	0.02	05.0	10.0 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.69	81.21	23.01		65.0	
10241- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz)         X         7.04         77.93         23.43         6.98         65.0         ± 9.6           10242- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz)         X         6.06         74.96         22.11         6.98         65.0         ± 9.6           10242- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz)         X         5.06         74.86         22.19         6.60         -         65.0         ± 9.6           10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz)         X         5.51         73.07         21.97         6.98         65.0         ± 9.6           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.78         70.78         15.40         3.98         65.0         ± 9.6           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.77         70.46         15.17         3.98         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.72         70.45         15.17         3.98         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz,         X         5.12         71.99         16.33         65.0         ± 9.6         2.9.6         0.0 <td></td> <td></td> <td>Z</td> <td>6,15</td> <td>82.03</td> <td>23.98</td> <td></td> <td>65.0</td> <td></td>			Z	6,15	82.03	23.98		65.0	
CAA         ID-CAM         Y         6.51         76.27         22.49         65.0           10242- CAA         LTE-TDD (SC-FDMA, 50% RB, 14 MHz, A-CAM)         Y         5.59         73.23         21.09         65.0         ± 9.6           10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, A-CAM)         Y         5.59         73.23         21.09         65.0         ± 9.6           10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, A-CAM)         Y         5.73         74.18         22.18         65.0         ± 9.6           10244- CAA         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         Y         4.33         69.76         14.94         65.0         ± 9.6           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         Y         4.33         69.76         14.94         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         Y         4.32         70.45         15.17         3.98         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         Y         3.81         70.99         15.71         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         3.81         70.99         15.71         65.0	10241-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	x	7.04	77.93	23.43	6.98	65.0	± 9.6 %
1         0.31         70.21         22.42         0.20           10242- CAA         64-OAM)         Y         6.96         74.96         22.11         6.98         65.0         ± 9.6           10243- CAA         40-OAM)         Y         5.59         73.23         21.09         65.0         ± 9.6           10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, OPSK)         Y         5.51         73.07         21.97         6.98         65.0         ± 9.6           10243- CAA         DPSK)         Y         5.73         74.18         22.28         65.0         ± 9.6           10244- CAB         16-OAM)         Y         4.33         69.76         14.49         65.0         ± 9.6           10245- CAB         16-OAM)         Y         4.33         69.76         14.49         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, Z         5.12         71.99         16.51         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, Z         X         5.22         75.90         15.71         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, Z         X         5.16         72.97         17.73 <td></td> <td>TO-QAIVI)</td> <td></td> <td>6.54</td> <td>76.27</td> <td>22.40</td> <td></td> <td>65.0</td> <td></td>		TO-QAIVI)		6.54	76.27	22.40		65.0	
10242- CAA         LTE-TDD (SC-FDMA, 50% RB, 14 MHz, A         2         6.08         77.39         22.11         6.98         65.0         ± 9.6           10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, A         Y         5.59         73.23         21.09         65.0         .			7	6.04	76.05	22.45		65.0	
10242- CAA         64-OAM)         Y         5.59         73.23         21.09         65.0         23.5           10243- CAA         1-CDD (SC-FDMA, 50% RB, 1.4 MHz, OPSK)         Y         5.59         73.23         21.09         65.0         2         9.6         65.0         2         9.6         65.0         2         9.6         65.0         2         9.6         65.0         2         9.6         65.0         2         9.6         65.0         2         9.7         7.318         22.28         65.0         2         5.0         7.318         22.10         65.0         2         9.6         5.0         2         5.0         7.318         22.10         65.0         2         9.6         5.0         2         9.6         5.0         2         9.6         0.0         2         5.15         71.99         16.51         65.0         2         9.6         0.0         2         5.16         71.99         16.33         65.0         2         9.6         0.0         2         5.16         71.99         16.33         65.0         2         9.6         0.0         0.0         2         4.30         70.90         15.71         6.50         0.0         0.0         0.0 </td <td>10010</td> <td>TE TOD (OO EDINA FOR DD 4 4 MUL</td> <td></td> <td>6.06</td> <td>70.95</td> <td>23.13</td> <td>6.09</td> <td>65.0</td> <td>+96%</td>	10010	TE TOD (OO EDINA FOR DD 4 4 MUL		6.06	70.95	23.13	6.09	65.0	+96%
Y         5.59         73.23         21.09         65.0           Z         6.26         74.88         22.18         65.0           CAA         QPSK)         Y         5.73         74.18         22.28         65.0         ±9.6           CAA         QPSK)         Y         5.73         74.18         22.28         65.0         ±9.6           10244-         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.78         70.86         15.40         3.98         65.0         ±9.6           CAB         16-QAM)         Y         4.33         69.76         14.94         65.0         ±9.6           CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.72         70.45         15.17         3.98         65.0         ±9.6           CAB         GPSK)         Y         4.32         69.53         14.79         65.0         ±9.6           CAB         QPSK)         Y         4.32         79.90         18.38         3.98         65.0         ±9.6           CAB         QPSK)         Y         3.81         70.99         15.71         65.0         ±9.6           CAB         QPSK)         Y         4.31         70.20	10242- CAA	64-QAM)		0.00	74.90	22.11	0.50	00.0	1 3.0 /0
Z         6.26         74.88         22.18         65.0         ±9.6           CAA         QPSK)         Y         5.51         73.07         21.97         6.98         65.0         ±9.6           CAA         QPSK)         Y         5.73         74.18         22.20         65.0         ±9.6           10244-         LTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.76         70.66         15.40         3.98         65.0         ±9.6           CAB         16-QAM)         Y         4.33         69.76         14.94         .65.0         ±9.6           CAB         16-QAM)         Y         4.32         69.63         14.79         .65.0         ±9.6           10245-         CTE-TDD (SC-FDMA, 50% RB, 3 MHz,         X         4.72         70.45         15.17         3.98         65.0         ±9.6           CAB         GPSK)         Y         3.81         70.99         15.71         65.0         ±9.6           CAB         CPSK)         Y         3.81         70.99         15.71         65.0         ±9.6           CAB         CPSK)         Y         3.81         70.20         16.15         65.0         ±9.6			Y	5.59	73.23	21.09		65.0	
10243- CAA         LTE-TDD (SC-FDMA, 50% RB, 14 MHz, OPSK)         X         5.51         73.07         21.97         6.98         65.0         ± 9.6           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)         Y         5.73         74.18         22.28         66.0         .           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         X         4.78         70.86         15.40         3.98         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         X         4.72         70.45         15.17         3.98         65.0         ± 9.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         X         5.12         71.69         16.33			Z	6.26	74.88	22.18		65.0	
Y         5.73         74.18         22.8         66.0           10244- LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)         X         4.76         70.86         15.40         3.98         65.0         ±9.6           10245- CAB         TE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         Y         4.33         69.76         14.94         65.0         2           10245- CAB         TE-TDD (SC-FDMA, 50% RB, 3 MHz, Q-SA         X         4.72         70.45         15.17         3.98         65.0         ±9.6           CAB         G4-QAM)         Y         4.32         69.53         14.79         66.0         ±9.6           CAB         GPSK)         Y         4.32         69.53         14.79         66.0         ±9.6           CAB         QPSK)         Y         3.81         70.99         15.71         66.0         ±9.6           CAB         QPSK)         Y         3.81         70.99         15.71         65.0         ±9.6           CAB         15-00 (SC-FDMA, 50% RB, 5 MHz,         X         5.16         72.97         17.73         3.98         65.0         ±9.6           CAB         15-00 (SC-FDMA, 50% RB, 5 MHz,         X         5.16         72.41         17.46 <t< td=""><td>10243- CAA</td><td>LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)</td><td>X</td><td>5.51</td><td>73.07</td><td>21.97</td><td>6.98</td><td>65.0</td><td>± 9.6 %</td></t<>	10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.51	73.07	21.97	6.98	65.0	± 9.6 %
Z         5.70         73.18         22.10         65.0           10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)         Y         4.33         69.76         14.94         65.0         ±9.6           10245- CAB         TIE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         Y         4.32         69.53         14.79         65.0         29.6           10246- CAB         TIE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         Y         4.32         69.53         14.79         65.0         29.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         X         5.25         75.90         18.38         3.98         65.0         29.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         5.16         72.97         17.73         3.98         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ±9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ±9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46 <t< td=""><td></td><td></td><td>Y</td><td>5.73</td><td>74.18</td><td>22.28</td><td></td><td>65.0</td><td></td></t<>			Y	5.73	74.18	22.28		65.0	
10244- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)         X         4.78         70.86         15.40         3.98         65.0         ± 9.6           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         X         4.72         70.45         15.17         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         4.32         69.53         14.79         66.0         ±         9.6           CAB         64-QAM)         Y         4.32         69.53         14.79         66.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         10.2         5.12         71.69         16.33         66.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         9.6         0.0         ±         0.6         0.0         10.2         1.1         1.0         0.0         0.0         0.0         0.0         0.0         0			Ż	5.70	73.18	22.10		65.0	
One         15 0 mm         Y         4.33         69.76         14.94         65.0           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         X         4.72         70.45         15.71         3.98         65.0         ±9.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         Y         4.32         69.53         14.79         65.0         ±9.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         Y         3.81         70.99         15.71         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         X         5.16         72.97         17.73         3.98         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.97         17.73         3.98         65.0         ±9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ±9.6           CAB         CAB         Y         4.39         70.02         16.08         65.0         ±9.6           CAB         QPSK)         Y         4.39         77.01         16.84         65.0         ±9.6	10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-OAM)	X	4.78	70.86	15.40	3.98	65.0	± 9.6 %
Z         5.15         71.99         16.51         65.0           10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         X         4.72         70.45         15.17         3.98         65.0         ±9.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         Y         4.32         69.53         14.79         65.0         65.0         ±9.6           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         X         5.25         75.90         18.38         3.98         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.97         17.73         3.98         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ±9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ±9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         6.38         79.12         20.58         3.98         65.0         ±9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         4.63 <td></td> <td></td> <td>Y</td> <td>4.33</td> <td>69.76</td> <td>14.94</td> <td></td> <td>65.0</td> <td></td>			Y	4.33	69.76	14.94		65.0	
10245- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)         X         4.72         70.45         15.77         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         4.32         69.53         14.79         65.0         ± 9.6           I0246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, CAB         X         5.25         75.90         18.38         3.98         65.0         ± 9.6           I0247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         X         5.16         72.97         17.73         3.98         65.0         ± 9.6           I0247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         X         5.16         72.97         17.73         3.98         65.0         ± 9.6           CAB         16-QAM)         Y         4.31         70.20         16.15         65.0         ± 9.6           CAB         64-QAM)         Y         4.39         70.02         16.08         65.0         ± 9.6           CAB         64-QAM,         Y         4.39         70.02         16.08         65.0         ± 9.6           CAB         64-QAM)         Y         4.39         70.02         16.08         65.0         ± 9.6           CAB <td></td> <td></td> <td>7</td> <td>5 15</td> <td>71 99</td> <td>16.51</td> <td></td> <td>65.0</td> <td></td>			7	5 15	71 99	16.51		65.0	
ID249- CAB         E1E-1DD (SC-FDMA, 50% RB, 5 MHz, P)         Y         4.32         10.40         10.47         5.00         50.00         10.50           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         Y         4.32         69.53         14.79         65.0         10.70           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         Y         3.81         70.99         15.71         65.0         10.77           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.97         17.73         3.98         65.0         ± 9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         4.39         70.02         16.08         65.0         ± 9.6           CAB         64-QAM)         Y         4.39         70.02         16.08         65.0         ± 9.6           CAB         QPSK)         Y         4.63         73.70	10245	TTE TOD (SC EDMA 50% PB 3 MHz		4 72	70.45	15 17	3 98	65.0	+96%
Y         4.32         69.33         14.79         65.0           Z         5.12         71.69         16.33         65.0         200           10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         X         5.25         75.90         18.38         3.98         65.0         ±9.6           10247-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.94         16.94         65.0         10.94           10247-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.97         17.73         3.98         65.0         ±9.6           CAB         16-QAM)         Y         4.31         70.20         16.15         65.0         10.96         65.0         10.98         16.96         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.99         16.98         65.0	CAB	64-QAM)		4.12	00.50	10.17	0.00	65.0	
10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         X         5.25         75.90         18.38         3.98         65.0         ± 9.6           CAB         Y         3.81         70.99         15.71         65.0         1<			Y	4.32	69.53	14.79		65.0	
10246- CAB         LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)         X         5.25         75.90         18.38         3.98         65.0         ±9.6           10247- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         3.81         70.99         15.71         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.94         65.0         10.98         16.96         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         10.98         65.0         19.6         10.98         65.0         19.6         10.98         65.0         19.6         10.98         65.0         19.6         10.98         65.0         19.6         10.			Z	5.12	71.69	16.33		65.0	
Y         3.81         70.99         15.71         65.0           10247-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         5.16         72.97         17.73         3.98         65.0         ± 9.6           CAB         16-QAM)         Y         4.31         70.29         16.15         65.0         ± 9.6           CAB         16-QAM)         Y         4.31         70.20         16.15         65.0         ± 9.6           10248-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         4.39         70.02         16.08         65.0         ± 9.6           10249-         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         6.38         79.12         20.58         3.98         65.0         ± 9.6           CAB         QPSK)         Y         4.63         73.70         17.68         65.0         ± 9.6           CAB         QPSK)         Y         5.27         72.94         18.89         65.0         ± 9.6           CAB         16-QAM)         Y         5.27         72.94         18.89         65.0         ±	10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	5.25	75.90	18.38	3.98	65.0	± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Y	3.81	70.99	15.71		65.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	4.30	72.34	16.94		65.0	
Y         4.31         70.20         16.15         65.0           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         4.39         70.02         16.08         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         4.39         70.02         16.08         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, CAB         Y         4.63         73.70         17.68         65.0         ± 9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         Y         4.63         73.70         17.68         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 2         X         6.19         75.75         20.58         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         5.85         75.00         19.12         65.0         <	10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-OAM)	X	5.16	72.97	17.73	3.98	65.0	± 9.6 %
Z         4.69         70.98         16.96         65.0           10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         Y         4.39         70.02         16.08         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         6.38         79.12         20.58         3.98         65.0         ± 9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         Y         4.63         73.70         17.68         65.0         ± 9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         6.19         75.75         20.58         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 864-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         Y         5.17         71.51         17.97         65.0         ± 9.6           10252- CAB         QPSK)         Y         5.35         75.00         19.12         65.0	0/10		t v	4.31	70.20	16.15		65.0	
10248- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         X         5.12         72.41         17.46         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         4.39         70.02         16.08         65.0         ±         9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         6.38         79.12         20.58         3.98         65.0         ±         9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         Y         4.63         73.70         17.68         65.0         ±         9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         Y         5.27         72.94         18.89         65.0         ±         9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 54-QAM)         X         5.85         73.63         19.31         65.0         ±         9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB         Y         5.17         71.51         17.97         65.0         ±         9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB         Y         5.17         71.51         17.97         65.0         ±         9.6         5.0         ±			7	4.69	70.98	16.96		65.0	
Y         4.39         70.02         16.08         65.0           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         6.38         79.12         20.58         3.98         65.0         ± 9.6           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         Y         4.63         73.70         17.68         65.0         ± 9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         6.19         75.75         20.58         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         5.17         72.94         18.89         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.00         73.06	10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-OAM)	X	5.12	72.41	17.46	3.98	65.0	± 9.6 %
Z         4.75         70.74         16.84         65.0           10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         6.38         79.12         20.58         3.98         65.0         ± 9.6           2         4.99         74.42         18.55         65.0         10250-         17.68         65.0         ± 9.6           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         6.19         75.75         20.58         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37 <t< td=""><td>0,12</td><td></td><td>t v</td><td>4 39</td><td>70.02</td><td>16.08</td><td></td><td>65.0</td><td></td></t<>	0,12		t v	4 39	70.02	16.08		65.0	
10249- CAB         LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         X         6.38         79.12         20.58         3.98         65.0         ± 9.6           2         4.99         74.42         18.55         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         17.68         65.0         19.6         17.68         65.0         19.6         17.68         65.0         19.6         10.6         19.6         19.6         19.6         19.6         19.6         19.6         19.6         10.6         19.6         19.6			7	4 75	70 74	16.84		65.0	
ID249- CAB       CH2+TDD (SC-FDMA, 50% RB, 10 MHz, 10250- CAB       Y       4.63       73.70       17.68       65.0         10250- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)       Y       4.63       73.70       17.68       65.0         10250- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)       Y       5.27       72.94       18.89       65.0       ± 9.6         10251- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)       Y       5.27       71.51       19.31       65.0       ± 9.6         10252- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB       Y       5.17       71.51       17.97       65.0       ± 9.6         10252- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB       Y       5.35       75.00       19.12       65.0       ± 9.6         10252- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)       X       6.83       79.49       21.71       3.98       65.0       ± 9.6         10253- CAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB       Y       5.37       71.19       18.20       65.0       ± 9.6         10253- CAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB       Y       5.37       71.19       18.20       65.0       ± 9.6         10254- CAB       LTE-TDD (SC-FDMA, 50% RB, 15	10240	TE TOD (SC FOMA 50% PR 5 MHZ	+ <del>2</del>	6 38	70.12	20.58	3 98	65.0	+96%
Y         4.63         73.70         17.68         65.0           Z         4.99         74.42         18.55         65.0           10250- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         X         6.19         75.75         20.58         3.98         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         Y         5.27         72.94         18.89         65.0         ± 9.6           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, CAB         X         5.35         75.00         19.12         65.0         ± 9.6           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37         71.19         18.20         65.0         ± 9.6           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37         71.19         18.20         65.0         ± 9.6           10254- CAB         LTE-TDD (SC-FDMA, 5	CAB	QPSK)		0.00	70.12	20.00	0.00	00.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Υ Υ	4.63	73.70	17.68		65.0	
10250- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)       Y       5.27       72.94       18.89       65.0       ±9.6         2       5.54       73.15       19.31       65.0       50       10251-       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)       X       5.85       73.63       19.32       3.98       65.0       ±9.6         10251- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)       Y       5.17       71.51       17.97       65.0       ±9.6         10252- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)       Y       5.17       71.51       17.97       65.0       ±9.6         10252- CAB       LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)       X       6.83       79.49       21.71       3.98       65.0       ±9.6         10253- CAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)       Y       5.35       75.00       19.12       65.0       ±9.6         10253- CAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)       Y       5.37       71.19       18.20       65.0       ±9.6         10254- CAB       LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB       Y       5.70       72.07       18.91       65.0       ±9.6			Z	4.99	74,42	18.55	1	65.0	
Y         5.27         72.94         18.89         65.0           Z         5.54         73.15         19.31         65.0           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         5.17         71.51         17.97         65.0         ± 9.6           CAB         C         Z         5.44         71.77         18.39         65.0         ± 9.6           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           CAB         QPSK)         Y         5.35         75.00         19.12         65.0         ± 9.6           CAB         ITE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37         71.19         18.20         65.0         ± 9.6           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AB         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.38         74.05         20.20         3.98	10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	6.19	/5./5	20.58	3.98	65.0	± 9.6 %
Z         5.54         73.15         19.31         65.0           10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           10251- CAB         64-QAM)         Y         5.17         71.51         17.97         65.0         1000000000000000000000000000000000000			Y	5.27	72.94	18.89		65.0	
10251- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         X         5.85         73.63         19.32         3.98         65.0         ± 9.6           Image: CAB         64-QAM)         Y         5.17         71.51         17.97         65.0         Image: CAB         65.0         Image: CAB         100252-         5.44         71.77         18.39         65.0         Image: CAB         19.12         65.0         Image: CAB         65.0         Image: CAB         19.64         65.0         Image: CAB         10253-         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, X         6.00         73.06         19.47         3.98         65.0         Image: CAB         16-QAM)         Image: CAB         10254-         Image: CAB         18.54         65.0         Image: CAB         10254-         Image: CAB         18.54         65.0         Image: CAB         10254-         Image: CAB         10254-         Image: CAB         17.38         18.54         65.0			Z	5.54	73.15	19.31		65.0	
Y         5.17         71.51         17.97         65.0           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           10253- CAB         QPSK)         Y         5.35         75.00         19.12         65.0         ± 9.6           10253- CAB         ITE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         Y         5.35         75.00         19.12         65.0         ± 9.6           10253- CAB         ITE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         6.00         73.06         19.47         3.98         65.0         ± 9.6           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 464-QAM)         Y         5.37         71.19         18.20         65.0         ± 9.6           10254- CAB         G4-QAM)         Y         5.70         72.07         18.91         65.0         ± 9.6	10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.85	73.63	19.32	3.98	65.0	± 9.6 %
Z         5.44         71.77         18.39         65.0           10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           QPSK)         Y         5.35         75.00         19.12         65.0         10253-           LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Z         5.58         75.17         19.64         65.0         10253-           LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37         71.19         18.20         65.0         19.65           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Y         5.37         71.19         18.20         65.0         19.65           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.38         74.05         20.20         3.98         65.0         19.65           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.38         74.05         20.20         3.98         65.0         19.65           10254- CAB         Y         5.70         72.07         18.91         65.0         19.65		1	Y	5.17	71.51	17.97		65.0	
10252- CAB         LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         X         6.83         79.49         21.71         3.98         65.0         ± 9.6           Image: CAB         QPSK)         Y         5.35         75.00         19.12         65.0         19.12         65.0         19.12         65.0         10253-         10253-         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.00         73.06         19.47         3.98         65.0         ± 9.6           10253- CAB         16-QAM)         Y         5.37         71.19         18.20         65.0         19.64         65.0         19.64         10.00         10.00         10.00         10.00         10.00         10.00         19.47         3.98         65.0         19.60         10.00 <td< td=""><td></td><td></td><td>Z</td><td>5.44</td><td>71.77</td><td>18.39</td><td></td><td>65.0</td><td></td></td<>			Z	5.44	71.77	18.39		65.0	
Y         5.35         75.00         19.12         65.0           IO253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         6.00         73.06         19.47         3.98         65.0         ± 9.6           IO253- CAB         16-QAM)         Y         5.37         71.19         18.20         65.0         ± 9.6           IO254- CAB         ITE-TDD (SC-FDMA, 50% RB, 15 MHz, AB         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           IO254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, AB         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           IO254- CAB         G4-QAM)         Y         5.70         72.07         18.91         65.0	10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.83	79.49	21.71	3.98	65.0	± 9.6 %
Z         5.58         75.17         19.64         65.0           10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         6.00         73.06         19.47         3.98         65.0         ± 9.6           M         Y         5.37         71.19         18.20         65.0         10254-           LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         Z         5.63         71.38         18.54         65.0           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           CAB         64-QAM)         Y         5.70         72.07         18.91         65.0			Y	5.35	75.00	19.12		65.0	
10253- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         X         6.00         73.06         19.47         3.98         65.0         ± 9.6           Y         5.37         71.19         18.20         65.0         10254-           LTE-TDD (SC-FDMA, 50% RB, 15 MHz, CAB         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           10254- CAB         64-QAM)         Y         5.70         72.07         18.91         65.0			Z	5.58	75.17	19.64		65.0	
Y         5.37         71.19         18.20         65.0           Z         5.63         71.38         18.54         65.0           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         6.38         74.05         20.20         3.98         65.0         ± 9.6	10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	6.00	73.06	19.47	3.98	65.0	± 9.6 %
Z         5.63         71.38         18.54         65.0           10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         6.38         74.05         20.20         3.98         65.0         ± 9.6			Y	5.37	71.19	18.20	1	65.0	
10254- CAB         LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         X         6.38         74.05         20.20         3.98         65.0         ± 9.6           Y         5.70         72.07         18.91         65.0         ± 9.6			7	5.63	71.38	18.54	-	65.0	
Y 5.70 72.07 18.91 65.0	10254-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	6.38	74.05	20.20	3.98	65.0	± 9.6 %
	CAD		V	5 70	72.07	19.01	+	65.0	+
7 5.06 70.00 40.00 65.0			7	5.00	70.02	10.91		65.0	

