## Annex Z. Calibration Certificate for Probe and Dipole

The SPEAG calibration certificates are shown as follows.



# CALIBRATION LABORATORY

Add: No.52 Huan Yuan Bei Road, Haidian District, Beijing, 100191, Cf



Tel: ÷86-10-62304633-2079 E-mail: cttl@chinanl.com

Fax: +86-10-62304633-2504 http://www.chinattl.cn

Certificate No:

Z21-60279

### CALIBRATION CERTIFICATE

Object D750V3 - SN: 1013

**B.V.ADT** 

Calibration Procedure(s)

Client

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date: August 31, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Power sensor NRP8S	104291	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Reference Probe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE3	SN 536	06-Nov-20(CTTL-SPEAG,No.Z20-60452)	Nov-21
Secondary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzer E5071C	MY46110673	14-Jan-21 (CTTL, No.J21X00232)	Jan-22

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	<b>基</b>
Reviewed by:	Lin Hao	SAR Test Engineer	林粉
Approved by:	Qi Dianyuan	SAR Project Leader	-20

Issued: September 6, 2021

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

Certificate No: Z21-60279

Page 1 of 6

Add: No.52 HuanYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORMx,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, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

### Additional Documentation:

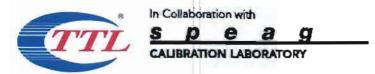
e) DASY4/5 System Handbook

### Methods Applied and Interpretation of Parameters:

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

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

Certificate No: Z21-60279 Page 2 of 6



Add: No.52 HuanYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

### **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22 0 °C	42.0	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.8 ± 6 %	0.90 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.56 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.41 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.62 W/kg ± 18.7 % (k=2)

Certificate No: Z21-60279 Page 3 of 6

Add: No.52 Huan Yuan Bei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### Appendix (Additional assessments outside the scope of CNAS L0570)

### Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.6Ω+ 0.26μΩ	
Return Loss	- 29.2dB	

### General Antenna Parameters and Design

Electrical Delay (one direction) 0.941 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	

Certificate No: Z21-60279 Page 4 of 6

Add: No.52 Huan Yuan Bei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 E-mail: ettl@chinattl.com http://www.chinattl.en

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

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1013

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: f = 750 MHz;  $\sigma = 0.895 \text{ S/m}$ ;  $\varepsilon_r = 41.82$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY5 Configuration:

 Probe: EX3DV4 - SN7517; ConvF(9.81, 9.81, 9.81) @ 750 MHz; Calibrated: 2021-02-03

Date: 08.31.2021

- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn536; Calibrated: 2020-11-06
- Phantom: MFP\_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DA\$Y52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

### Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 55.83 V/m; Power Drift = -0.01 dB