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10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	6.57	76.92	20.95	3.98	65.0	± 9.6 %
CAB			5.49	73.63	18 88		65.0	
			5 74	73.82	19.32		65.0	
10056	LTE TOD (SC EDMA 100% RB 14	X	3.74	67.44	12.81	3.98	65.0	± 9.6 %
T0250-	MHz 16-OAM)	^	0.14	01.17		0.00		
0/11		t y t	3.48	66.93	12.66		65.0	
		$\frac{1}{2}$	4.23	69.22	14.36		65.0	
10257	LTE-TOD (SC-EDMA 100% RB 14	$\frac{1}{x}$	3.69	67.00	12.51	3.98	65.0	± 9.6 %
CΔΔ	MHz 64-QAM)		0.00					
0///		Ty 1	3 49	66.66	12.47		65.0	
		7	4 21	68.84	14.11		65.0	
10258-	LTE-TOD (SC-EDMA 100% RB 14	X	4 02	71.55	15.68	3.98	65.0	± 9.6 %
CAA	MHz OPSK)		1.02					
		t y t	3.09	68.06	13.65		65.0	
		7	3.62	69.79	15.14		- 65.0	
10250	LTE-TOD (SC-EDMA, 100% BB, 3 MHz	x	5.56	74.02	18.76	3.98	65.0	± 9.6 %
CAR	16-OAM)		0.00					
CAD			4 68	7121	17 14		65.0	
		+ + + +	5.02	71 77	17 79		65.0	
10260	LTE TOD (SC EDMA 100% PB 3 MHz		5.58	73 77	18.66	3.98	65.0	+9.6%
10200-	64-OAM)	^	0.00	10.17	10.00	0.00		
CAB			4 76	71 15	17 14		65.0	
		+ +	5.09	71.10	17.14		65.0	
10261			6.20	78.55	20.76	3 98	65.0	+96%
10201-			0.23	70.00	20.70	0.00	00.0	20.0 //
			1 78	73 79	18 12		65.0	
		+ + +	<u> </u>	74.26	18.82		65.0	
40060	LTE TOD (CC EDMA 100% PR 5 MHz		6.17	75.68	20.53	3 98	65.0	+96%
10262-	LTE-TOD (SC-FDIMA, 100% RD, 3 MITZ,	^	0.17	75.00	20.00	5.50	00.0	1 0.0 /0
CAB		$+$ $\vee$ $+$	5.26	72.00	18.85	+	65.0	<u>├ ─</u> ──
		7	5.52	72.50	10.00		65.0	
40000	LTE TOD (CO COMA 400% DD 5 MUS	- <del>2</del>	5.55	72.61	10.21	3.08	65.0	+96%
10263-	LTE-TDD (SC-FDMA, 100% RB, 5 MHZ,	<b>^</b>	0.64	13.01	19.51	3.90	05.0	1 5.0 %
CAB	64-QAM)		E 40	71.40	17.06		65.0	
		+ <del>1</del>	5.10	71.49	19.20	<u> </u>	65.0	
10001	LITE TOD (00 EDIAL 400% DD C MUS		5.43	71.75	21 61	2.09	65.0	+96%
10264-	LTE-TUD (SC-FDMA, 100% RB, 5 MHZ,	^	0.77	79.30	21.01	3.90	05.0	1 5.0 %
CAB	QPSK)		E 21	74.96	10.04	<u>.</u>	65.0	
		7	5.51	75.04	10.57		65.0	
40005	1 TE TOD (00 EDUA 100% DD 10	<u> </u>	0.00	73.04	19.07	2.09	65.0	+96%
10265-	LTE-TUD (SC-FDMA, 100% RB, 10	<b>^</b>	6.09	/ 3.40	19.00	3.90	05.0	1 5.0 %
CAB	MHZ, 16-QAM)		E AC	74.64	19.27		65.0	
		7	5.40	71.01	10.37	· · ·	65.0	
10000	1 TE TOD (00 EDMA 400% DD 40		0.71	74.50	10.72	2.00	65.0	+06%
10266-	LIE-IDD (SC-FDMA, 100% RB, 10	×	0.51	74.00	20.01	2.30	05.0	1 9.0 %
CAB		V	6 0 2	70 55	10.15		65.0	1
		7	0.02	72.00	19.15		65.0	
40007		1	0.07	12.00	19,47	2.00	65.0	+06%
10267-	LTE TOD (00 CD144 4000/ DD 40	V	600	77 45	00.00			T 21 11 7/0
0.00	LTE-TDD (SC-FDMA, 100% RB, 10	X	6.83	77.45	20.99	3.90	00.0	10.0 /0
CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.83	77.45	20.99	3.90	65.0	20.0 //
CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X Y	6.83 5.66	77.45 73.95	20.99 18.78	3.90	65.0	
CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X Y Z	6.83 5.66 5.93	77.45 73.95 74.22	20.99 18.78 19.29	3.90	65.0 65.0	106%
CAB 10268-	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X Y Z X	6.83 5.66 5.93 6.77	77.45 73.95 74.22 73.64	20.99 18.78 19.29 20.20	3.90	65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X Y Z X	6.83 5.66 5.93 6.77	77.45 73.95 74.22 73.64	20.99 18.78 19.29 20.20	3.96	65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X Y Z X Y	6.83 5.66 5.93 6.77 6.18	77.45 73.95 74.22 73.64 72.03	20.99 18.78 19.29 20.20 19.01	3.96	65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X Y Z X Y Z	6.83 5.66 5.93 6.77 6.18 6.44	77.45 73.95 74.22 73.64 72.03 72.19	20.99 18.78 19.29 20.20 19.01 19.31	3.98	65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269-	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15	X Y Z X Y Z X	6.83 5.66 5.93 6.77 6.18 6.44 6.77	77.45 73.95 74.22 73.64 72.03 72.19 73.30	20.99 18.78 19.29 20.20 19.01 19.31 20.10	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X Y Z X Y Z X	6.83 5.66 5.93 6.77 6.18 6.44 6.77	77.45 73.95 74.22 73.64 72.03 72.19 73.30	20.99 18.78 19.29 20.20 19.01 19.31 20.10	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X Y Z X Y Z X Y	6.83 5.66 5.93 6.77 6.18 6.44 6.77 6.18	77.45 73.95 74.22 73.64 72.03 72.19 73.30 71.75	20.99 18.78 19.29 20.20 19.01 19.31 20.10 18.96 10.25	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X Y Z X Y Z X Y Z	6.83 5.66 5.93 6.77 6.18 6.44 6.77 6.18 6.45	77.45 73.95 74.22 73.64 72.03 72.19 73.30 71.75 71.92	20.99 18.78 19.29 20.20 19.01 19.31 20.10 18.96 19.25 20.22	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269- CAB 10270-	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) LTE-TDD (SC-FDMA, 100% RB, 15	X Y Z X Y Z X Y Z X	6.83 5.66 5.93 6.77 6.18 6.44 6.77 6.18 6.45 6.82	77.45 73.95 74.22 73.64 72.03 72.19 73.30 71.75 71.92 75.40	20.99 18.78 19.29 20.20 19.01 19.31 20.10 18.96 19.25 20.32	3.98	65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0           65.0	± 9.6 %
CAB 10268- CAB 10269- CAB 10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X Y Z X Y Z X Y Z X	6.83 5.66 5.93 6.77 6.18 6.44 6.77 6.18 6.45 6.82	77.45 73.95 74.22 73.64 72.03 72.19 73.30 71.75 71.92 75.40	20.99 18.78 19.29 20.20 19.01 19.31 20.10 18.96 19.25 20.32 40.55	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
CAB 10268- CAB 10269- CAB 10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X Y Z X Y Z X Y Z X Y Z X Y	6.83 5.66 5.93 6.77 6.18 6.44 6.77 6.18 6.45 6.82 5.92	77.45 73.95 74.22 73.64 72.03 72.19 73.30 71.75 71.92 75.40 72.79	20.99 18.78 19.29 20.20 19.01 19.31 20.10 18.96 19.25 20.32 18.53 18.53	3.98	65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 % ± 9.6 %

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10274-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	X	2.81	67.70	16.05	0.00	150.0	±9.6 %
		Y	2.23	63.69	12.84		150.0	
		Z	2.44	64.27	13.54		150.0	
10275-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	x	1.88	69.73	17.07	0.00	150.0	± 9.6 %
UAD		Y	1.16	62.43	11.20		150.0	
		Z	1.36	63.33	12.40		150.0	
10277-	PHS (QPSK)	x	2.61	62.77	8.38	9.03	50.0	± 9.6 %
0.01		Y	2.25	61.38	6.94		50.0	
		Z	2.63	62.97	8.65		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	4.70	71.38	15.25	9.03	50.0	±9.6 %
		Y	3.93	68.83	13.36		50.0	
		Z	4.99	72.83	16.26		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	x	4.78	71.57	15.37	9.03	50.0	± 9.6 %
		Y	4.05	69.12	13.55		50.0	
		Ζ	5.10	73.05	<u>16.39</u>		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	Х	2.25	75.22	17.65	0.00	150.0	±9.6 %
		Y	0.86	61.52	8.91		150.0	
		Z	1.09	63.04	10.78		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.30	71.53	16.40	0.00	150.0	± 9.6 %
		Y	0.52	60.00	7.47		150.0	
		Z	0.71	61.30	9.60		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	2.31	81.52	20.95	0.00	150.0	± 9.6 %
		Y	0.52	60.36	7.90		150.0	
		Z	0.72	61.98	10.27		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	6.74	99.12	27.19	0.00	150.0	± 9.6 %
		Y	0.57	61.02	8.66		150.0	
		Ζ	0.79	62.85	11.09		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	8.34	81.73	22.23	9.03	50.0	±9.6 %
		Y	6.23	76.73	19.76		50.0	
		Z	6.45	77.64	21.00		50.0	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.99	70.89	17.66	0.00	150.0	± 9.6 %
		Ý	2.12	64.97	13.14		150.0	
		Z	2.36	65.73	14.02	1	150.0	
10298- AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.02	71.48	16.46	0.00	150.0	± 9.6 %
		Y	1.07	61.94	9.85		150.0	
		Z	1.30	63.17	11.36		150.0	
10299- AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.27	67.51	12.91	0.00	150.0	± 9.6 %
		Y	1.64	63.04	9.94		150.0	
		Z	2.12	65.38	11.83		150.0	
10300- AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.7 <del>9</del>	63.99	10.46	0.00	150.0	± 9.6 %
		Y	1.50	61.76	8.70		150.0	
		Z	1.87	63.45	10.26		150.0	
10301- 	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	×	4.68	65.29	17.42	4.17	50.0	± 9.6 %
		Y	4.48	64.08	16.18		50.0	
		Z	4.72	64.54	16.63		50.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	×	5.18	66.01	18.18	4.96	50.0	± 9.6 %
		Y	5.01	64.98	17.07		50.0	
		Z	5.17	65.03	17.28		50.0	