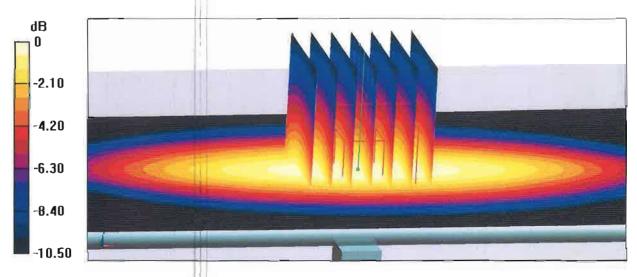
Peak SAR (extrapolated) = 3,36 W/kg

SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.41 W/kg

Smallest distance from peaks to all points 3 dB below = 18.6 mm

Ratio of SAR at M2 to SAR at M1 = 64.1%

Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 2.92 W/kg = 4.65 dBW/kg

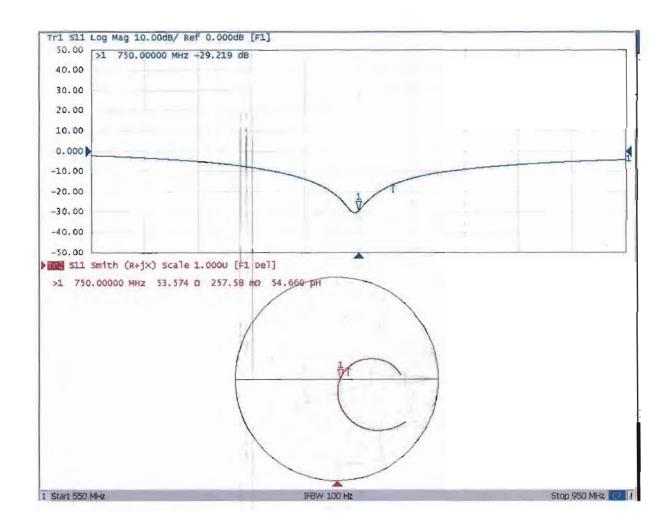
Certificate No: Z21-60279 Page 5 of 6



Add: No.52 HuanYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504

Tel: +86-10-62304633-2079 Fax: +86-10-62304633-25
E-mail: ettl@chinattl.com http://www.chinattl.cn

### Impedance Measurement Plot for Head TSL





# CALIBRATION LABORATORY

http://www.chinattl.cn

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, Chi Fax: +86-10-62304633-2504



Client

**B.V.ADT** 

Certificate No:

Z21-60280

### **CALIBRATION CERTIFICATE**

Tel: +86-10-62304633-2079

E-mail: cttl@chinattl.com

Object D835V2 - SN: 4d121

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

August 31, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Power sensor NRP8S	104291	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Reference Probe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE3	SN 536	06-Nov-20(CTTL-SPEAG,No.Z20-60452)	Nov-21
Secondary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzer E5071C	MY46110673	14-Jan-21 (CTTL, No.J21X00232)	Jan-22

Name Function Calibrated by: Zhao Jing SAR Test Engineer Reviewed by: Lin Hao SAR Test Engineer

SAR Project Leader

Issued: September 6, 2021

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

Qi Dianyuan

Certificate No: Z21-60280

Approved by:

Page 1 of 6

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel; +86-10-62304633-2079 Fax; +86-10-62304633-2504 http://www.chinattl.cn

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORMx,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, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

### **Additional Documentation:**

e) DASY4/5 System Handbook

### Methods Applied and Interpretation of Parameters:

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

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

Certificate No: Z21-60280 Page 2 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 E-mail: cttl@chinattl.com Fax: +86-10-62304633-2504 http://www.chinattl.cn

### **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41 5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.7 ± 6 %	0.88 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		_

### SAR result with Head TSL

SAR averaged over 1 $cm^3$ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.36 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.58 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.53 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.19 W/kg ± 18.7 % (k=2)

Certificate No: Z21-60280 Page 3 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 E-mail: ettl@chinattl.com

Fax: +86-10-62304633-2504 http://www.chinattl.cn

### Appendix (Additional assessments outside the scope of CNAS L0570)

### Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.4Ω- 3.55jΩ	
Return Loss	- 28.5dB	

### General Antenna Parameters and Design

Electrical Delay (one direction)	1.301 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 semingid 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		1	SPEAG

Certificate No: Z21-60280

Report No.: SFBFLF-WTW-P21123600A

Page 4 of 6

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### DASY5 Validation Report for Head TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: f = 835 MHz;  $\sigma = 0.884$  S/m;  $\varepsilon_r = 41.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY5 Configuration:

 Probe: EX3DV4 - SN7517; ConvF(9.81, 9.81, 9.81) @ 835 MHz; Calibrated: 2021-02-03

Date: 08.31.2021

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn536; Calibrated: 2020-11-06

Phantom: MFP\_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062

 Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

### Dipole Calibration/Zoom Scap (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 58.83 V/m; Power Drift = 0.00 dB

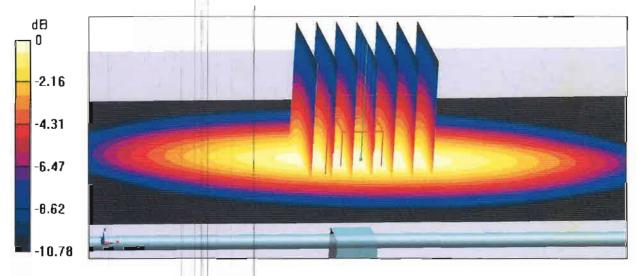
Peak SAR (extrapolated) = 3.72 W/kg

SAR(1 g) = 2.36 W/kg; SAR(10 g) = 1.53 W/kg

Smallest distance from peaks to all points 3 dB below = 18.6 mm

Ratio of SAR at M2 to SAR at M1 = 63.7%

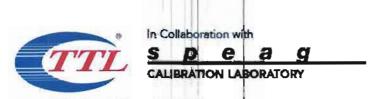
Maximum value of SAR (measured) = 3.24 W/kg



0 dB = 3.24 W/kg = 5.11 dBW/kg

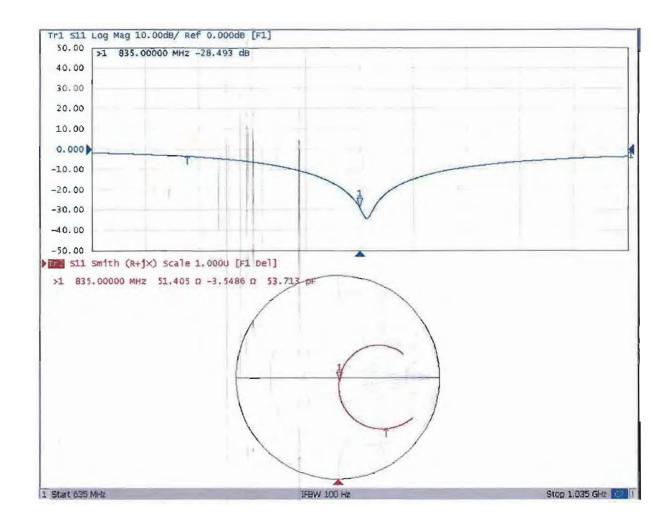
Certificate No: Z21-60280

Page 5 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### Impedance Measurement Plot for Head TSL





## s p e a g

### CALIBRATION LABORATORY

Add: No.52 Hua YuanBei Road, Haidian District, Beijing, 100191, Ch
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: ettl@chinattl.com http://www.chinattl.cn





Client

B.V.ADT

Certificate No:

Z21-60283

### **CALIBRATION CERTIFICATE**

Object D1750V2 - SN: 1055

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

September 2, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Power sensor NRP8S	104291	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Reference Probe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE4	SN 1556	15-Jan-21(SPEAG,No.DAE4-1556_Jan21)	Jan-22
Secondary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C MY49071430		01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzer E5071C	MY46110673	14-Jan-21 (CTTL, No.J21X00232)	Jan-22
			1

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	是先
Reviewed by:	Lin Hao	SAR Test Engineer	林光
Approved by:	Qi Dianyuan	SAR Project Leader	an

Issued: September 8, 2021

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

Certificate No: Z21-60283

Page 1 of 6

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORMx,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, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

### Additional Documentation:

e) DASY4/5 System Handbook

### Methods Applied and Interpretation of Parameters:

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

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

Certificate No: Z21-60283 Page 2 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1750 MHz ± 1 MHz	

### **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.1	1.37 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.4 ± 6 %	1.36 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	II.
SAR measured	250 mW input power	8.90 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	35.8 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	4.64 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	18.6 W/kg ± 18.7 % (k=2)

Certificate No: Z21-60283 Page 3 of 6

Add: No.52 Hua Yuan Bei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 E-mail: cttl@chinattl.com http://www.chinattl.cn

### Appendix (Additional assessments outside the scope of CNAS L0570)

### Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.7Ω- 1.56jΩ
Return Loss	- 33.8 dB

### General Antenna Parameters and Design

Electrical Delay (one direction)		1.123 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

Certificate No: Z21-60283

Report No.: SFBFLF-WTW-P21123600A

Page 4 of 6

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

### DASY5 Validation Report for Head TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1750 MHz;  $\sigma = 1.364 \text{ S/m}$ ;  $\varepsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY5 Configuration:

 Probe: EX3DV4 - SN7517; ConvF(8.22, 8.22, 8.22) @ 1750 MHz; Calibrated: 2021-02-03

Date: 09.02.2021

- Sensor-Surface: 1.4mm<sub>i</sub> (Mechanical Surface Detection)
- Electronics: DAE4 Sn | 556; Calibrated: 2021-01-15
- Phantom: MFP\_V5.10 (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