#### EX3DV4- SN:3939

10303-	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 640AM, PUSC)	X	4.94	65.65	18.01	4.96	50.0	± 9.6 %
	10/01/12, 040/00/	Y	4.78	64.64	16.90		50.0	
		Ż	4.94	64.69	17.11	-	50.0	
10304-	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 640AM, PUSC)	X	4.77	65.65	17.58	4.17	50.0	±9.6 %
	1011112; 0442 411; 1 000)	Y	4.56	64.37	16.29		50.0	
		Ż	4.72	64.47	16.55		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	x	4.42	67.25	19.34	6.02	35.0	± 9.6 %
		Y	4.22	66.18	18.32		35.0	
		Z	4.37	66.02	18.45		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.71	66.29	18.96	6.02	35.0	±9.6 %
		Y	4.55	65.43	18.05		35.0	
		Z	4.71	65.37	18.21		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.61	66.44	18.94	6.02	35.0	± 9.6 %
		Y	4.45	65.57	17.99		35.0	
		Z	4.61	65.51	18.16		35.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.59	66.63	19.08	6.02	35.0	± 9.6 %
		Y	4.42	65.72	18.10		35.0	
		Z	4.58	65.64	18.25		35.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.75	66.41	19.06	6.02	35.0	± 9.6 %
		Y	4.61	65.64	18.19		35.0	
		Z	4.77	65.56	18.33		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.67	66.37	18.96	6.02	35.0	±9.6 %
		Y	4.50	65.47	18.01		35.0	
		Z	4.66	65.41	18.17		35.0	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.38	70.24	17.27	0.00	150.0	± 9.6 %
		Y	2.41	64.49	13.03		150.0	
		Z	2.65	65.25	13.84		150.0	
10313- AAA	IDEN 1:3	X	100.00	131.05	35.95	6.99	70.0	± 9.6 %
		Y	5.19	78.16	17.79		70.0	
		Z	8.90	88.38	23.09		70.0	
10314- AAA	iDEN 1:6	X	38.99	120.46	35.66	10.00	30.0	± 9.6 %
		Y	3.20	73.05	17.67		30.0	
		Z	4.18	78.61	21.76	1	30.0	
10315- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	×	1.29	64.88	16.14	0.17	150.0	± 9.6 %
		Y	0.89	60.43	11.43		150.0	
		Z	1.06	61.08	12.41		150.0	
10316- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	×	4.68	67.04	16.50	0.17	150.0	±9.6 %
	-	Y	4.35	65.49	15.06		150.0	
400.1		Z	4.54	65.79	15.40		150.0	10.00
10317- AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.68	67.04	16.50	0.17	150.0	± 9.6 %
		Y	4.35	65.49	15.06		150.0	
40400			4.54	67.40	15.40	0.00	150.0	100%
AAA	99pc duty cycle)	X	4.79	67.46	16.60	0.00	150.0	±9.6%
		Y	4.44	05.77	15.03		150.0	
10404		<u> </u>	4.64	66.08	15.39	0.00	150.0	10.0.0
AAA	99pc duty cycle)	X	5.46	07.40	10.62	0.00	150.0	± 9.6 %
		Y -	5.14	66.13	15.35		150.0	
		Z	5.34	66.43	15.67		150.0	

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10402- AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.76	67.86	16.73	0.00	150.0	±9.6 %
		Y	5.40	66.52	15.41		150.0	
		Z	5.60	66.83	15.74		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.25	75.22	17.65	0.00	115.0	± 9.6 %
		Y	0.86	61.52	8.91		115.0	
		Z	1.09	63.04	10.78		115.0	_
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.25	75.22	17.65	0.00	115.0	±9.6 %
		Y	0.86	61.52	8.91		115.0	
		Z	1.09	63.04	10.78		115.0	
10406- AAA	CDMA2000, RC3, SO32, SCH0, Full Rate	X	6.74	99.12	27.19	0.00	150.0	± 9.6 %
		Y	0.57	61.02	8.66		150.0	
		Z	0.79	62.85	11.09		- 150.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.72	60.00	4.12	2.23	80.0	± 9.6 %
		Y	46.36	64.55	3.25		80.0	
		Z	0.78	60.00	4.15		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.21	64.25	15.79	0.00	150.0	±9.6 %
		Y	0.83	60.00	11.07		150.0	
		Z	1.00	60.59	12.02		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.66	67.19	16.58	0.00	150.0	± 9.6 %
		Y	4.29	65.46	14.98		150.0	
		Z	4.49	65.78	15.34		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.66	67.19	16.58	0.00	150.0	± 9.6 %
		Y	4.29	65.46	14.98		150.0	
		Z	4.49	65.78	15.34		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.66	67.38	16.63	0.00	150.0	± 9.6 %
		Y	4.27	65.56	14.96		150.0	
		Z	4.47	65.89	15.33		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.67	67.32	16.61	0.00	150.0	± 9.6 %
		Y	4.29	65.54	14.98		150.0	
		Z	4.49	65.86	15.35		150.0	

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

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





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Accreditation No.: SCS 108

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

Microsoft Client

Certificate No: EX3-3940\_Jul14

Object	EX3DV4 - SN:39	40	
Calibration procedure(s)	QA CAL-01.v9, C Calibration proce	A CAL-14.v4, QA CAL-23.v5, QA dure for dosimetric E-field probes	CAL-25.v6
Calibration date:	July 17, 2014		
This calibration certificate docum The measurements and the unco All calibrations have been condu Calibration Equipment used (M&	nents the traceability to nation ertainties with confidence pr ucted in the closed laborator TE critical for calibration)	anal standards, which realize the physical units obability are given on the following pages and a y facility: environment temperature (22 ± 3)°C a	of measurements (SI), are part of the certificate. and humidity < 70%.
Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Primary Standards Power meter E4419B	ID GB41293874	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911)	Scheduled Calibration Apr-15
Primary Standards Power meter E4419B Power sensor E4412A	ID GB41293874 MY41498087	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911)	Scheduled Calibration Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c)	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915)	Scheduled Calibration Apr-15 Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x)	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01919)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b)	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Apr-15
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01919) 03-Apr-14 (No. 217-01920) 30-Dec-13 (No. ES3-3013_Dec13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)	Scheduled Calibration         Apr-15         Apr-15         Apr-15         Apr-15         Apr-15         Dec-14         Dec-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID	Cal Date (Certificate No.) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01911) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01915) 03-Apr-14 (No. 217-01920) 30-Dec-13 (No. ES3-3013_Dec13) 13-Dec-13 (No. DAE4-660_Dec13) Check Date (in house)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US3642U01700 US37390585	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)	Scheduled Calibration         Apr-15         Apr-15         Apr-15         Apr-15         Dec-14         Dec-14         Scheduled Check         In house check: Apr-16         In house check: Oct-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 20 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US37390585 Name	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16 In house check: Oct-14
Primary Standards Power meter E4419B Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 20 dB Attenuator Reference Probe ES3DV2 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID GB41293874 MY41498087 SN: S5054 (3c) SN: S5277 (20x) SN: S5129 (30b) SN: 3013 SN: 660 ID US3642U01700 US37390585 Name Israe El-Naouq	Cal Date (Certificate No.)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01911)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01915)           03-Apr-14 (No. 217-01919)           03-Apr-14 (No. 217-01920)           30-Dec-13 (No. ES3-3013_Dec13)           13-Dec-13 (No. DAE4-660_Dec13)           Check Date (in house)           4-Aug-99 (in house check Apr-13)           18-Oct-01 (in house check Oct-13)           Function           Laboratory Technician	Scheduled Calibration Apr-15 Apr-15 Apr-15 Apr-15 Apr-15 Dec-14 Dec-14 Scheduled Check In house check: Apr-16 In house check: Oct-14 Signature

#### Calibration Laboratory of

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





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#### Accreditation No.: SCS 108

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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., 9 = 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, "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

#### Methods Applied and Interpretation of Parameters:

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

# Probe EX3DV4

## SN:3940

Manufactured: Calibrated: May 2, 2013 July 17, 2014

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

#### Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) <sup>2</sup> ) <sup>A</sup>	0.41	0.38	0.41	± 10.1 %
DCP (mV) <sup>B</sup>	103.8	104.5	102.4	

#### **Sensor Model Parameters**

	C1	C2	α	T1	T2	T3	T4	T5	T6
	fF	fF	V-1	ms.V <sup>-2</sup>	ms.V⁻¹	ms	V-2	V-1	
X	54.98	401.6	34.73	18.6	0.75	5.011	1.302	0.192	1.005
Y	43.05	316.2	34.94	13.6	0.757	5.003	1.111	0.266	1.004
Z	43.27	318	34.93	16.21	0.589	5.042	1.241	0.169	1.008

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

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

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

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. (k=2)
750	41.9	0.89	9.55	9.55	9.55	0.60	0.72	± 12.0 %
835	41.5	0.90	9.17	9.17	9.17	0.36	0.99	± 12.0 %
900	41.5	0.97	8.90	8.90	8.90	0.25	1.32	± 12.0 %
1750	40.1	1.37	7.94	7.94	7.94	0.63	0.63	± 12.0 %
1900	40.0	1.40	7.67	7.67	7.67	0.77	0.61	± 12.0 %
2000	40.0	1.40	7.76	7.76	7.76	0.66	0.61	± 12.0 %
2300	39.5	1.67	7.39	7.39	7.39	0.44	0.75	± 12.0 %
2450	39.2	1.80	7.00	7.00	7.00	0.43	0.73	± 12.0 %
2600	39.0	1.96	7.01	7.01	7.01	0.57	0.67	± 12.0 %
3500	37.9	2.91	7.00	7.00	7.00	0.40	0.96	± 13.1 %
5200	36.0	4.66	5.10	5.10	5.10	0.35	1.80	± 13.1 %
5300	35.9	4.76	4.91	4.91	4.91	0.35	1.80	± 13.1 %
5500	35.6	4.96	4.65	4.65	4.65	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.54	4.54	4.54	0.40	1.80	± 13.1 %
5800	35.3	5.27	4.56	4.56	4.56	0.40	1.80	± 13.1 %

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

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

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

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

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. (k=2)
750	55.5	0.96	9.18	9.18	9.18	0.23	1.40	± 12.0 %
835	55.2	0.97	9.22	9.22	9.22	0.24	1.43	± 12.0 %
900	55.0	1.05	9.04	9.04	9.04	0.36	1.04	± 12.0 %
1750	53.4	1.49	7.51	7.51	7.51	0.67	0.69	± 12.0 %
1900	53.3	1.52	7.14	7.14	7.14	0.66	0.70	± 12.0 %
2000	53.3	1.52	7.53	7.53	7.53	0.36	0.89	± 12.0 %
2300	52.9	1.81	6.97	6.97	6.97	0.72	0.63	± 12.0 %
2450	52.7	1.95	7.05	7.05	7.05	0.80	0.50	± 12.0 %
2600	52.5	2.16	6.97	6.97	6.97	0.80	0.50	± 12.0 %
3500	51.3	3.31	6.47	6.47	6.47	0.67	0.78	± 13.1 %
5200	49.0	5.30	4.31	4.31	4.31	0.40	1.90	± 13.1 %
5300	48.9	5.42	4.20	4.20	4.20	0.40	1.90	± 13.1 %
5500	48.6	5.65	3.79	3.79	3.79	0.50	1.90	± 13.1 %
5600	48.5	5.77	3.77	3.77	3.77	0.50	1.90	± 13.1 %
5800	48.2	6.00	3.93	3.93	3.93	0.50	1.90	± 13.1 %

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

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

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

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



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

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



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




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

Certificate No: EX3-3940\_Jul14



### **Conversion Factor Assessment**

July 17, 2014

		1 1 1			1	0.00	450.0	1004
10402- AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.97	68.39	17.21	0.00	150.0	±9.6%
		Y	5.75	68.10	16.99		150.0	
		Z	5.79	68.03	16.96		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	x	10.90	101.16	27.85	0.00	115.0	± 9.6 %
		Y	17.67	105.75	27.20		115.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.24	88.40	22.62		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	10.90	101.16	27.85	0.00	115.0	± 9.6 %
		Y	17.67	105.75	27.20		115.0	
		Z	5.24	88.40	22.62		115.0	
10406- AAA	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	153.54	43.12	0.00	150.0	± 9.6 %
		Y	100.00	147.69	39.68		150.0	
		Z	100.00	146.26	39.42	- 75	- 150.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	4.64	2.23	80.0	±9.6 %
		Y	7.03	67.08	5.70		80.0	
		Z	2.08	65.20	6.36		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.30	67.03	18.31	0.00	150.0	±9.6 %
		Y	1.21	66.43	17.58		150.0	
		Z	1.23	65.51	16.96		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.86	67.64	17.13	0.00	150.0	± 9.6 %
		Y	4.65	67.56	16.94		150.0	
		Z	4.69	67.42	16.86		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.86	67.64	17.13	0.00	150.0	± 9.6 %
		Y	4.65	67.56	16.94		150.0	
		Z	4.69	67.42	16.86		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.85	67.83	17,17	0.00	150.0	± 9.6 %
		Y	4.65	67.78	17.00		150.0	
		Z	4.69	67.63	16.92		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.87	67.76	17.16	0.00	150.0	± 9.6 %
		Y	4.67	67.70	16.98	-	150.0	
		Z	4.70	67.56	16.90		150.0	
			A					