### System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.84 V/m | Power Drift = 0.00 dB

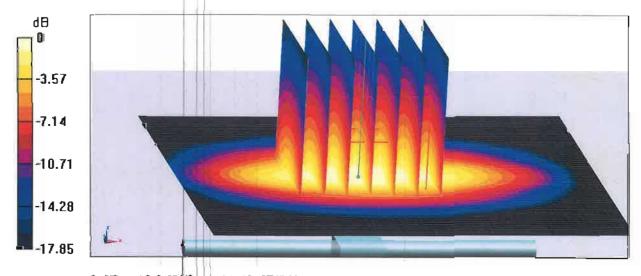
Peak SAR (extrapolated) = 1710 W/kg

SAR(1 g) = 8.9 W/kg; SAR(10 g) = 4.64 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 52.6%

Maximum value of SAR (measured) = 13.9 W/kg



0 dB = 13.9 W/kg = 11.43 dBW/kg

Certificate No: Z21-60283

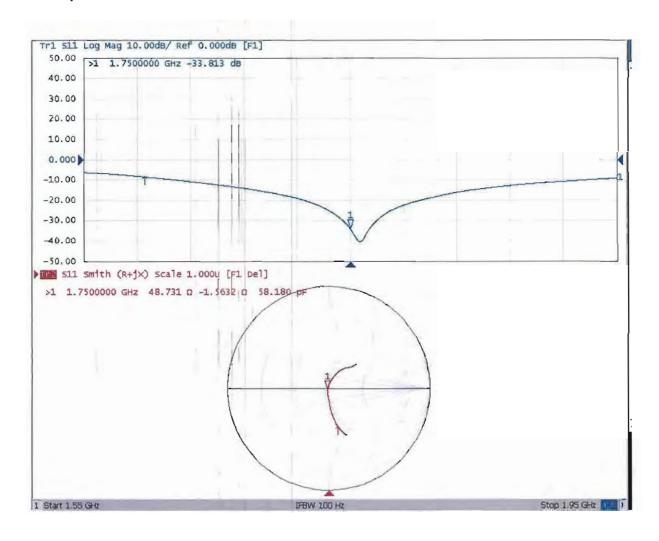
Page 5 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 E-mail: cttl@chinattl.com http://www.chinattl.cn

### Impedance Measurement Plot for Head TSL



Certificate No: Z21-60283 Page 6 of 6

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





C

S

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

Accreditation No.: SCS 0108

Certificate No: D1900V2-5d036\_Jan21

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

**B.V. ADT (Auden)** 

CALIBRATION CERTIFICATE

Object D1900V2 - SN:5d036

Calibration procedure(s) QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date: January 22, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 7349	28-Dec-20 (No. EX3-7349_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	S. Koth
Approved by:	Katja Pokovic	Technical Manager	aces

Issued: January 25, 2021

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

Certificate No: D1900V2-5d036\_Jan21

Page 1 of 6

### **Calibration Laboratory of**

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

### Glossary:

TSL

tissue simulating liquid

ConvF

sensitivity in TSL / NORM x,y,z

N/A

not applicable or not measured

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

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### **Additional Documentation:**

e) DASY4/5 System Handbook

### **Methods Applied and Interpretation of Parameters:**

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

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

Certificate No: D1900V2-5d036\_Jan21 Page 2 of 6

### **Measurement Conditions**

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

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.2 ± 6 %	1.39 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	****	J-4-1

### SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	10.0 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	40.4 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.23 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.1 W/kg ± 16.5 % (k=2)

Page 3 of 6 Certificate No: D1900V2-5d036\_Jan21

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

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

Impedance, transformed to feed point	$50.4~\Omega + 5.3~\mathrm{j}\Omega$	
Return Loss	- 25.5 dB	

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

	Y
Electrical Delay (one direction)	1.195 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

Certificate No: D1900V2-5d036\_Jan21

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

Date: 22.01.2021

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d036

Communication System: UID 0 - CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz;  $\sigma = 1.39 \text{ S/m}$ ;  $\varepsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

### DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(8.43, 8.43, 8.43) @ 1900 MHz; Calibrated: 28.12.2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.8 V/m; Power Drift = 0.03 dB