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

AAA         TOMPLZ_PERGAM, PUSC)         Y         4.97         66.07         18.32         50.0           10304         IEEE 802.169 WIMAX (29:18, 5ms, 100, 100, 100, 100, 100, 100, 100, 10	10303-	IEEE 802.16e WIMAX (31:15, 5ms,	X	5.24	66.21	18.72	4.96	50.0	±9.6 %
Z         5.11         66.37         18.52         50.0           10304-         IEEE 802.166 WIMAX (29:18, 5ms, X         5.05         66.16         18.26         4.17         50.0         ± 9.8 %           10305-         IEEE 802.166 WIMAX (31:15, 10ms, X         4.80         66.11         17.83         50.0           10305-         IEEE 802.166 WIMAX (31:15, 10ms, X         4.49         68.18         19.94         35.0         ± 9.8 %           10305-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.49         68.16         19.44         35.0         ± 9.6 %           10306-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.95         66.72         19.81         60.2         35.0         ± 9.6 %           10307-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.87         67.02         19.87         60.2         35.0         ± 9.6 %           10307-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.87         67.15         19.42         35.0         19.87           10308-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.86         67.15         19.43         35.0         12.9.6 %           10308-         IEEE 802.166 WIMAX (29:18, 10ms, X         4.86         67.19         19.89         35.0         12.0.0 <td>AAA</td> <td>10MHz, 64QAM, PUSC)</td> <td></td> <td>A 97</td> <td>66.07</td> <td>18.32</td> <td></td> <td>50.0</td> <td></td>	AAA	10MHz, 64QAM, PUSC)		A 97	66.07	18.32		50.0	
10304         IEEE 802.168 WIMAX (29:18, 5ms, X         X         5.05         68.16         18.26         4.17         50.0         ± 9.8 %           10305         IOMHz, 640AM, PUSC)         Y         4.80         66.11         17.33         50.0           10305         IEEE 802.168 WIMAX (31:15, 10ms, X         4.84         67.79         20.41         6.02         35.0         ± 9.8 %           10305         IEEE 802.168 WIMAX (23:18, 10ms, X         4.84         67.79         20.41         6.02         35.0         ± 9.8 %           10306         IEEE 802.168 WIMAX (23:18, 10ms, X         4.95         66.72         19.81         6.02         35.0         ± 9.6 %           10307         IEEE 802.168 WIMAX (23:18, 10ms, X         4.99         67.32         19.72         35.0         10.36           10307         IEEE 802.168 WIMAX (29:18, 10ms, X         4.89         67.15         19.43         35.0         10.36         4.86         67.79         20.00         6.02         35.0         ± 9.6 %           10308         IEEE 802.168 WIMAX (29:18, 10ms, X         4.84         67.19         19.80         35.0         10.35         10.35.0         ± 9.6 %           10308         IEEE 802.168 WIMAX (29:18, 10ms, X         4.90			+ + +	5 11	66.37	18.52		50.0	
Ava.         Town Z, Biddaw, FOSC/         Y         4.80         66.11         17.93         50.0           10305- 10305- 10305- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10306- 10307- 10306- 10307- 10307- 10307- 10307- 10307- 10307- 10308- 10307- 10308-	10304-	IEEE 802.16e WiMAX (29:18, 5ms,	x	5.05	66.16	18.26	4.17	50.0	±9.6 %
Z         433         66.33         1506         50.0           10305- AAA         IEEE 802.168 WIMAX (31:15, 10ms, AAA         X         4.84         67.79         20.41         6.02         35.0         ± 9.8 %           10306- AAA         IMMiz, 64QAM, PUSC, 15 symbols)         Y         4.49         68.18         19.94         35.0         ± 9.8 %           10306- AAA         IEEE 802.168 WIMAX (29:18, 10ms, AAA         X         4.95         66.72         19.81         6.02         35.0         ± 9.8 %           10307- IO307- ICEEE 802.168 WIMAX (29:18, 10ms, AAA         X         4.87         67.02         19.43         35.0         ± 9.6 %           10308- ICEEE 802.168 WIMAX (29:18, 10ms, AAA         X         4.87         67.02         19.87         6.02         35.0         ± 9.6 %           AAA         IDMHz, 160AM, PUSC)         Y         4.66         67.15         19.23         35.0         ± 9.6 %           AAA         IDMHz, 160AM, PUSC)         Z         4.79         67.76         19.89         35.0         ± 9.6 %           AAA         IDMHz, 160AM, PUSC         Z         4.78         67.79         19.54         35.0         ± 9.6 %           AAA         IDMHz, 160AM, AUC 2x3, 18 symbols)	AAA			4.80	66 11	17.93		50.0	
10305- 10305- 1001H2, 64QAM, PUSC, 15 symbols)         X         4,64         67.79         20.41         6.02         35.0         ± 9.8 %           10306- 10306- 10306- 10306- 10307- 10308-			7	4.93	66.33	18 06		50.0	
AAA         10MT2, 64LAM, PUSC, 15 symbols)         Y         4.49         68.18         19.94         35.0           10306- 10306- 10MT2, 64QAM, PUSC, 18 symbols)         Y         4.43         66.72         19.81         6.02         35.0         ± 9.6 %           AAA         10MH2, 64QAM, PUSC, 18 symbols)         Y         4.75         66.94         19.43         35.0         ± 9.6 %           AAA         10MH2, 0PSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           AAA         10MH2, 0PSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           AAA         10MH2, 0PSK, PUSC, 18 symbols)         Y         4.66         67.19         20.00         6.02         35.0         ± 9.6 %           AAA         10MH2, 16QAM, PUSC)         Y         4.46         67.19         20.00         6.02         35.0         ± 9.6 %           AAA         10MH2, 16QAM, AMC 22:18, 10ms,         X         5.02         66.99         19.37         6.02         35.0         ± 9.6 %           AAA         10MH2, 16QAM, AMC 2x3, 18 symbols)         Y         4.78         67.09         19.45         55.0         ± 9.6 %	10305-	IEEE 802.16e WIMAX (31:15, 10ms,	X	4.64	67.79	20.41	6.02	35.0	±9.6 %
1         1	AAA	IUMHZ, 64QAM, PUSC, 15 Symbols)		1 10	68 18	10 04		35.0	
10306- AAA         10M1z, 64QAM, PUSC, 18 symbols)         2         4.95         66.72         19.81         6.02         35.0         ± 9.6 %           10307- 10307- 10307- AAA         16EEE 802.16e WiMAX (29:18, 10ms, 10M1z, QPSK, PUSC, 18 symbols)         X         4.87         67.02         19.87         6.02         35.0         ± 9.6 %           AAA         10M1z, QPSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           AAA         10M1z, QPSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           AAA         10M1z, GOAM, PUSC)         Y         4.66         67.19         19.43         35.0         ± 9.6 %           AAA         10M1z, 16QAM, PUSC)         Y         4.66         67.74         19.89         35.0         ± 9.6 %           AAA         10M1z, 16QAM, AMC 2x3, 18 symbols)         X         5.02         66.99         19.97         6.02         35.0         ± 9.6 %           AAA         10M1z, OPSK, AMC 2x3, 18 symbols)         Y         4.79         67.49         19.43         35.0         ± 9.6 %           AAA         10M1z, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.69 <t< td=""><td></td><td></td><td>7</td><td>4.45</td><td>68 59</td><td>20.27</td><td></td><td>35.0</td><td></td></t<>			7	4.45	68 59	20.27		35.0	
IDSD         IDSD <thidsd< th="">         IDSD         IDSD         <thi< td=""><td>10206</td><td>1555 900 160 WiMAX (20:18 10mg</td><td></td><td>4.05</td><td>66 72</td><td>10.81</td><td>6.02</td><td>35.0</td><td>+96%</td></thi<></thidsd<>	10206	1555 900 160 WiMAX (20:18 10mg		4.05	66 72	10.81	6.02	35.0	+96%
Y         4.75         66.94         19.72         35.0           10307-         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         4.87         67.02         19.87         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           10308- AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         4.66         67.75         19.43         35.0         ± 9.6 %           10308- AAA         10MHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0         ± 9.6 %           10309- 10309- 10309-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         4.76         67.09         19.97         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.76         67.09         19.97         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.77         67.09         19.94         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.23         19.84         35.0         ±	AAA	10MHz, 64QAM, PUSC, 18 symbols)		4.55	00.72	10.01	0.02	00.0	± 0.0 %
IEEE 802.16e WiMAX (29:18, 10ms, AAA         4.87         67.02         19.72         35.0         ± 9.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         ± 9.6 %           10308- AAA         IDMHz, 16QAM, PUSC)         Y         4.66         67.15         19.72         35.0         ± 9.6 %           10308- AAA         IDMHz, 16QAM, PUSC)         Y         4.65         67.76         19.89         35.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 23:18, 10ms, AAA         X         7.76         67.76         19.89         35.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 23:18, 10ms, AAA         X         7.76         67.09         19.54         35.0         ± 9.6 %           10300-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.85         35.0         ± 9.6 %           10310-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         6.02         35.0         ± 9.6 %           10310-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         0.00         150.0         ± 9.6 %			Y	4.75	66.94	19.43		35.0	
10307.         IEEE 802. 16e WIMAX (29:18, 10ms, AAA         X         4.87         67.02         19.87         6.02         35.0         29.6 %           AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         4.66         67.15         19.43         35.0         19.72         35.0         19.72         35.0         10.00           10308- AAA         10MHz, QPSK, PUSC, 18 symbols)         Y         4.66         67.75         19.89         35.0         19.6 %           10309- 10309- 10309- 100Hz, 16QAM, AMC 2x3, 18 symbols)         Y         4.78         67.76         19.89         35.0         19.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.78         67.76         19.89         35.0         19.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.78         67.76         19.80         6.02         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.80         6.02         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %         35.0         19.6 %<			Z	4.89	67.32	19.72	0.00	35.0	
Y         4.66         67.15         19.43         35.0           10208- AAA         10MHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0           10309- AAA         10MHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0           10309- AAA         10MHz, 16QAM, AMC 2x3.18 symbols)         Y         4.76         67.76         19.89         6.02         35.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3.18 symbols)         Y         4.76         67.79         19.84         35.0           10310- 10310-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         6.02         35.0         ± 9.6 %           AAA         10MHz, 0PSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         36.0         10.0         150.0         ± 9.6 %           AAA         I0MHz, 0PSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         36.0         150.0         ± 9.6 %           AAA         I0MHz, 0PSK)         Y         3.86         77.27         18.28         0.00         150.0         150.0           10313-         DEN 1:3         X </td <td>10307- AAA</td> <td>IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)</td> <td>X</td> <td>4.87</td> <td>67.02</td> <td>19.87</td> <td>6.02</td> <td>35.0</td> <td>± 9.6 %</td>	10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.87	67.02	19.87	6.02	35.0	± 9.6 %
Z         4.79         67.51         19.72         35.0           AAA         10MHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0         ± 9.6 %           AAA         10MHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0         ± 9.6 %           10309-         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         5.02         66.99         19.97         6.02         35.0         ± 9.6 %           AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         4.79         67.09         19.54         35.0         ± 9.6 %           I0310-         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         103.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         103.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         103.0         ± 9.6 %           <			Y	4.66	67.15	19.43		35.0	
1030e- AAA         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         4.84         67.19         20.00         6.02         35.0         ± 9.6 %           I030e- AAA         IDMHz, 16QAM, PUSC)         Y         4.65         67.38         19.59         35.0         -           I030e- AAA         IDMHz, 16QAM, PUSC)         Y         4.76         67.76         19.89         35.0         ± 9.6 %           I030e- AAA         IDMHz, 16QAM, AMC 2x3, 18 symbols)         Y         4.779         67.09         19.54         35.0         ± 9.6 %           I0310- AAA         IDMHz, 16QAM, AMC 2x3, 18 symbols)         Y         4.779         67.05         19.43         35.0         ± 9.6 %           AAA         IDMHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         ± 9.6 %           AAA         IDMHz, QPSK, AMC 2x3, 18 symbols)         Y         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         IDE, 10 (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         Y         3.66         73.25         18.79         150.0         ± 9.6 % <td></td> <td></td> <td>Z</td> <td>4.79</td> <td>67.51</td> <td>19.72</td> <td></td> <td>35.0</td> <td></td>			Z	4.79	67.51	19.72		35.0	
Y         4.65         67.38         19.59         35.0           10309- AAA         Z         4.78         67.76         19.89         35.0           10309- AAA         10MHz, 16QAM, AMC 2x3, 18 symbols)         Y         4.79         67.09         19.97         6.02         35.0         ± 9.8 %           10310-         IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.79         67.09         19.54         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         10.0         150.0         ± 9.6 %           AAA         IDEN 1.3         X         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         100.0         131.54         36.13         6.99         70.0         ± 9.6 %           AAA         DEN 1:3         X         100.00         131.54         36.13         6.99         70.0         ± 9.6 %<	10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.84	67.19	20.00	6.02	35.0	±9.6 %
Z         4.76         67.76         19.89         35.0           10309- AAA         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         5.02         66.99         19.97         6.02         35.0         ± 9.6 %           IO310- AAA         IEEE 802.16e WiMAX (29:18, 10ms, AAA         Y         4.79         67.09         19.54         35.0           I0310- AAA         IEEE 802.16e WiMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         6.02         35.0         ± 9.6 %           I0310- AAA         IDMHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         .           I0311- LTE-FDD (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         .           10313- IDEN 1:3         X         100.00         131.54         36.13         6.99         70.0         ± 9.6 %           AAA         Y         100.00         133.90         36.86         70.0         .         2.9.6 %           AAA         Y         100.00         133.90         36.86			Y	4.65	67.38	19.59		35.0	
10309- AAA         IEEE 802.16e WIMAX (22:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)         X         5.02         66.99         19.97         6.02         35.0         ± 9.6 %           01010- 10310- AAA         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.93         67.49         19.85         35.0         35.0         ± 9.6 %           AAA         IDMHz, QPSK, AMC 2x3, 18 symbols)         X         4.90         66.81         19.86         6.02         35.0         ± 9.6 %           AAA         IDMHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         -           10311- LTE-FDD (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         -           10313- AAA         IDEN 1:3         X         100.00         131.54         36.81         6.99         70.0         ± 9.6 %           AAA         Y         100.00         133.90         36.86         70.0         ± 9.6 %           AAA         Y         100.00         133.43         40.49         10.00         30.0         -			Z	4.78	67.76	19.89		35.0	
Y         4.79         67.09         19.54         35.0           IO310-         IEEE 802.16e WIMAX (29:18, 10ms, X         4.90         68.81         19.85         35.0           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.49         19.85         35.0           IO310-         IEEE 802.16e WIMAX (29:18, 10ms, X         4.90         68.81         19.80         6.02         35.0         ±9.6 %           AAA         IOMHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         -           10311-         LTE-FDD (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ±9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         100.00         131.54         36.13         6.99         70.0         ±9.6 %           AAA         Y         100.00         133.90         36.86         70.0         2         100.00         139.43         40.49         10.00         30.0         ±9.6 %           AAA         Y         100.00         139.43         40.49         10.00         30.0         ±9.6 %	10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.02	66.99	19.97	6.02	35.0	±9.6 %
Z         4.93         67.49         19.85         35.0           10310- AAA         IEEE 802.16e WIMAX (29:18, 10ms, AAA         X         4.90         66.81         19.80         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0         .         19.6 %         .         35.0         .         9.6 %         .         .         .         .         9.7 %         .         35.0         .         .         9.6 %         .			Y	4.79	67.09	19.54		35.0	
10310- AAA         IEEE 802.16e WiIMAX (29:16, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)         X         4.90         66.81         19.60         6.02         35.0         ± 9.6 %           AAA         10MHz, QPSK, AMC 2x3, 18 symbols)         Y         4.71         67.05         19.43         35.0           I0311- AAA         LTE-FDD (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ± 9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         100.00         131.54         36.13         6.99         70.0         ± 9.6 %           AAA         MHz, QPSK)         X         100.00         131.54         36.13         6.99         70.0         ± 9.6 %           AAA         Y         100.00         133.90         36.86         70.0         10314-           I0EN 1:6         X         100.00         133.94         40.49         10.00         30.0         ± 9.6 %           AAA         Y         100.00         139.69         40.30         30.0         30.0           10314- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.41         68.08         18.88         0.17			Z	4.93	67.49	19.85		35.0	
Y         4.71         67.05         19.43         35.0           10311-         LTE-FDD (SC-FDMA, 100% RB, 15         X         4.84         67.41         19.72         35.0           AAA         MHz, QPSK)         Y         3.86         77.25         18.79         150.0         ±9.6%           AAA         Y         3.86         73.25         18.79         150.0         ±9.6%           AAA         DEN 1:3         X         100.00         131.54         36.13         6.99         70.0         ±9.6%           AAA         Y         100.00         133.90         36.86         70.0         ±9.6%           AAA         Y         100.00         137.49         38.84         70.0         ±9.6%           AAA         Y         100.00         139.69         40.30         30.0         ±9.6%           AAA         Y         100.00         139.69         40.30         30.0         ±9.6%           AAA         Y         100.00         145.75         43.37         30.0         ±9.6%           AAA         Mps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ±9.6%           AAA	10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.90	66.81	19.80	6.02	35.0	±9.6 %
Z         4.84         67.41         19.72         35.0           10311- AAA         LTE-FDD (SC-FDMA, 100% RB, 15         X         4.35         74.73         19.58         0.00         150.0         ±9.6 %           AAA         MHz, QPSK)         Y         3.86         73.25         18.79         150.0         ±9.6 %           IO313- AAA         IDEN 1:3         X         100.00         131.54         36.13         6.99         70.0         ±9.6 %           AAA         Y         100.00         133.90         36.86         70.0         ±9.6 %           AAA         Y         100.00         133.49         38.44         70.0         ±9.6 %           I0314- AAA         DEN 1:6         X         100.00         139.43         40.49         10.00         30.0         ±9.6 %           AAA         Y         100.00         139.43         40.49         10.00         30.0         ±9.6 %           AAA         Mbps, 96pc duty cycle)         Y         100.00         145.75         43.37         30.0         ±9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ±9.6 %			Y	4.71	67.05	19.43		35.0	
10311- AAA       LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)       Y       3.86       74.73       19.58       0.00       150.0       ± 9.6 %         AAA       MHz, QPSK)       Y       3.86       73.25       18.79       150.0       150.0         10313- AAA       iDEN 1:3       X       100.00       131.54       36.13       6.99       70.0       ± 9.6 %         AAA       Y       100.00       133.90       36.86       70.0       ± 9.6 %         AAA       Y       100.00       133.90       36.86       70.0       ± 9.6 %         AAA       Y       100.00       133.90       36.86       70.0       ± 9.6 %         AAA       Y       100.00       139.43       40.49       10.00       30.0       ± 9.6 %         AAA       Y       100.00       139.69       40.30       30.0       ± 9.6 %         AAA       Y       100.00       145.75       43.37       30.0       30.0       ± 9.6 %         AAA       Mbps, 96pc duty cycle)       Y       1.30       67.33       18.09       150.0       ± 9.6 %         AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       <			Z	4.84	67.41	19.72		35.0	
Y         3.86         73.25         18.79         150.0           10313- AAA         Z         3.69         72.07         18.29         150.0           10313- AAA         Y         100.00         131.54         36.13         6.99         70.0         ± 9.6 %           10314- AAA         Y         100.00         133.90         36.86         70.0         ± 9.6 %           10314- AAA         iDEN 1:6         X         100.00         139.43         40.49         10.00         30.0         ± 9.6 %           AAA         Y         100.00         139.69         40.30         30.0         ± 9.6 %           AAA         Y         100.00         139.69         40.30         30.0         ± 9.6 %           AAA         Y         100.00         145.75         43.37         30.0         ± 9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ± 9.6 %           AAA         Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ± 9.6 %           AAA         OFDM, 6 Mbps, 96pc duty cycle)         Y         4.68         67.55         17.12         <	10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, OPSK)	X	4.35	74.73	19.58	0.00	150.0	± 9.6 %
Z         3.69         72.07         18.29         150.0           10313- AAA         iDEN 1:3         X         100.00         131.54         36.13         6.99         70.0         ± 9.6 %           AAA         Y         100.00         133.90         36.86         70.0         ± 9.6 %           AAA         Y         100.00         133.90         36.86         70.0         ±           10314- AAA         iDEN 1:6         X         100.00         139.43         40.49         10.00         30.0         ±         9.6 %           AAA         Y         100.00         139.69         40.30         30.0         ±         9.6 %           AAA         Y         100.00         139.69         40.30         30.0         ±         9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ±         9.6 %           AAA         OFDM, 6         Mbps, 96pc duty cycle)         Y         4.89         67.55         17.12         0.17         150.0         ±         9.6 %           AAA         OFDM, 6         AA         4.89         67.55         17.12         0.17         150.0 <td></td> <td></td> <td>†γ</td> <td>3.86</td> <td>73.25</td> <td>18.79</td> <td></td> <td>150.0</td> <td></td>			†γ	3.86	73.25	18.79		150.0	
10313- AAA       iDEN 1:3       X       100.00       131.54       36.13       6.99       70.0       ± 9.6 %         AAA       Y       100.00       133.90       36.86       70.0       10.00         10314- AAA       Z       100.00       137.49       38.84       70.0       10.00         10314- AAA       Z       100.00       139.43       40.49       10.00       30.0       ± 9.6 %         AAA       Y       100.00       139.69       40.30       30.0       ± 9.6 %         AAA       Y       100.00       139.69       40.30       30.0       ± 9.6 %         AAA       Y       100.00       139.69       40.30       30.0       ± 9.6 %         AAA       Mbps, 96pc duty cycle)       Y       1.30       67.33       18.09       150.0         10316-       IEEE 802.11g WiFi 2.4 GHz (ERP- AAA       X       4.89       67.55       17.12       0.17       150.0       ± 9.6 %         AAA       OFDM, 6 Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       ± 9.6 %         AAA       Mbps, 96pc duty cycle)       Y       4.68       67.55       17.12       0.17       150.0       <			Ż	3.69	72.07	18.29		150.0	
Y         100.00         133.90         36.86         70.0           Z         100.00         137.49         38.84         70.0           10314- AAA         X         100.00         139.43         40.49         10.00         30.0         ±9.6 %           AAA         Y         100.00         139.43         40.49         10.00         30.0         ±9.6 %           AAA         Y         100.00         139.69         40.30         30.0         ±9.6 %           AAA         Y         100.00         145.75         43.37         30.0         ±9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ±9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ±9.6 %           AAA         OFDM, 6 Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ±9.6 %           AAA         OFDM, 6 Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ±9.6 %           AAA         Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90 </td <td>10313- AAA</td> <td>iDEN 1:3</td> <td>X</td> <td>100.00</td> <td>131.54</td> <td>36.13</td> <td>6.99</td> <td>70.0</td> <td>± 9.6 %</td>	10313- AAA	iDEN 1:3	X	100.00	131.54	36.13	6.99	70.0	± 9.6 %
Z         100.00         137.49         38.84         70.0           10314- AAA         iDEN 1:6         X         100.00         139.43         40.49         10.00         30.0 $\pm 9.6 \%$ AAA         Y         100.00         139.43         40.49         10.00         30.0 $\pm 9.6 \%$ AAA         Y         100.00         139.69         40.30         30.0 $\pm 9.6 \%$ 10315- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1         X         1.41         68.08         18.88         0.17         150.0 $\pm 9.6 \%$ AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0 $\pm 9.6 \%$ 10316-         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         X         4.89         67.55         17.12         0.17         150.0 $\pm 9.6 \%$ 10317-         IEEE 802.11a WiFi 5 GHz (OFDM, 6         X         4.89         67.55         17.12         0.17         150.0 $\pm 9.6 \%$ 10400-         IEEE 802.11ac WiFi (20MHz, 64-QAM, A         4.89         67.55         17.12         0.17         150.0 $\pm 9.6 \%$ AAA         99pc duty cycle)         Y			Y	100.00	133.90	36.86		70.0	
10314- AAA       iDEN 1:6       X       100.00       139.43       40.49       10.00       30.0       ± 9.6 %         AAA       Y       100.00       139.69       40.30       30.0       30.0       ± 9.6 %         I0315- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)       X       1.41       68.08       18.88       0.17       150.0       ± 9.6 %         I0315- AAA       Mbps, 96pc duty cycle)       Y       1.30       67.33       18.09       150.0       ± 9.6 %         I0316- AAA       IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)       Y       1.30       67.55       17.12       0.17       150.0       ± 9.6 %         I0316- AAA       IEEE 802.11a WiFi 5 GHz (OFDM, 6 X       X       4.89       67.55       17.12       0.17       150.0       ± 9.6 %         I0317- AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       ± 9.6 %         I0400- AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       ± 9.6 %         I0400- AAA       Y       4.68       67.44       16.90       150.0       ± 9.6 %         I0400- AAA       Y       4.89       67.			7	100.00	137.49	38.84	-1	70.0	
Y         100.00         139.69         40.30         30.0           10315- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)         X         1.41         68.08         18.88         0.17         150.0         ± 9.6 %           10315- AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0           10316- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10316- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10317- AAA         IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10317- AAA         IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10400- AAA         Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ± 9.6 %           10400- AAA         99pc duty cycle)         Y         4.88         67.73         16.90         150.0	10314-	iDEN 1:6	X	100.00	139.43	40.49	10.00	30.0	± 9.6 %
Z         100.00         145.75         43.37         30.0           10315- AAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)         X         1.41         68.08         18.88         0.17         150.0         ± 9.6 %           AAA         Mbps, 96pc duty cycle)         Y         1.30         67.33         18.09         150.0         ± 9.6 %           10316- AAA         IEEE 802.11g WiFi 2.4 GHz (ERP- AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10316- AAA         OFDM, 6 Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ± 9.6 %           10317- AAA         IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAA         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10400- AAA         Mbps, 96pc duty cycle)         Y         4.68         67.44         16.90         150.0         ± 9.6 %           10400- AAA         Soppc duty cycle)         Y         4.88         67.39         16.90         150.0         ± 9.6 %           10400- AAA         Soppc duty cycle)         Y         4.80         67.84         16.90         150.0         ± 9.6 %           <	1001		Y	100.00	139.69	40.30		30.0	
10315- AAA       IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)       X       1.41       68.08       18.88       0.17       150.0       ± 9.6 %         Y       1.30       67.33       18.09       150.0       150.0       150.0       150.0       150.0       150.0       150.0       150.0       10316-       IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)       X       4.89       67.55       17.12       0.17       150.0       ± 9.6 %         10316- AAA       IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       150.0         10317- AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       ± 9.6 %         10317- AAA       IEEE 802.11a WiFi 5 GHz (OFDM, 6 AAA       X       4.89       67.55       17.12       0.17       150.0       ± 9.6 %         10400- AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0       ± 9.6 %         10400- AAA       Y       4.68       67.44       16.90       150.0       ± 9.6 %         10400- AAA       Y       4.80       67.84       16.90       150.0       ± 9.6 %       ± 9.6 %       ± 9.6 % </td <td></td> <td></td> <td>Ż</td> <td>100.00</td> <td>145.75</td> <td>43.37</td> <td>1</td> <td>30.0</td> <td></td>			Ż	100.00	145.75	43.37	1	30.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10315- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	x	1.41	68.08	18.88	0.17	150.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	1.30	67.33	18.09		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	1.32	66.42	17.52		150.0	
Y         4.68         67.44         16.90         150.0           10317- AAA         IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)         X         4.89         67.55         17.12         0.17         150.0         ± 9.6 %           10400- AAA         Y         4.68         67.44         16.90         150.0         ± 9.6 %           10400- AAA         Y         4.68         67.44         16.90         150.0         ± 9.6 %           10400- AAA         IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)         X         5.05         68.00         17.17         0.00         150.0         ± 9.6 %           2         4.80         67.84         16.96         150.0         ± 9.6 %           2         4.80         67.84         16.96         150.0         ± 9.6 %           2         4.84         67.73         16.90         150.0         ± 9.6 %           2         4.84         67.73         16.90         150.0         ± 9.6 %           3         10401- 99pc duty cycle)         Y         5.47         67.73         16.94         150.0           2         5.51         67.68         16.92         150.0         ± 9.6 %	10316- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.89	67.55	17.12	0.17	150.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.68	67.44	16.90		150.0	
10317- AAA       IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)       X       4.89       67.55       17.12       0.17       150.0       ± 9.6 %         AAA       Mbps, 96pc duty cycle)       Y       4.68       67.44       16.90       150.0         IO400- AAA       IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)       X       5.05       68.00       17.17       0.00       150.0         Y       4.80       67.84       16.96       150.0       ± 9.6 %         AAA       99pc duty cycle)       Y       4.80       67.84       16.96       150.0         I0400- AAA       Z       4.84       67.73       16.96       150.0       ± 9.6 %         I0401- AAA       IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)       X       5.66       67.87       17.10       0.00       150.0       ± 9.6 %         I0401- AAA       IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)       X       5.66       67.87       17.10       0.00       150.0       ± 9.6 %         I0401- AAA       IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)       X       5.66       67.87       17.10       0.00       150.0       ± 9.6 %         IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400- IO400			Z	4.73	67.39	16.90		150.0	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10317- AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.89	67.55	17.12	0.17	150.0	± 9.6 %
Z         4.73         67.39         16.90         150.0           10400- AAA         IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)         X         5.05         68.00         17.17         0.00         150.0         ± 9.6 %           Y         4.80         67.84         16.96         150.0         ± 9.6 %           Z         4.84         67.73         16.90         150.0         ± 9.6 %           10401- AAA         99pc duty cycle)         Y         4.84         67.73         16.90         150.0           10401- AAA         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.66         67.87         17.10         0.00         150.0         ± 9.6 %           Z         5.56         67.87         17.10         0.00         150.0         ± 9.6 %           AAA         99pc duty cycle)         Y         5.47         67.73         16.94         150.0			Y	4.68	67.44	16.90		150.0	
10400- AAA         IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)         X         5.05         68.00         17.17         0.00         150.0         ± 9.6 %           Y         4.80         67.84         16.96         150.0         150.0         ± 9.6 %           Z         4.80         67.84         16.96         150.0         150.0         150.0           10401- AAA         JEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.66         67.87         17.10         0.00         150.0         ± 9.6 %           Y         5.47         67.73         16.94         150.0         ± 9.6 %         150.0         ± 9.6 %			Z	4.73	67.39	16.90		150.0	
Y         4.80         67.84         16.96         150.0           Z         4.84         67.73         16.90         150.0           10401- AAA         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.66         67.87         17.10         0.00         150.0         ± 9.6 %           Y         5.47         67.73         16.94         150.0         ± 9.6 %	10400- AAA	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	5.05	68.00	17.17	0.00	150.0	± 9.6 %
Z         4.84         67.73         16.90         150.0           10401- AAA         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.66         67.87         17.10         0.00         150.0         ± 9.6 %           Y         5.47         67.73         16.94         150.0         ± 9.6 %			Y	4.80	67.84	16.96		150.0	
10401- AAA         IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)         X         5.66         67.87         17.10         0.00         150.0         ± 9.6 %           XAA         99pc duty cycle)         Y         5.47         67.73         16.94         150.0         ± 9.6 %			Z	4.84	67.73	16.90		150.0	
Y 5.47 67.73 16.94 150.0 Z 551 67.68 16.92 150.0	10401- AAA	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.66	67.87	17.10	0.00	150.0	± 9.6 %
7 551 67.68 16.02 150.0			Y	5,47	67.73	16.94	1	150.0	
	-		Z	5.51	67.68	16.92	1	150.0	

10274-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	X	3.08	69.28	17.52	0.00	150.0	± 9.6 %
		Y	2.93	69.22	17.03		150.0	· · · ·
		z	2.92	68.68	16.79		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8 4)	×	2.71	76.98	21.10	0.00	150.0	± 9.6 %
0.10		Y	2.39	75.43	19.91		150.0	
		Z	2.19	73.15	18.97		150.0	
10277- CAA	PHS (QPSK)	×	2.91	64.32	9.69	9.03	50.0	± 9.6 %
		Y	2.35	62.02	7.64		50.0	
		Z	2.57	63.40	8.77		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	12.96	88.77	23.01	9.03	50.0	± 9.6 %
		Y	5.15	73.22	15.88		50.0	
		Z	9.72	83.81	20.71		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	13.10	88.84	23.07	9.03	50.0	± 9.6 %
		Y_	5.28	73.48	16.04		50.0	
		Z	9.78	83.85	20.78		50.0	
10290- 	CDMA2000, RC1, SO55, Fuil Rate	×	10.90	101.16	27.85	0.00	150.0	± 9.6 %
		Y	17.67	105.75	27.20		150.0	
		Z	5.24	88.40	22.62		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	7.22	101.47	28.63	0.00	150.0	±9.6 %
		Υ Υ	9.25	102.26	26.71		150.0	
		Z	2.90	84.87	21.90		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	100.00	150.30	41.51	0.00	150.0	± 9.6 %
		Ι Y	100.00	143.00	37.47		150.0	
	Leavenue and the second second second second second	Z	29.49	123.47	33.45		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	×	100.00	153.54	43.12	0.00	150.0	±9.6 %
		Y	100.00	147.69	39.68		150.0	
		Z	100.00	146.26	39.42		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	×	10.16	87.92	25.99	9.03	50.0	± 9.6 %
		Y	11.58	88.38	24.76		50.0	
		Z	16.21	96.35	28.33		50.0	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.90	75.71	20.19	0.00	150.0	±9.6 %
		Y_	3.44	74.31	19.39		150.0	
		Z	3.28	72.97	18.82	1	150.0	
10298- 	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	4.15	83.51	22.60	0.00	150.0	±9.6 %
		Y_	3.82	82.31	20.84		150.0	
10000		Z	2.83	77.29	19.18		150.0	
10299- AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	8.54	87.73	22.62	0.00	150.0	± 9.6 %
		Y	4.69	78.05	17.67		150.0	
10000		Z	7.37	84.94	20.67		150.0	
10300- AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.55	73.27	16.44	0.00	150.0	±9.6 %
		Y -	2.13	66.75	12.12		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, OPSK, PUSC)	X	5.04	69.60 66.09	13.94 18.23	4.17	150.0 50.0	± 9.6 %
		v	4 71	65.74	17.76		50.0	
		7	4.11	66.30	18.12		50.0	
10302-	IEEE 802.16e WIMAX (29:18.5ms	X	5 48	66 53	18.93	A 06	50.0	+96%
AAA	10MHz, QPSK, PUSC, 3 CTRL symbols)	Ŷ	5.24	66.40	10.00	4.50	50.0	1 9.0 %
		7	0.21	66.74	10.49		50.0	
		12	0.35	00.71	18.67		50.0	

10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	8.37	81.83	23.53	3.98	65.0	±9.6 %
CAD			7 12	70.90	22.50		65.0	
			7.13	79.09	22.05		65.0	
			7.86	01.70	23.04	00	05.0	+069/
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.11	79.52	19.77	3.98	65.0	±9.0 %
		Y	4.34	70.69	14.76		65.0	
		Z	6.54	77.11	18.13		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	7.33	78.21	19.17	3.98	65.0	±9.6 %
		Y	4,15	69.74	14.23		65.0	
		7	5.96	75.38	17.32		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	×	9.41	86.14	22.83	3.98	65.0	± 9.6 %
		Y	5.01	76.16	17.86		65.0	
		Z	7.12	81.78	20.56		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.31	79.48	22.10	3.98	65.0	± 9.6 %
		Y	6.02	76.76	20.33		65.0	
		Z	6.71	78.69	21.46		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.27	79.02	21.92	3.98	65.0	± 9.6 %
		Y	5.98	76.30	20.13		65.0	
		Z	6.64	78.14	21.23		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	x	10.47	88.50	25.44	3.98	65.0	± 9.6 %
-		Y	8.20	84.90	23.62		65.0	
		Z	9.76	88.23	25.24		65.0	
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	7.64	80.20	23.23	3.98	65.0	± 9.6 %
		Y	6.54	78.20	22.04		65.0	
		Z	7.08	79.61	22.91		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.06	77.41	21.77	3.98	65.0	± 9.6 %
		Y	5.98	75.26	20.43		65.0	
		Z	6.51	76.80	21.38		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.27	87.57	25.47	3.98	65.0	± 9.6 %
		Y	8.33	84.75	24.16		65.0	
		Z	9.57	87.46	25.52		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.12	76.72	21.72	3.98	65.0	±9.6 %
		Y	6.10	74.66	20.60		65.0	
		Z	6.58	76.02	21.46	3	65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	7.52	77.60	22.43	3.98	65.0	± 9.6 %
		Y	6.56	75.87	21.49		65.0	
		Z	7.00	77.06	22.24		65.0	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	8.98	82.87	23.68	3.98	65.0	± 9.6 %
		Y	7.57	80.74	22.72		65.0	
		Z	8.41	82.74	23.81		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	7.59	76.06	21.75	3.98	65.0	± 9.6 %
		Y	6.6 <del>9</del>	74.42	20.91		65.0	
		Z	7.10	75.49	21.60		65.0	1
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	7.50	75.50	21.58	3.98	65.0	± 9.6 %
		Y	6.65	73.96	20.75		65.0	
		Z	7.04	74.98	21.43		65.0	
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.07	78.79	22.19	3.98	65.0	± 9.6 %
		Y	7.05	77.19	21.45		65.0	
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10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	89.92	127.58	36.29	6.02	65.0	± 9.6 %
CAB	64-QAM)		22.47	103.96	20.76		65.0	
		7	22.47	130.40	29.70		65.0	
10040			24 75	112.68	35.47	6.02	65.0	+96%
CAB	OPSK)	^	24.75	112.00	00.47	0.02	00.0	20.0 %
0,10		Y	9.60	94.60	29.66		65.0	
		z	13.50	103.55	33.70		65.0	
10241-	LTE-TDD (SC-EDMA, 50% RB, 1.4 MHz,		8.59	82.45	26.32	6.98	65.0	± 9.6 %
CAA	16-QAM)							
		Y	7.50	80.76	25.27		65.0	
		Z	8.27	83.36	26.96		65.0	
10242-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	7.71	80.09	25.27	6.98	65.0	± 9.6 %
CAA	64-QAM)							
		Y	7.07	79.51	24.67		65.0	
		Z	7.42	80.97	25.90	4	65.0	
10243-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	6.59	77.16	24.77	6.98	65.0	± 9.6 %
CAA	QPSK)							
		Y	6.14	76.75	24.25		65.0	
		Z	6.28	77.48	25.16		65.0	
10244-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	9.35	82.95	22.02	3.98	65.0	± 9.6 %
CAB	16-QAM)							
		Y	6.23	76.32	18.28		65.0	
		Ζ_	9.03	82.82	21.45		65.0	
10245-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	9.00	82.04	21.62	3.98	65.0	± 9.6 %
CAB	64-QAM)							
		Y	5.96	75.38	17.85		65.0	
		Z	8.42	81.41	20.86		65.0	
10246-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	11.76	90.47	25.03	3.98	65.0	± 9.6 %
		Y	7.61	83.30	21.54		65.0	<u>                                      </u>
		7	10.31	88.67	23.95		65.0	
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-OAM)	X	7.12	79.22	21.53	3.98	65.0	± 9.6 %
UND		Y	5.64	75.78	19.30	<u> </u>	65.0	
·		17	6.44	78.06	20.62		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	x	6.95	78.23	21.11	3.98	65.0	± 9.6 %
		Y	5,47	74.77	18.85		65.0	
		Z	6.21	76.92	20.11		65.0	
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	x	12.41	91.77	26.21	3.98	65.0	± 9.6 %
		Y	9.31	87.25	23.99		65.0	
		Z	11.63	91.49	25.92	1	65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	7.65	80.25	23.28	3.98	65.0	± 9.6 %
		Y	6.56	78.29	22.10		65.0	
		Z	7.09	79.68	22.96		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.07	77.43	21.78	3.98	65.0	± 9.6 %
		Y	5.99	75.29	20.44		65.0	
		Z	6.53	76.83	21.39		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.39	87.81	25.57	3.98	65.0	± 9.6 %
		Y	8.45	85.05	24.29		65.0	
		Z	9.70	87.73	25.64		65.0	
10253- CAB	LTE-TDD (SC-EDMA 50% RB 15 MHz	X	6.90	75.97	21.42	3.98	65.0	± 9.6 %
0,10	16-QAM)							
	16-QAM)	Y	5.98	74.14	20.33		65.0	
	16-QAM)	Y Z	5.98 6.44	74.14	20.33 21.18		65.0 65.0	
10254- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Y Z X	5.98 6.44 7.28	74.14 75.46 76.84	20.33 21.18 22.09	3.98	65.0 65.0 65.0	± 9.6 %
10254- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Y Z X Y	5.98 6.44 7.28 6.39	74.14 75.46 76.84 75.25	20.33 21.18 22.09 21.13	3.98	65.0 65.0 65.0 65.0	± 9.6 %