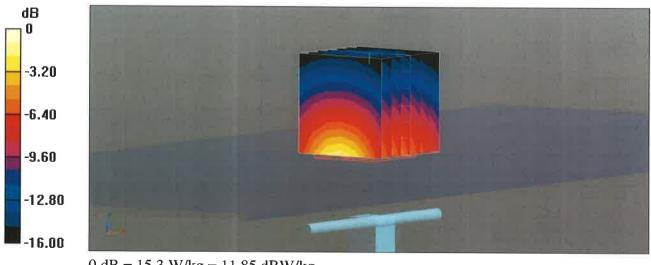
Peak SAR (extrapolated) = 18.4 W/kg

### SAR(1 g) = 10.0 W/kg; SAR(10 g) = 5.23 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 55.3%

Maximum value of SAR (measured) = 15.3 W/kg

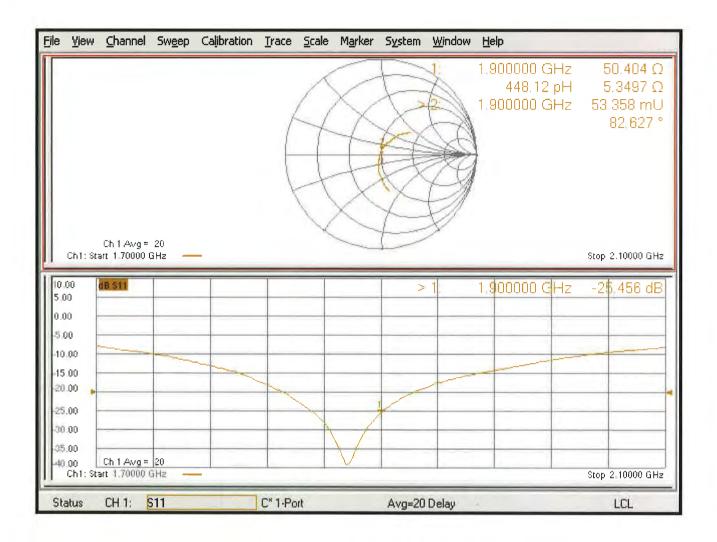


0 dB = 15.3 W/kg = 11.85 dBW/kg

Certificate No: D1900V2-5d036\_Jan21

Page 5 of 6

### **Impedance Measurement Plot for Head TSL**

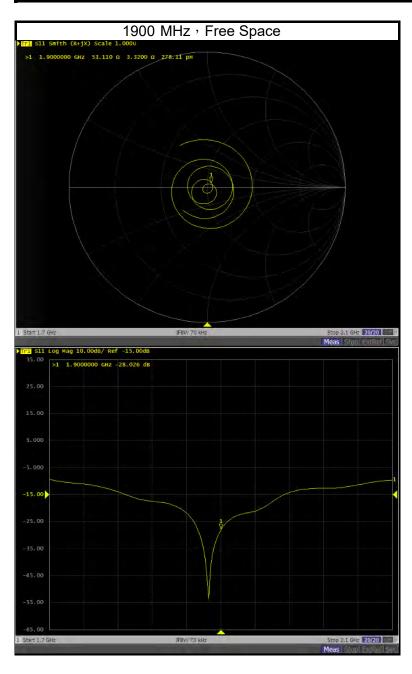




# Annual Confirmation of SAR Reference Dipole

Model: D1900V2 S/N: 5d036 Measurement Date: 2022/1/21

Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	50.404	53.110	2.71	±5Ω	PASS
1900	Free Space	Imaginary Impedance	0.5336	3.3200	2.79	±5Ω	PASS
		Return Loss	-25.456	-28.026	10.10%	±20%	PASS



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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

**B.V. ADT (Auden)** 

Certificate No: D2300V2-1004\_Jan21

### **CALIBRATION CERTIFICATE**

Object

D2300V2 - SN:1004

Calibration procedure(s)

QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

January 22, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 7349	28-Dec-20 (No. EX3-7349_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	desta
Approved by:	Katja Pokovic	Technical Manager	BUSC