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	10.69	104.98	31.76	2.04	110.0	± 9.6 %
CAA	Mops)		5.45	92.69	27.41		110.0	
		7	5.40	92.05	27.41		110.0	
10062-	IEEE 802,11a/h WiFi 5 GHz (OFDM, 6	X	4.97	67.46	17.28	0.49	100.0	± 9.6 %
CAA	Mbps)							
		Y	4.77	67.38	17.08		100.0	
		Z	4.83	67.35	17.10		100.0	
10063- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.98	67.54	17.37	0.72	100.0	±9.6 %
-		Y	4.78	67.45	17.16		100.0	
		Z	4.84	67.45	17.20		100.0	
10064- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.29	67.77	17.55	0.86	100.0	±9.6 %
		Y	5.04	67.63	17.32		100.0	
		Z	5.11	67.64	17.38		· 100.0	
10065- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.15	67.66	17.63	1.21	100.0	± 9.6 %
		Y	4.91	67.49	17.39		100.0	
		Z	4.98	67.53	17.48		100.0	
10066- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.16	67.64	17.77	1.46	100.0	±9.6 %
		Y	4.91	67.46	17.52		100.0	
		Z	5.00	67.53	17.63		100.0	
10067- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.42	67.60	18.06	2.04	100.0	± 9.6 %
		Y	5.19	67.55	17.87		100.0	
		Z	5.28	67.67	18.03		100.0	
10068- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.48	67.73	18.31	2.55	100.0	± 9.6 %
		Y	5.22	67.49	18.02		100.0	
		Z	5.32	67.65	18.23		100.0	
10069- CAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.55	67.62	18.43	2.67	100.0	± 9.6 %
		Y	5.29	67.48	18.19		100.0	
		Z	5.39	67.64	18.39		100.0	
10071- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.21	67.28	17.93	1.99	100.0	± 9.6 %
		Y	5.02	67.23	17.74		100.0	
		Z	5.10	67.33	17.88		100.0	
10072- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.21	67.67	18.17	2.30	100.0	± 9.6 %
		Y	4.99	67.54	17.94		100.0	
		Z	5.08	67.66	18.12	4	100.0	1
10073- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.26	67.78	18.45	2.83	100.0	± 9.6 %
		Y	5.05	67.66	18.22		100.0	
		Z	5.15	67.82	18.44		100.0	
10074- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.22	67.62	18.58	3.30	100.0	± 9.6 %
		Y	5.03	67.53	18.34		100.0	
		Z	5.13	67.71	18.59		100.0	
10075- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.27	67.79	18.91	3.82	90.0	± 9.6 %
		Y	5.06	67.60	18.60		90.0	
		Z	5.17	67.80	18.88		90.0	
10076- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.25	67.47	18.94	4.15	90.0	± 9.6 %
		Y	5.08	67.38	18.70		90.0	
		Z	5.18	67.59	18.99		90.0	
10077- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.27	67.51	19.03	4.30	90.0	± 9.6 %
		Y	5.10	67.45	18.79	1	90.0	
		Z	5.21	67.66	19.10		90.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.71	68.19	17.29	0.00	150.0	± 9.6 %
UAA		Y	5.49	68.00	17.12		150.0	
		7	5.53	67.91	17.07		150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-	X	5.45	68.18	17.22	0.00	150.0	± 9.6 %
UAA	GAWI	Y	5.24	67.94	17.01		150.0	
	12,0	ż	5.28	67.84	16.96		150.0	
10225- CAB	UMTS-FDD (HSPA+)	×	3.25	68.36	17.27	0.00	150.0	± 9.6 %
		Y	3.06	68.25	16.77		150.0	
		Z	3.06	67.81	16.55		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	132.35	38.26	6.02	65.0	± 9.6 %
		Y	27.26	109.39	32.08		65.0	
		Z	92.22	136.29	40.35		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	100.00	129.63	36.86	6.02	65.0	± 9.6 %
		Y	25.91	106.52	30.56		65.0	
		Z	98.38	134.53	39.09		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	26.87	114.46	36.05	6.02	65.0	± 9.6 %
		Y	10.26	95.98	30.20		65.0	
		Z	14.43	105.01	34.23		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	100.00	132.07	38.09	6.02	65.0	± 9.6 %
		Y	23.94	106.84	31.26		65.0	
		Z	76.57	132.41	39.31		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	×	90.23	127.60	36.29	6.02	65.0	± 9.6 %
		Y	22.67	104.08	29.79		65.0	
		Z	80.25	130.57	38.06		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	24.67	112.57	35.43	6.02	65.0	± 9.6 %
		Y	9.62	94.59	29.66		65.0	
		Z	13.51	103.50	33.68		65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	100.00	132.08	38.09	6.02	65.0	± 9.6 %
		Y	23.88	106.80	31.26		65.0	
		Z	76.42	132.39	39.31		65.0	
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	90.12	127.59	36.29	6.02	65.0	± 9.6 %
		Y	22.57	104.02	29.78		65.0	
		Z	79.75	130.48	38.04	J.	65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	22.89	110.81	34.80	6.02	65.0	± 9.6 %
		Y	9.13	93.38	29.13		65.0	
		Z	12.85	102.26	33.17		65.0	
10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	100.00	132.10	38.10	6.02	65.0	± 9.6 %
		Y	23.93	106.86	31.27		65.0	
		Z	76.84	132.52	39.34		65.0	
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	92.77	128.05	36.39	6.02	65.0	± 9.6 %
		Y	22.94	104.26	29.84		65.0	
10237-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, OPSK)	X	82.50 24.86	131.04	38.17 35.49	6.02	65.0	± 9.6 %
		V	0.62	04 64	20.69		65.0	
	10 22.000	7	13.65	103.60	33.71		65.0	
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	100.00	132.09	38.09	6.02	65.0	± 9.6 %
		v	23.81	106 77	31.25		65.0	-
		7	76.29	132.37	30.31		65.0	1
h	-	12	1 10.20	132.37	39.31		1 00.0	1

10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	3.41	71.96	20.90	3.01	150.0	± 9.6 %
CAB	QPSK)	Y	3.07	70.24	19.82		150.0	
		7	3.06	70.13	20.10		150.0	
10185-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	5.73	82.69	25.15	3.01	150.0	± 9.6 %
CAB	QAM)	v	4 85	79.68	23 71		150.0	
		7	4.57	78.94	23.82		150.0	
10186- AAA	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- DAM)	x	4.30	76.23	21.53	3.01	150.0	±9.6 %
	do titly	Y	3.59	73.10	19.86		150.0	
		z	3.61	73.64	20.56		150.0	
10187- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	x	3.42	71.99	20.95	3.01	150.0	±9.6 %
		Y	3.08	70.30	19.89		150.0	
		Z	3.07	70.19	20.16	4	150.0	
10188- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	6.06	83.92	25.74	3.01	150.0	± 9.6 %
		Y	5.12	80.86	24.29		150.0	
		Z	4.76	79.83	24.28		150.0	
10189- AAA	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.45	76.95	21.93	3.01	150.0	± 9.6 %
		Y	3.71	73.74	20.24		150.0	
		Z	3.71	74.20	20.89		150.0	
10193- CAA	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.85	67.60	17.08	0.00	150.0	± 9.6 %
	Charles and Charle	Y	4.65	67.54	16.87		150.0	
		Z	4.69	67.40	16.80	_	150.0	
10194- CAA	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	5.05	67.95	17.19	0.00	150.0	± 9.6 %
		Y	4.82	67.82	16.99		150.0	
		Z	4.85	67.69	16.91		150.0	
10195- CAA	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	5.09	67.96	17.19	0.00	150.0	± 9.6 %
		Y	4.86	67.84	17.00		150.0	
		Z	4.89	67.71	16.93		150.0	
10196- CAA	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	×	4.87	67.70	17.11	0.00	150.0	± 9.6 %
		Y	4.65	67.59	16.89		150.0	
		Z	4.69	67.45	16.81		150.0	
10197- CAA	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	5.06	67.97	17.20	0.00	150.0	± 9.6 %
		Y	4.83	67.84	17.00		150.0	
		Z	4.87	67.70	16.92	1	150.0	
10198- CAA	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	5.09	67.98	17.20	0.00	150.0	± 9.6 %
		Y	4.86	67.85	17.01		150.0	
		Z	4.89	67.72	16.94		150.0	
10219- CAA	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.82	67.74	17.10	0.00	150.0	± 9.6 %
		Y -	4.61	67.64	16.87		150.0	
		Z	4.64	67.49	16.79		150.0	
10220- CAA	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	5.06	67.95	17.19	0.00	150.0	±9.6%
		<u>Υ</u>	4.82	67.80	16.98		150.0	
10221- CAA	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- OAM)	X	4.86	67.89	17.17	0.00	150.0	± 9.6 %
		Y	4 86	67.77	16.98		150.0	
		7	4.90	67.64	16.91		150.0	
10222- CAA	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	×	5.40	68.06	17.23	0.00	150.0	± 9.6 %
		Y	5.19	67.81	17.02		150.0	
		7	5,23	67.71	16.96	1	150.0	
		1 -	0.20	1 01.11	1.0.00	1	1.00.0	

10168-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-OAM)	X	5.89	78.41	23.10	3.01	150.0	± 9.6 %
		Y	5.62	78.74	23.01		150.0	
		Z	5.46	78.28	23.12		150.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, OPSK)	X	3.42	72.12	21.05	3.01	150.0	± 9.6 %
		Y	3.08	70.43	20.00		150.0	
		Z	3.07	70.27	20.25		150.0	
10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.82	83.06	25.32	3.01	150.0	± 9.6 %
		Y	4.90	79.96	23.84		150.0	
		Z	4.60	79.13	23.92		150.0	
10171- AAA	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.30	76.32	21.5 <del>9</del>	3.01	150.0	± 9.6 %
		Y	3.59	73.16	19.90		150.0	
		Z	3.61	73.68	20.59		150.0	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	19.13	107.23	33.86	6.02	65.0	±9.6 %
		Y	8.80	92.59	28.97		65.0	
		Z	9.57	96.17	31.35		65.0	
10173- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	100.00	132.08	38.09	6.02	65.0	±9.6 %
		Y	23.64	106.64	31.20		65.0	
		Z	75.58	132.18	39.25		65.0	
10174- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	×	54.16	118.95	34.22	6.02	65.0	± 9.6 %
		Y	11.84	93.49	26.77		65.0	
		Z	37.07	116.80	34.70		65.0	
10175- CAB	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.36	71.70	20.75	3.01	150.0	± 9.6 %
		Y	3.03	70.00	19.68		150.0	
		Z	3.03	69.93	19.98		150.0	
10176- CAB	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.83	83.10	25.34	3.01	150.0	± 9.6 %
		Y	4.91	80.00	23.86		150.0	
		Z	4.61	79.16	23.93		150.0	
10177- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.40	71.92	20.88	3.01	150.0	±9.6 %
		Y	3.06	70.21	19.81	_	150.0	
		Z	3.06	70.10	20.08		150.0	
10178- CAB	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.70	82.61	25.12	3.01	150.0	± 9.6 %
		Y	4.83	79.60	23.67		150.0	
		Z	4.55	78.88	23.79	1	150.0	
10179- CAB	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.00	79.54	23.32	3.01	150.0	± 9.6 %
		Y	4.16	76.29	21.69		150.0	
		Z	4.08	76.36	22.16		150.0	
10180- CAB	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	×	4.28	76.16	21.50	3.01	150.0	± 9.6 %
		Y	3.58	73.04	19.83		150.0	
		Z	3.60	73.59	20.53		150.0	
10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.40	71.90	20.87	3.01	150.0	± 9.6 %
		Y	3.05	70.18	19.79		150.0	
10182-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	Z X	3.05 5.69	70.08 82.57	20.07	3.01	150.0 150.0	± 9.6 %
CAB	16-QAM)							
		Y	4.82	79.57	23.66		150.0	
		Z	4.55	78.85	23.77		150.0	
10183- AAA	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.27	76.13	21.49	3.01	150.0	± 9.6 %
		Y	3.57	73.01	19.82		150.0	
		Z	3.59	73.56	20.52		150.0	

Y         3.24         69.91         17.6           Z         3.22         69.32         17.3           10150- CAB         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         X         3.60         70.23         18.0           Y         3.35         69.79         17.58           CAB         Y         3.35         69.79         17.58           LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         Y         3.33         69.22         17.3'           10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         Y         7.59         80.81         22.75           Z         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.7'	2 0.00 3 0.00 3 3.98 5	150.0 150.0 150.0 150.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 % ± 9.6 % ± 9.6 %
Z         3.22         69.32         17.33           10150- CAB         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         X         3.60         70.23         18.03           Y         3.35         69.79         17.58           LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         Y         3.33         69.22         17.33           V         3.33         69.22         17.33         69.22         17.33           10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         X         9.01         82.93         23.76           V         7.59         80.81         22.75         2         2         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.74	2 0.00 3 0.00 3 3.98 5	150.0 150.0 150.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 % ± 9.6 % ± 9.6 %
10150- CAB         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         X         3.60         70.23         18.0           Y         3.35         69.79         17.56           Z         3.33         69.22         17.3           10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         X         9.01         82.93         23.76           How the second	3 0.00 3 3.98 5	150.0 150.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 % ± 9.6 % ± 9.6 %
Y         3.35         69.79         17.54           10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         X         9.01         82.93         23.76           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         Y         7.59         80.81         22.75           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 10152- CAB         X         7.13         76.72         21.75	3 3.98 5 1 3.98 5 5 4 3.98	150.0 150.0 65.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
Z         3.33         69.22         17.3           10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         X         9.01         82.93         23.70           V         7.59         80.81         22.75           Z         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.75	3.98 3.98 3.98 3.98 5 5 4 3.98	150.0 65.0 65.0 65.0 65.0 65.0	± 9.6 %
10151- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         X         9.01         82.93         23.76           V         7.59         80.81         22.75           Z         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.75	3.98       3.98       3.98       3.98       3.98       3.98       3.98	65.0 65.0 65.0 65.0 65.0	± 9.6 %
Y         7.59         80.81         22.75           Z         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.75	5 4 3.98 9 5 4 3.98	65.0 65.0 65.0 65.0	± 9.6 %
Z         8.43         82.80         23.84           10152- CAB         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         X         7.13         76.72         21.7 <sup>-1</sup>	3.98 3.98 3.98 3.98	65.0 65.0 65.0	± 9.6 %
10152- LTE-TDD (SC-FDMA, 50% RB, 20 MHz, X 7.13 76.72 21.7 CAB 16-QAM) 76.72 21.7	3.98 3.98 3.98	65.0 65.0	± 9.6 %
	) 5 I 3.98	65.0	
Y 6.10 74.65 20.59	5 I 3.98		
Z 6.58 76.02 21.45	l 3.98	65.0	
10153-         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, CAB         X         7.52         77.62         22.44		65.0	± 9.6 %
Y 6.56 75.89 21.56	)	65.0	
Z 7.01 77.07 22.2	5	65.0	
10154-         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, X         3.38         75.86         20.54           CAB         QPSK)	0.00	150.0	± 9.6 %
Y 3.00 74.82 19.76	3	150.0	
Z 2.80 73.00 18.9	3	150.0	
10155-         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, X         3.38         72.46         19.12           CAB         16-QAM)         10         10         10         10	2 0.00	150.0	± 9.6 %
Y 3.21 72.61 18.7	3	150.0	ļ
Z 3.08 71.28 18.1	7	150.0	
10156-         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, CAB         X         3.38         78.89         21.52	2 0.00	150.0	± 9.6 %
Y 3.10 78.51 20.6	2	150.0	
Z 2.66 75.23 19.3	7	150.0	
10157- LTE-FDD (SC-FDMA, 50% RB, 5 MHz, X 3.29 74.41 18.9) CAB 16-QAM) 74.41	7 0.00	150.0	± 9.6 %
Y 2.97 73.65 17.70	)	150.0	
Z 2.79 72.18 17.10	3	150.0	
10158- LTE-FDD (SC-FDMA, 50% RB, 10 MHz, X 3.52 72.34 19.10 CAB 64-QAM) 72.34	0.00	150.0	± 9.6 %
Y 3.37 72.68 18.8	5	150.0	
Z 3.23 71.35 18.24	1	150.0	
10159-         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, X         X         3.53         75.28         19.44           CAB         64-QAM)	0.00	150.0	± 9.6 %
Y 3.26 74.85 18.20	3	150.0	
Z 2.98 72.96 17.5	7	150.0	
10160- LTE-FDD (SC-FDMA, 50% RB, 15 MHz, X 3.52 72.88 19.14 CAB QPSK) 72.88	4 0.00	150.0	± 9.6 %
Y 3.24 72.26 18.6	1	150.0	
Z 3.16 71.30 18.1	3	150.0	
10161- LTE-FDD (SC-FDMA, 50% RB, 15 MHz, X 3.51 70.28 18.00 CAB 16-QAM)	5 0.00	150.0	± 9.6 %
Y 3.27 69.92 17.6	1	150.0	
Z 3.24 69.30 17.3	1	150.0	
10162- CAB 64-QAM) X 3.61 70.26 18.0	7 0.00	150.0	± 9.6 %
Y 3.38 70.04 17.6	9	150.0	ļ
Z 3.35 69.43 17.33 10166- LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, X 3.96 71.18 20.4 CAB OPSK)	4 3.01	150.0 150.0	± 9.6 %
		160.0	
	2	150.0	
2 3.14 10.90 20.3 10167   TE-EDD /SC-EDMA 50% DB 1.4 MHz V 5.16 75.47 04.5	1 2.04	150.0	+06%
CAB 16-QAM)	3.01	100.0	1 9.0 %
Y 4.72 74.89 20.9	<u></u>	150.0	
<u>∠ 4.75 75.09 21.3</u>	9	150.0	1

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10112-	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.59	70.16	17.98	0.00	150.0	± 9.6 %
		Y	3.34	69.70	17.52		150.0	
		Z	3.32	69.16	17.26		150.0	
10113- CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-0AM)	x	3.51	72.25	19.05	0.00	150.0	±9.6 %
0/10		v	3 35	72 54	18 78		150.0	
		7	3.22	71.25	18 18		150.0	
10114- CAA	IEEE 802.11n (HT Greenfield, 13.5 Mbps_BPSK)	X	5.43	68.08	17.23	0.00	150.0	± 9.6 %
0,11		Y	5.25	67.95	17.08		150.0	
		z	5.29	67.85	17.02		150.0	
10115- CAA	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	x	5.77	68.28	17.31	0.00	150.0	± 9.6 %
		Y	5.50	67.94	17.07		150.0	
		Z	5.54	67.86	17.02	-	· 150.0	
10116- CAA	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	×	5.55	68.33	17.28	0.00	150.0	± 9.6 %
		Y	5.34	68.13	17.10		150.0	
		Z	5.38	68.03	17.04		150.0	
10117- CAA	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.42	68.03	17.22	0.00	150.0	±9.6 %
		Y	5.21	67.80	17.02		150.0	
		Z	5.25	67.70	16.97		150.0	
10118- CAA	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.84	68.44	17.39	0.00	150.0	±9.6 %
		Y	5.58	68.13	17.17		150.0	
	and the second	Z	5.62	68.05	17.12		150.0	
10119- CAA	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.52	68.26	17.26	0.00	150.0	± 9.6 %
		Y	5.32	68.08	17.08		150.0	
		Z	5.36	67.98	17.03		150.0	
10140- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.92	69.98	17.78	0.00	150.0	± 9.6 %
		Y	3.66	69.36	17.31		150.0	
		Z	3.66	68.97	17.12		150.0	
10141- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	4.03	69.91	17.85	0.00	150.0	± 9.6 %
		Y	3.78	69.43	17.46		150.0	
		Z	3.78	69.03	17.25		150.0	
10142- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	3.22	76.63	20.67	0.00	150.0	± 9.6 %
		Y	2.91	76.02	19.85		150.0	
		Z	2.65	73.76	18.94	4	150.0	
10143- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	3.67	75.49	20.04	0.00	150.0	±9.6 %
		Y	3.66	76.42	19.70		150.0	
		Z	3.27	73.96	18.72		150.0	
10144- CAB	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	×	3.11	71.61	17.80	0.00	150.0	± 9.6 %
		Y	2.77	70.76	16.64		150.0	
		Z	2.72	70.02	16.38		150.0	
10145- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	5.20	87.32	23.14	0.00	150.0	± 9.6 %
		Y	3.56	80.46	18.80		150.0	
10110		Z	2.69	/6.43	17.67	0.00	150.0	
10146- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	12.35	92.27	23.04	0.00	150.0	± 9.6 %
		Y	2.59	70.21	13.32		150.0	
		Z	5.77	80.54	17.86		150.0	
10147- CAB	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	×	74.12	117.95	30.02	0.00	150.0	± 9.6 %
		Y	5.18	78.45	16.63		150.0	
		Z	37.21	103.94	24.78		150.0	

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10081-	CDMA2000 (1xRTT, RC3)	X	8.14	103.44	29.22	0.00	150.0	±9.6 %
CAB		Y	11.54	105.53	27.61		150.0	
		Ż	3.12	85.96	22.29		150.0	
10082-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	x	1.04	61.06	6.31	4.77	80.0	± 9.6 %
CAB	DQPSK, Fullrate)		0.00	60.00	E 40		00.0	
		Y 7	0.80	61.00	0.13		00.0	
40000			100.00	401.22	0.44	C 5C	60.0	+06%
DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	^	100.00	121.19	30.29	0.00	00.0	± 9.0 %
~		<u>Y</u>	100.00	117.57	28.26		60.0	
		Z	100.00	126.34	32.54		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.67	74.30	20.09	0.00	150.0	± 9.6 %
		Y	2.55	74.17	19.47		150.0	
		Z	2.38	72.21	18.62	4	150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.63	74.38	20.14	0.00	150.0	± 9.6 %
		Y	2.51	74.19	19.48		150.0	
		Z	2.34	72.21	18.63		150.0	
10099- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	13.82	101.27	36.26	9.56	60.0	± 9.6 %
		Y	8.86	90.41	31.98		60.0	
		Z	10.82	96.82	35.28		60.0	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	×	4.45	76.51	20.24	0.00	150.0	± 9.6 %
		Y	3.91	74.76	19.33		150.0	
		Z	3.74	73.57	18.85		150.0	
10101- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.80	70.22	17.89	0.00	150.0	± 9.6 %
		Y	3.53	69.48	17.37		150.0	
		Z	3.53	69.07	17.18		150.0	
10102- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.88	69.99	17.87	0.00	150.0	± 9.6 %
		Y	3.63	69.37	17.41		150.0	
		Z	3.63	68.96	17.21		150.0	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	×	8.21	79.75	22.34	3.98	65.0	± 9.6 %
		Y	7.15	78.09	21.60		65.0	
		Z	7.58	79.16	22.32		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	7.52	76.46	21.81	3.98	65.0	± 9.6 %
		Y	6.55	74.58	20.87	,	65.0	
		Z	6.98	75.74	21.62	4	65.0	
10105- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	×	7.01	74.99	21.47	3.98	65.0	± 9.6 %
		Y	6.34	73.82	20.84		65.0	
	A Second Se	Z	6.50	74.17	21.22		65.0	
10108- CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.87	75.54	20.10	0.00	150.0	± 9.6 %
		Y	3.41	74.12	19.29		150.0	
		Z	3.26	72.83	18.74		150.0	
10109- CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	×	3.49	70.42	18.07	0.00	150.0	± 9.6 %
		Y	3.23	69.81	17.54		150.0	
		Z	3.21	69.25	17.27		150.0	
10110- CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	3.23	74.98	20.09	0.00	150.0	± 9.6 %
		Y	2.86	73.90	19.28		150.0	
		Z	2.72	72.40	18.64		150.0	
10111- CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	3.38	72.47	19.12	0.00	150.0	± 9.6 %
		Y	3.21	72.60	18.77		150.0	
		Z	3.07	71.26	18.15		150.0	
-	12. Contraction of the second s	100.001		59	A PARTIE OF	A	WALL STREET	

# Appendix: Modulation Calibration Parameters (Additional assessments outside the scope of SCS108)

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	X	0.00	0.00	1.00	0.00	171.3	± 3.8 %
		Y	0.00	0.00	1.00		163.7	
		Z	0.00	0.00	1.00		160.9	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	×	11.46	93.32	24.33	10.00	20.0	± 9.6 %
		Y	6.01	82.08	19.74		20.0	
40044		Z	24.33	107.00	28.78	0.00	20.0	+06%
CAB			2.30	78.00	23.90	0.00	150.0	19.0 %
		7	1.91	74.77	21.07		150.0	
10012- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	×	1.49	67.79	18.62	0.41	150.0	± 9.6 %
		Y	1.37	66.90	17.78		150.0	
		Z	1.41	66.29	17.41		150.0	
10013- CAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.12	67.25	17.68	1.46	150.0	± 9.6 %
		<u> </u>	4.93	67.21	17.50		150.0	
40024		Z	5.01	67.27	17.60	0.20	150.0	+0.00
10021- DAB	GSM-FDD (TDMA, GMSK)	X	100.00	119.78	30.59	9.39	50.0	± 9.6 %
		Y 7	100.00	116.08	28.64		50.0	
10022	CPRS EDD (TDMA, CMSK, TN 0)		100.00	123.03	32.03	0.57	50.0	+06%
DAB	GFR3-FDD (TDMA, GMSR, TN U)		100.00	118.94	28.77	9.57	50.0	± 9.0 %
		7	100.00	123.08	20.11		50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	121.28	30.32	6.56	60.0	± 9.6 %
		Y	100.00	117.63	28.27		60.0	
		Z	100.00	126.45	32.57		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	9.00	93.05	37.73	12.57	50.0	± 9.6 %
		Y_	4.50	70.54	26.26		50.0	
10000		ι <del>ζ</del>	/.88	89.67	36.76	0.50	50.0	106%
DAB	EUGE-FUD (IDMA, 8PSK, IN 0-1)		13.72	101.14	30.22	9.50	60.0	I 9.0 %
		7	0.00	90.30	35.23		60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	x	100.00	125.51	31.48	4.80	80.0	± 9.6 %
		Y	100.00	121.75	29.31		80.0	
		Z	100.00	132.04	34.27		80.0	
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	133.08	34.12	3.55	100.0	± 9.6 %
		Y	100.00	129.54	31.97		100.0	
40000		Z	100.00	140.52	37.23		100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	8.19	88.56	30.50	7.80	80.0	± 9.6 %
		7	6.60	84.53	27.51	+	80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	120.51	29.54	5.30	70.0	± 9.6 %
		Y	100.00	115.91	26.99		70.0	
		Z	100.00	125.24	31.51		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	×	100.00	150.02	39.82	1.88	100.0	±9.6 %
		Y	100.00	141.77	35.51		100.0	
		Z	100.00	152.95	40.89		100.0	