Issued: January 25, 2021

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

Certificate No: D2300V2-1004\_Jan21

Page 1 of 6

### **Calibration Laboratory of**

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





C

S

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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

### Glossary:

TSL

tissue simulating liquid

ConvF N/A sensitivity in TSL / NORM x,y,z 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, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### **Additional Documentation:**

e) DASY4/5 System Handbook

### Methods Applied and Interpretation of Parameters:

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

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

Certificate No: D2300V2-1004\_Jan21

Page 2 of 6

### **Measurement Conditions**

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

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2300 MHz ± 1 MHz	

## **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.5	1.67 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.7 ± 6 %	1.71 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

### SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	12.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	49.2 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.01 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg ± 16.5 % (k=2)

Certificate No: D2300V2-1004\_Jan21

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

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

Impedance, transformed to feed point	48.5 Ω - 3.1 jΩ
Return Loss	- 29.2 dB

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

	Electrical Delay (one direction)	1.164 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**

I Manufactured by	SPEAG
	31 LAG

Certificate No: D2300V2-1004\_Jan21

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

Date: 22.01.2021

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1004

Communication System: UID 0 - CW; Frequency: 2300 MHz

Medium parameters used: f = 2300 MHz;  $\sigma = 1.71 \text{ S/m}$ ;  $\varepsilon_r = 38.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

### DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(7.98, 7.98, 7.98) @ 2300 MHz; Calibrated: 28.12.2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.5 V/m; Power Drift = 0.01 dB