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LPA         Y         100.00         174.36         475.45         100.00           10033.         IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH1)         X         100.00         132.82         37.01         5.30         70.0         ± 9.8 %           10034.         DETE 802.15.1 Bluetooth (PI4-DQPSK, X         50.00         132.82         37.01         5.30         70.0         ± 9.8 %           10034.         EEE 802.15.1 Bluetooth (PI4-DQPSK, X         52.11         124.82         34.35         1.88         100.0         ± 9.6 %           CAA         DH3)         Y         45.77         117.72         30.64         100.0         ± 9.6 %           CAA         DH5)         Y         45.77         117.43         31.31         1.17         100.0         ± 9.6 %           CAA         DH5)         Y         45.77         110.43         31.31         1.17         100.0         ± 9.6 %           CAA         DH5)         Y         45.22         10.00         133.26         100.0         12.8 %           CAA         Y         91.62         127.23         34.22         70.0         1.00.0           10036         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         41.93	10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	х	100.00	180.36	51.24	1.17	100.0	± 9.6 %
D033         EEE 802.15.1 Bluetooth (PI4-DQPSK, CAA         X         100.00         178.42         49.46         100.00         29.6 %           CAA         DH1         Y         39.88         113.21         30.74         70.0         ±9.6 %           CAA         DH1         Y         39.88         113.21         30.74         70.0         ±9.6 %           CAA         DH3         Z         100.00         132.62         37.21         70.0         ±9.6 %           CAA         DH3         V         45.77         117.72         30.64         100.0         ±9.6 %           CAA         DH3         Y         45.90         121.07         32.38         100.0         ±9.6 %           CAA         DH5         Y         25.22         110.59         28.86         100.0         ±9.6 %           CAA         Y         91.62         127.23         34.22         70.0         ±9.6 %           CAA         Y         91.62         127.23         34.42         70.0         ±9.6 %           CAA         Y         91.62         127.23         34.42         70.0         ±9.6 %           CAA         Y         28.55         110.00	CAA		V	100.00	174 36	47.54		100.0	
1003. CAA         EEE 802.15.1 Bluetooth (PI4-DQPSK, DH1)         X         100.00         132.82         37.01         5.30         70.0         ± 9.6 %           CAA         Y         38.58         113.21         30.74         70.0         -           10034.         EEE 802.15.1 Bluetooth (PI4-DQPSK, CAA         X         52.11         124.82         34.35         1.88         100.0         ± 9.6 %           10034.         EEE 802.15.1 Bluetooth (PI4-DQPSK, CAA         Y         45.77         117.72         30.64         100.0         -         ± 9.6 %           10035.         EEE 802.15.1 Bluetooth (PI4-DQPSK, CAA         Y         45.77         117.72         30.64         100.0         -         ± 9.6 %           10036.         EEE 802.15.1 Bluetooth (PI4-DQPSK, CAA         Y         25.22         110.59         28.86         100.0         -         -         -         -         -         -         -         -         -         -         0.0         -         -         -         0.0         -         -         -         0.0         -         -         0.0         -         -         -         0.0         -         -         0.0         -         -         -         0.0			7	100.00	176.42	49.48		100.0	
CAA         DH1)         Y         Set58         Flazz         Sort         Flazz         Flazz </td <td>10033-</td> <td>IEEE 802 15 1 Bluetooth (PI/4-DOPSK</td> <td>X</td> <td>100.00</td> <td>132.82</td> <td>37.01</td> <td>5.30</td> <td>70.0</td> <td>± 9.6 %</td>	10033-	IEEE 802 15 1 Bluetooth (PI/4-DOPSK	X	100.00	132.82	37.01	5.30	70.0	± 9.6 %
P         38.58         113.21         30.74         70.0           10034         IEFE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)         Y         45.77         117.72         30.64         100.00         132.66         36.72         70.0           10034         IEFE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)         Y         45.77         117.72         30.64         100.0         2.96.%           CAA         DH5         Y         45.90         121.03         31.31         1.17         100.0         2.96.%           CAA         DH5         Y         25.22         110.59         28.86         100.0         100.0           CAA         Y         91.62         127.23         34.22         70.0         2.96.%           CAA         Y         91.62         127.23         34.22         70.0         2.96.%           CAA         Y         28.55         110.05         28.98         100.0         1.17           1003         Z         133.7         112.52         39.37         100.0         1.17           CAA         Y         27.45         113.66         31.79         1.17         100.0         2.56.%           CAA         Y         27.74 <t< td=""><td>CAA</td><td>DH1)</td><td></td><td>100.00</td><td>IOL.OL</td><td>•••••</td><td>0.00</td><td></td><td></td></t<>	CAA	DH1)		100.00	IOL.OL	•••••	0.00		
2         100.20         132.66         36.72         70.0         ±9.6%           CAA         DH3)         Y         45.71         1124.92         34.35         1.88         100.0         ±9.6%           CAA         DH3)         Y         46.77         117.72         30.64         100.0         ±9.6%           CAA         DH5         Z         46.90         121.07         32.38         100.0         ±9.6%           CAA         DH5         19.400.0h (Pl/4-DQPSK,         X         21.58         112.43         31.31         1.17         100.0         ±9.6%           CAA         DH5         Y         25.22         10.00         133.26         37.22         5.30         70.0         ±9.6%           CAA         Y         91.62         127.23         34.22         70.0         ±9.6%           CAA         Y         19.62         132.66         36.95         70.0         ±9.6%           CAA         Y         110.00         ±9.6%         133.66         36.95         70.0         ±9.6%           CAA         Y         100.00         133.26         13.69         11.86         100.0         ±9.6%           CAA			Y	38.58	113.21	30.74		70.0	
10034.         IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)         X         52.11         124.92         34.35         1.88         100.0         ± 9.6 %           CAA         DH3)         Y         46.77         117.72         30.84         100.0            10035-         IEEE 802.15.1 Bluetooth (PI/4-DQPSK, CAA         X         21.58         112.43         31.31         1.17         100.0         ± 9.6 %           10036-         IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)         X         100.00         133.16         36.95         70.0         1         9.6 %           10036-         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.16         36.95         70.0         1         0.00.0         1         1.88         100.0         ± 9.6 %           10037-         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         12.14         33.49         1.88         100.0         ± 9.6 %           CAA         EEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         12.14         33.49         1.88         100.0         ± 9.6 %           CAA         EEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         12.14         39.51         10.00         10.00			Ζ	100.00	132.66	36.72		70.0	
CAA         DH3)         Y         45.77         117.72         30.64         100.0           10035- CAA         IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH6)         X         21.58         112.43         31.31         1.17         100.0         ± 9.6 %           CAA         DH6)         Y         25.22         110.59         28.86         100.0         ± 9.6 %           CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.16         37.22         5.30         70.0         ± 9.6 %           CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           CAA         Z         100.00         133.16         33.49         1.88         100.0         ± 9.6 %           CAA         Z         33.37         115.32         39.97         100.0         ± 9.6 %           CAA         Z         10.86         10.95         2.85.51         10.17         100.0         ± 9.6 %           CAA         Z         16.86         106.50         28.73         100.0         ± 9.6 %           CAA         Y         100.00         117.80         28.87         150.0	10034-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	Х	52.11	124.92	34.35	1.88	100.0	± 9.6 %
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	CAA	DH3)							
Z         48.90         121 07         82.38         100.0           CAA         DH5)         Y         21.58         112.43         31.31         1.17         100.0         ±9.6 %           CAA         DH5         Y         25.22         110.59         28.46         100.0         .           CAA         EEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.16         36.95         70.0         ±9.6 %           CAA         Z         100.00         133.16         36.95         70.0         ±9.6 %           10037-         EEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ±9.6 %           CAA         Y         28.55         110.96         28.98         100.0          .<	-		Y	45.77	117.72	30.64		100.0	
10035- CAA         IEEE 802 15 1 Bluetooth (PI/4-DQPSK, DH5)         X         21.58         112.43         31.31         1.17         100.0         ± 9.6 %           CAA         DH5)         Y         25.22         110.59         28.86         100.0         -           10036- CAA         IEEE 802 15 1 Bluetooth (8-DPSK, DH1)         X         100.00         133.26         37.22         5.30         70.0         ± 9.6 %           CAA         Y         9162         127.23         34.22         70.0         -           10037- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           CAA         Y         28.65         110.95         28.98         100.0         -         -         -         2         33.37         11.71         100.0         ± 9.6 %           CAA         Y         27.64         112.41         29.51         100.0         -         -         -         -         -         100.0         -         -         -         -         -         -         -         100.0         -         -         -         -         -         -         -         -			Ζ	48.90	121.07	32.38		100.0	
CAA         DH5)         Y         25.22         10.59         28.86         100.0           I0036- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.26         37.22         5.30         70.0         ± 9.6 %           I0037- CAA         Y         91.62         127.23         34.22         70.0         ± 9.6 %           I0037- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           I0038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         110.95         28.96         100.0         1.88         100.0         ± 9.6 %           I0038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ± 9.8 %           I0039- CAA         Z         18.86         106.50         28.73         100.0         12.8 %         100.0         12.8 %         100.0         12.8 %         150.0         12.8 %         165.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         12.8 %         150.0         16.8 %         160.00	10035-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	X	21.58	112.43	31.31	1.17	100.0	±9.6 %
V         25.22         110.59         28.66         100.0           Z         17.10         106.13         28.46         100.0           10036-         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.26         37.22         5.30         70.0         ±9.6 %           CAA         Y         91.62         127.23         34.22         70.0         -           10037-         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ±9.6 %           CAA         Y         28.55         110.95         28.98         100.0         ±9.6 %           CAA         Y         28.55         110.95         28.98         100.0         ±9.6 %           CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.76         33.80         0.00         160.0         ±9.6 %           CAA         IEEE 602.15.1 Bluetooth (8-DPSK, DH5)         X         22.76         33.80         0.00         160.0         ±9.6 %           CAA         IEEE 602.15.1 Bluetooth (8-DPSK, DH5)         X         102.76         33.60         100.0         150.0         ±9.6 %           CAB         CDMA2000 (1xRTT,	CAA	DH5)							
ID036- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.26         37.22         5.30         70.0         ± 9.6 %           CAA         Y         91.62         127.23         34.22         70.0            10037- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           CAA         Y         28.55         110.95         28.98         100.0         ± 9.6 %           CAA         Y         28.55         110.95         28.98         100.0         ± 9.6 %           CAA         Y         27.24         115.45         30.97         1.00.0         ± 9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ± 9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ± 9.6 %           CAB         Y         100.00         132.60         34.08         150.0         ± 9.6 %           CAB         Y         100.00         117.80         28.67         50.0         ± 9.6 %           CAB         DQPSK, Halfrate)         Y         100.00			Y	25.22	110.59	28.86	_	100.0	
10036- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH1)         X         100.00         133.26         37.22         5.30         70.0         1.9.6 %           CAA         Y         91.62         127.23         34.22         70.0         -           CAA         Y         91.62         127.23         34.22         70.0         -           10037- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           CAA         Y         28.65         110.95         28.98         100.0         -           10038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ± 9.6 %           CAA         Y         27.24         112.41         29.51         100.0         150.0         ± 9.6 %           CAB         CDMA2000 (1xRTT, RC1)         X         38.78         122.76         33.00         0.00         150.0         ± 9.6 %           CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4-         X         100.00         117.80         28.64         7.78         50.0         2         0.6 %         0.00         149.6 %			Z	17.10	106.13	28.46		100.0	
Y         91.62         127.23         34.22         70.0           2         100.00         133.16         36.95         70.0           10037- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH3)         X         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           10038- CAA         Y         28.55         110.95         28.98         100.0         100.0           10038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ± 9.6 %           CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         30.97         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         133.60         34.08         150.0         150.0         150.0         150.0         100.0         100.42         15.54 / 15.136 FDD (TDMA/FDM, PI/4- CAB         X         100.00         117.80         28.94         7.78         50.0         49.6 %           CAB         Y         100.00         113.53         26.67         50.0         100.4         150.0         10.00         113.55         10.0	10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	133.26	37.22	5.30	70.0	±9.6 %
CAA         Z         100.00         133.16         36.95         70.0           CAA         Y         41.93         121.45         33.49         1.88         100.0         ± 9.6 %           CAA         Y         28.55         110.55         28.98         100.0         ±         9.6 %           CAA         Z         33.37         115.52         30.97         100.0         ±         9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ±         9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ±         9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ±         9.6 %           CAA         Y         100.00         132.60         34.08         ±50.0         ±         9.6 %           CAB         CDMA2000 (1xRTT, RC1)         X         36.74         100.00         113.50         28.67         50.0         ±         9.6 %           CAB         DQPSK, Halfrate)         Y         100.00         113.53         28.67         50.0         ±         9.6 %           CAA         Y<			Y	91.62	127.23	34.22		70.0	
10037.       IEEE 802.15.1 Bluetooth (8-DPSK, DH3)       X       41.93       121.45       33.49       1.88       100.0       ± 9.6 %         CAA       Y       28.55       110.95       28.98       100.0       -         10038-       IEEE 802.15.1 Bluetooth (8-DPSK, DH5)       X       22.45       113.66       31.79       1.17       100.0       ± 9.8 %         CAA       Y       27.24       112.41       29.51       100.0       -       -       9.8 %         CAA       Y       27.24       112.41       29.51       100.0       -       -       -       9.8 %         CAA       Y       27.24       112.41       29.51       100.0       -       -       -       -       -       100.0       - <t< td=""><td></td><td></td><td>Z</td><td>100.00</td><td>133.16</td><td>36.95</td><td></td><td>70.0</td><td></td></t<>			Z	100.00	133.16	36.95		70.0	
Y         28.55         110.95         28.98         100.0           10038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ±9.8 %           CAA         Y         27.24         112.41         29.51         100.0         ±9.8 %           CAB         Y         27.24         112.41         29.51         100.0         ±9.6 %           CAB         Y         100.00         132.60         34.08         150.0         ±9.6 %           CAB         Y         100.00         132.60         34.08         150.0         ±9.6 %           CAB         Z         155.51         105.44         27.98         150.0         ±9.6 %           CAB         DQPSK, Halfrate)         Y         100.00         113.53         26.67         50.0         ±9.6 %           CAA         DOPSK, Halfrate)         Y         100.00         113.53         26.67         50.0         ±9.6 %           CAA         S91/EIATIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         ±9.6 %           CAA         Stot, 24)         Y         100.00         119.35	10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	41.93	121.45	33.49	1.88	100.0	± 9.6 %
Z         33.37         115.32         30.97         110.0           10038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ± 9.6 %           CAA         Y         27.24         112.41         29.51         100.0         ±         9.6 %           CAB         CDMA2000 (1xRTT, RC1)         X         38.78         122.76         33.90         0.00         150.0         ±9.6 %           CAB         Z         16.63         106.50         28.73         100.0         ±9.6 %           CAB         Z         16.63         105.44         27.98         150.0         ±9.6 %           CAB         DQPSK, Halfrate)         Y         100.00         113.53         26.67         50.0            10044-         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         31.79         13.80         25.0            10044-         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         32.81         150.0         ±9.6 %           CAA         Y         0.66         60.00         32.41         25.0          26.44         150			Y	28.55	110.95	28.98		100.0	
10038- CAA         IEEE 802.15.1 Bluetooth (8-DPSK, DH5)         X         22.45         113.66         31.79         1.17         100.0         ± 9.6 %           I0039- CAB         CDMA2000 (1xRTT, RC1)         X         27.24         112.41         29.51         100.0           CAB         I00.600         132.60         38.73         100.0         150.0         ± 9.6 %           CAB         Intermediate         Y         100.00         132.60         34.08         150.0         ±           I0042- CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4- CAB         Z         156.3         105.44         27.98         150.0         ±         9.6 %           I0044- CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4- CAB         Z         100.00         113.53         26.67         50.0         ±         9.6 %           I0044- CAB         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         ±         9.6 %           CAA         IS-91/EIA/TIA-553 FDD (FDMA, GFSK, Full         X         100.00         120.73         32.41         25.0         ±         9.6 %           CAA         IS-91/EIA/TIA-553 FDD (FDMA, GFSK, Full         X         100.00         120.73         32.41		and the second sec	Z	33.37	115.32	30.97		100.0	
Y         27.24         112.41         29.51         100.0           Z         16.86         106.50         28.73         100.0           CAB         X         38.78         122.76         33.90         0.00         150.0         ± 9.6 %           CAB         Z         15.63         105.44         27.98         150.0         -           10042-         IS-54 / IS-136 FDD (TDMA/FDM, PI/4-         X         100.00         117.80         28.94         7.78         50.0         ± 9.6 %           CAB         DQPSK, Halfrate)         Y         100.00         113.53         26.67         50.0         -         -         -         9.6 %           CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         50.0         -<	10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	22.45	113.66	31.79	1.17	100.0	±9.6 %
Image: constraint of the second sec			Y	27.24	112.41	29.51		100.0	
10039- CAB         CDMA2000 (1xRTT, RC1)         X         38.78         122.76         33.90         0.00         150.0         ± 9.6 %           Image: Comparison of CAB         Image: Comparison of CAB         Y         100.00         132.60         34.08         Image: Comparison of CAB         150.0         Image: Comparison of CAB         120.00         121.26         30.44         150.0         Image: Comparison of CAB         Image: Comparison of CAB         150.0         Image: Comparison of CAB         Image: Comparison of CAB         150.0         Image: Comparison of CAB         Image: Comparison of CAB         150.0         Image: Comparison of CAB         Image: Comparison of CAB         150.0         Image: Comparison of CAB         Image: Comparison of CAB         Image: Comparison of CAB         Image: Comparison of CAB         Image: Comparison of CAB <td></td> <td>Carlo Late Manager and Carlo Carlo</td> <td>Z</td> <td>16.86</td> <td>106.50</td> <td>28.73</td> <td></td> <td>100.0</td> <td></td>		Carlo Late Manager and Carlo	Z	16.86	106.50	28.73		100.0	
Y         100.00         132.60         34.08         150.0           10042- CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)         X         100.00         117.80         28.94         7.78         50.0         ± 9.6 %           2         100.00         113.53         26.67         50.0         ± 9.6 %           2         100.00         121.26         30.44         50.0         ± 9.6 %           10044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         ± 9.6 %           CAA         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         120.73         32.41         25.	10039- CAB	CDMA2000 (1xRTT, RC1)	X	38.78	122.76	33.90	0.00	150.0	± 9.6 %
Z         15.63         105.44         27.98         150.0           10042- CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4- CAB         X         100.00         117.80         28.94         7.78         50.0         ± 9.6 %           CAB         DQPSK, Halfrate)         Y         100.00         113.53         26.67         50.0         ± 9.6 %           I0044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         ± 9.6 %           I0048- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.06         60.00         39.25         150.0         ± 9.6 %           I0048- Slot, 24)         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         113.50         29.04         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         UMTS-TDD (TD-SCD			Y	100.00	132.60	34.08		150.0	
10042- CAB         IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)         X         100.00         117.80         28.94         7.78         50.0         ± 9.6 %           0042- CAB         DQPSK, Halfrate)         Y         100.00         113.53         26.67         50.0            10044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         31.59         0.00         150.0         ± 9.6 %           CAA         Solo, 24.44         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         39.25         150.0         ± 9.6 %           CAA         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         114.66         28.39         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         127.52         35.73         9.03 <td></td> <td></td> <td>Z</td> <td>15.63</td> <td>105.44</td> <td>27.98</td> <td></td> <td>150.0</td> <td></td>			Z	15.63	105.44	27.98		150.0	
Y         100.00         113.53         26.67         50.0           IO044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         31.59         0.00         150.0         ± 9.6 %           CAA         Y         0.06         60.00         39.25         150.0         ±         9.6 %           IO048- CAA         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         119.35         31.79         13.80         25.0         ±         9.6 %           IO048- CAA         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         119.35         31.79         13.80         25.0         ±         9.6 %           IO049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double         X         100.00         118.72         30.45         10.79         40.0         ±         9.6 %           CAA         Slot, 12         Y         100.00         114.66         28.39         40.0         ±         9.6 %           CAA         Slot, 12         Y         100.00         127.52         35.73         9.03         50.0         ±         9.6 %           CAA         V         35.34         106.73         29.13         50.0         ±         9.6 %	10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	117.80	28.94	7.78	50.0	±9.6 %
Z         100.00         121.26         30.44         50.0           10044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         31.59         0.00         150.0         ± 9.6 %           CAA         Y         0.06         60.00         39.25         150.0         ± 9.6 %           CAA         Z         0.10         60.00         24.44         150.0         1           10048- CAA         DECT (TDD, TDMA/FDM, GFSK, Full         X         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           10049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         114.66         28.39         40.0         10.79         40.0         ± 9.6 %           CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)			Y	100.00	113.53	26.67		50.0	
10044- CAA         IS-91/EIA/TIA-553 FDD (FDMA, FM)         X         0.10         60.00         31.59         0.00         150.0         ± 9.6 %           CAA         Y         0.06         60.00         39.25         150.0			Z	100.00	121.26	30.44		50.0	
Y         0.06         60.00         39.25         150.0           10048- CAA         DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)         Z         0.10         60.00         24.44         150.0           10048- CAA         Slot, 24)         Y         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           2         100.00         113.50         29.04         25.0         25.0         10049-           0ECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         114.66         28.39         40.0         40.0           10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         128.19         35.86         50.0         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           DAB         Z         50.08         78.97         26.25         100.0         ± 9.6 %	10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.10	60.00	31.59	0.00	150.0	± 9.6 %
Z         0.10         60.00         24.44         150.0           10048- CAA         Slot, 24)         X         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0            CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0            CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0            10049-         DECT (TDD, TDMA/FDM, GFSK, Double         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12         Y         100.00         114.66         28.39         40.0            10056-         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           CAA         Y         4.70         77.25         25.06         100.0         ± 9.6 %           DAB         <			Y	0.06	60.00	39.25		150.0	
10048- CAA         DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)         X         100.00         119.35         31.79         13.80         25.0         ± 9.6 %           CAA         Slot, 24)         Y         100.00         113.50         29.04         25.0            IO049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           IO049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         Y         100.00         114.66         28.39         40.0            IO056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           I0058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           I0059- CAA         Y         4.70         77.25         25.06         100.0         ± 9.6 %           I0059- CAA         Y         4.70         77.25         25.06         100.0         ± 9.6 %           I0059- CAA         HEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61			Z	0.10	60.00	24.44		150.0	
Y         100.00         113.50         29.04         25.0           Z         100.00         120.73         32.41         25.0           10049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         114.66         28.39         40.0           10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           10056- CAA         V         35.34         106.73         29.13         50.0         ± 9.6 %           10058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           10059- CAA         Y         4.70         77.25         25.06         100.0         ± 9.6 %           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         1.45         68.46         18.55         110.0         ± 9.6 %	10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Fuil Slot, 24)	X	100.00	119.35	31.79	13.80	25.0	± 9.6 %
Z         100.00         120.73         32.41         25.0           10049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         X         100.00         118.72         30.45         10.79         40.0 $\pm 9.6 \%$ AA         Slot, 12)         Y         100.00         114.66         28.39         40.0           IO056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0 $\pm 9.6 \%$ IO058- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0 $\pm 9.6 \%$ IO058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0 $\pm 9.6 \%$ I0059- CAA         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0 $\pm 9.6 \%$ I0059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61         110.0 $\pm 9.6 \%$ I0060- CAA         Mbps)         Y         1.45         68.46         18.55         110.0 <td< td=""><td></td><td></td><td>Y</td><td>100.00</td><td>113.50</td><td>29.04</td><td></td><td>25.0</td><td></td></td<>			Y	100.00	113.50	29.04		25.0	
10049- CAA         DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         X         100.00         118.72         30.45         10.79         40.0         ± 9.6 %           CAA         Slot, 12)         Y         100.00         114.66         28.39         40.0            CAA         V         100.00         120.60         31.27         40.0            10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           10058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         1.45         68.46         18.55         110.0         ± 9.6 %           10060- CAA         Mbps)         Y			Z	100.00	120.73	32.41	4	25.0	
Y         100.00         114.66         28.39         40.0           Z         100.00         120.60         31.27         40.0           10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           AA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ± 9.6 %           10058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         1.45         68.46         18.55         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         1.49         67.83         18.25         110.0         ± 9.6 %           CAA         Mbps)         Y	10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	100.00	118.72	30.45	10.79	40.0	± 9.6 %
Z         100.00         120.60         31.27         40.0           10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0         ±         9.03         50.0         ±         9.6 %           IO058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ±         9.6 %           IO059- CAA         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ±         9.6 %           IO059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2         X         1.61         69.72         19.57         0.61         110.0         ±         9.6 %           IO060- CAA         Mbps)         Y         1.45         68.46         18.55         110.0         10.0         ±         9.6 %           IO060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5         X         100.00         151.04         42.27         1.30         110.0         ±         9.6 %           CAA         Mbps) <td< td=""><td></td><td></td><td>Y</td><td>100.00</td><td>114.66</td><td>28.39</td><td></td><td>40.0</td><td></td></td<>			Y	100.00	114.66	28.39		40.0	
10056- CAA         UMTS-TDD (TD-SCDMA, 1.28 Mcps)         X         100.00         127.52         35.73         9.03         50.0         ± 9.6 %           CAA         Y         35.34         106.73         29.13         50.0            50.0            50.0            50.0            50.0            50.0             50.0           50.0             50.0            50.0            50.0            50.0            50.0            50.0           50.0           50.0             50.0             50.0          50.0            50.0            50.0          100.0          100.0          100.0			Z	100.00	120.60	31.27		40.0	
Y         35.34         106.73         29.13         50.0           10058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)         Y         4.70         77.25         25.06         100.0         100.0           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)         X         1.61         69.72         19.57         0.61         110.0         ± 9.6 %           10060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5         X         100.00         110.0         ± 9.6 %           Y         1.45         68.46         18.55         110.0         ± 9.6 %           Y         1.45         68.46         18.25         110.0         ± 9.6 %           Y         1.00         151.04         42.27         1.30         110.0         ± 9.6 % <td< td=""><td>10056- CAA</td><td>UMTS-TDD (TD-SCDMA, 1.28 Mcps)</td><td>X</td><td>100.00</td><td>127.52</td><td>35.73</td><td>9.03</td><td>50.0</td><td>± 9.6 %</td></td<>	10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	100.00	127.52	35.73	9.03	50.0	± 9.6 %
Z         100.00         128.19         35.86         50.0           10058- DAB         EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)         X         6.09         82.30         27.32         6.55         100.0         ± 9.6 %           AB         Y         4.70         77.25         25.06         100.0         100.0           Image: Comparison of the system of th			Y	35.34	106.73	29.13		50.0	
10058- DAB       EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)       X       6.09       82.30       27.32       6.55       100.0       ± 9.6 %         AB       Y       4.70       77.25       25.06       100.0       ±       100.0       ±       9.6 %         Image: Constraint of the state			Z	100.00	128.19	35.86		50.0	
Y         4.70         77.25         25.06         100.0           10059- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)         X         1.61         69.72         19.57         0.61         110.0         ± 9.6 %           10060- CAA         Y         1.45         68.46         18.55         110.0           2         1.49         67.83         18.25         110.0           10060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5         X         100.00         151.04         42.27         1.30         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         100.00         151.04         42.27         1.30         110.0         ± 9.6 %           10060- CAA         Mbps)         Y         100.00         151.04         42.27         1.30         110.0         ± 9.6 %           X         100.00         148.25         40.54         110.0         110.0	10058- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	6.09	82.30	27.32	6.55	100.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.70	77.25	25.06		100.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	5.08	78.97	26.25		100.0	
Y         1.45         68.46         18.55         110.0           Z         1.49         67.83         18.25         110.0           10060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5         X         100.00         151.04         42.27         1.30         110.0         ± 9.6 %           Mbps)         Y         100.00         148.25         40.54         110.0           Z         100.00         150.26         41.85         110.0	10059- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	×	1.61	69.72	19.57	0.61	110.0	± 9.6 %
Z         1.49         67.83         18.25         110.0           10060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)         X         100.00         151.04         42.27         1.30         110.0         ± 9.6 %           Mbps)         Y         100.00         148.25         40.54         110.0           Z         100.00         150.26         41.85         110.0			Y	1.45	68.46	18.55		110.0	
10060- CAA         IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)         X         100.00         151.04         42.27         1.30         110.0         ± 9.6 %             Y         100.00         148.25         40.54         110.0         ± 9.6 %            Z         100.00         148.25         40.54         110.0         110.0			Z	1.49	67.83	18.25		110.0	
Y         100.00         148.25         40.54         110.0           Z         100.00         150.26         41.85         110.0	10060- CAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	151.04	42.27	1.30	110.0	± 9.6 %
Z 100.00 150.26 41.85 110.0			Y	100.00	148.25	40.54		110.0	
			Z	100.00	150.26	41.85		110.0	

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3940

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	-136.3
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