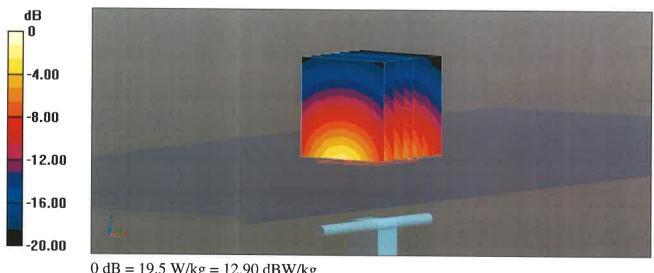
Peak SAR (extrapolated) = 23.0 W/kg

### SAR(1 g) = 12.5 W/kg; SAR(10 g) = 6.01 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 54.8%

Maximum value of SAR (measured) = 19.5 W/kg

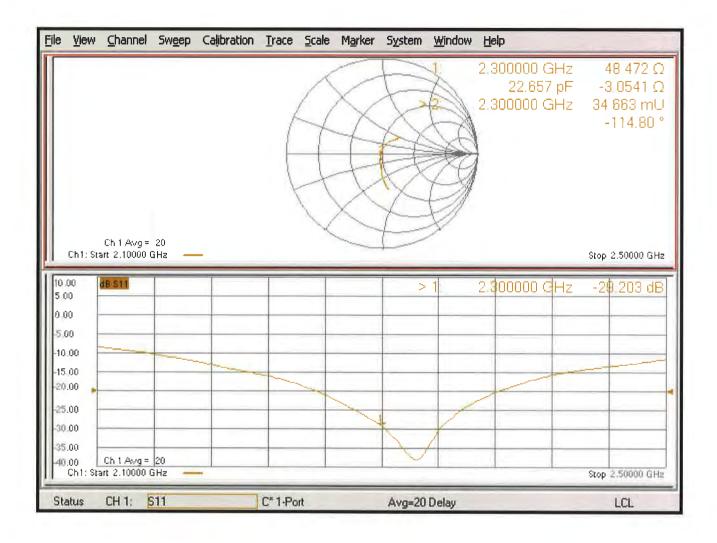


0 dB = 19.5 W/kg = 12.90 dBW/kg

Certificate No: D2300V2-1004\_Jan21

Page 5 of 6

### Impedance Measurement Plot for Head TSL

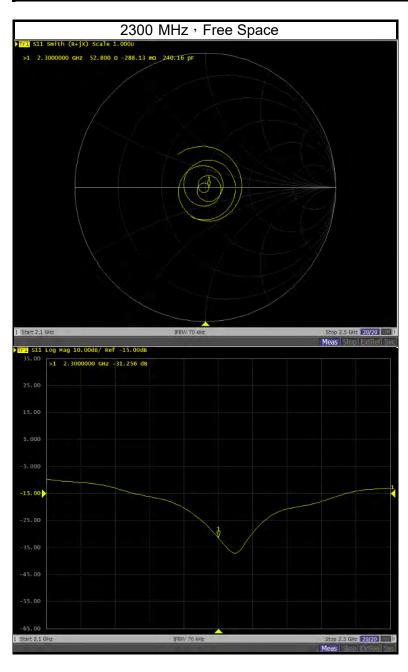




# Annual Confirmation of SAR Reference Dipole

Model: D2300V2 S/N: 1004 Measurement Date: 2022/1/21

Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	48.472	52.800	4.33	±5Ω	PASS
2300	Free Space	Imaginary Impedance	0.3466	-0.2881	-0.63	±5Ω	PASS
		Return Loss	-29.203	-31.256	7.03%	±20%	PASS





# CALIBRATION LABORATORY

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, Chi Fax: +86-10-62304633-2504 http://www.chinattl.cn





Client

**B.V.ADT** 

Certificate No:

Z21-60284

### **CALIBRATION CERTIFICATE**

Tel: +86-10-62304633-2079

E-mail: enl@chinattl.com

Object D2450V2 - SN: 737

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

August 26, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Power sensor NRP8S	104291	23-Sep-20 (CTTL, No.J20X08336)	Sep-21
Reference Probe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE3	SN 536	06-Nov-20(CTTL-SPEAG,No.Z20-60452)	Nov-21
Secondary Standards	ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzer E5071C MY46110673		14-Jan-21 (CTTL, No.J21X00232)	Jan-22

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	tet
Reviewed by:	Lin Hao	SAR Test Engineer	种路
Approved by:	Qi Dianyuan	SAR Project Leader	50-0

Issued: August 31, 2021

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

Certificate No: Z21-60284

Page 1 of 6



# S P E A 9 CALIBRATION LABORATORY

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORMx,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, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

### Additional Documentation:

e) DASY4/5 System Handbook

### Methods Applied and Interpretation of Parameters:

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

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

Certificate No: Z21-60284

Page 2 of 6



## s p e a g

### CALIBRATION LABORATORY

Add: No.52 Hua Yuan Bei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.com

### **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
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	40.0 ± 6 %	1.77 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.0 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.6 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	5.92 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.9 W/kg ± 18.7 % (k=2)

Certificate No: Z21-60284

Page 3 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

# Appendix (Additional assessments outside the scope of CNAS L0570)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.0Ω+ 4.29jΩ
Return Loss	- 25.0dB

# General Antenna Parameters and Design

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 semingid 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		
	1		
T.	1		

Certificate No: Z21-60284 Page 4 of 6



In Collaboration with

# S P E A G CALIBRATION LABORATORY

Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

## DASY5 Validation Report for Head TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz;  $\sigma = 1.772 \text{ S/m}$ ;  $\varepsilon_r = 40.04$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY5 Configuration:

 Probe: EX3DV4 - SN7517; ConvF(7.34, 7.34, 7.34) @ 2450 MHz; Calibrated: 2021-02-03

Date: 08.26.2021

• Sensor-Surface: 1.4mm|(Mechanical Surface Detection)

• Electronics: DAE3 Sn536; Calibrated: 2020-11-06

Phantom: MFP\_V5.1 C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062

 Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Dipole Calibration/Zoom Scan** (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 108.5 V/m; Power Drift = -0.01 dB

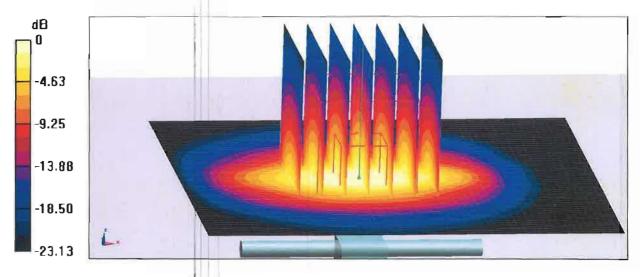
Peak SAR (extrapolated) = 27.8 W/kg

SAR(1 g) = 13 W/kg; SAR(10 g) = 5.92 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46.7%

Maximum value of SAR (measured) = 22.3 W/kg



0 dB = 22.3 W/kg = 13.48 dBW/kg

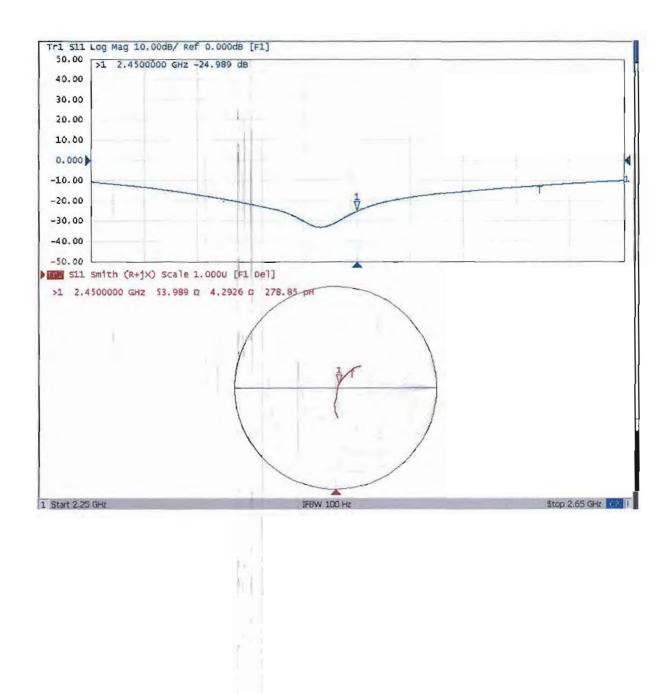
Certificate No: Z21-60284

Page 5 of 6



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504 http://www.chinattl.cn

# Impedance Measurement Plot for Head TSL



Certificate No: Z21-60284 Page 6 of 6

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

B.V.ADT (Auden)

Certificate No: D2600V2-1020\_Aug21

# CALIBRATION CERTIFICATE

Object

D2600V2 - SN:1020

Calibration procedure(s)

QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

August 17, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

ID#	Cal Date (Certificate No.)	Scheduled Calibration
SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
SN: 103244	09-Apr-21 (No. 217-03291)	Apr-22
SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
SN: BH9394 (20k)	09-Apr-21 (No. 217-03343)	Apr-22
SN: 310982 / 06327	09-Apr-21 (No. 217-03344)	Apr-22
SN: 7349	28-Dec-20 (No. EX3-7349_Dec20)	Dec-21
SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
ID#	Check Date (in house)	Scheduled Check
SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
Name	Function	Signature
Leif Klysner	Laboratory Technician	4 Sel Men
Katja Pokovic	Technical Manager	
	SN: 104778 SN: 103244 SN: 103245 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 7349 SN: 601  ID # SN: GB39512475 SN: US37292783 SN: MY41092317 SN: 100972 SN: US41080477  Name Leif Klysner	SN: 104778

Issued: August 27, 2021

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

Certificate No: D2600V2-1020\_Aug21

Page 1 of 6

# Calibration Laboratory of

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

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/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# **Additional Documentation:**

c) DASY 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 source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. 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%.

Certificate No: D2600V2-1020\_Aug21

Report No. : SFBFLF-WTW-P21123600A

Page 2 of 6

# **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz ± 1 MHz	

**Head TSL parameters**The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.4 ± 6 %	2.04 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	4-94	

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.8 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.6 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.52 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.7 W/kg ± 16.5 % (k=2)

Certificate No: D2600V2-1020\_Aug21

Page 3 of 6

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

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

Impedance, transformed to feed point	47.8 Ω - 4.9 jΩ
Return Loss	- 25.2 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

Certificate No: D2600V2-1020\_Aug21 Page 4 of 6

# **DASY5 Validation Report for Head TSL**

Date: 17.08.2021

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1020** 

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz;  $\sigma = 2.04$  S/m;  $\varepsilon_r = 37.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

# DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(7.84, 7.84, 7.84) @ 2600 MHz; Calibrated: 28.12.2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 119.9 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 29.7 W/kg

# SAR(1 g) = 14.8 W/kg; SAR(10 g) = 6.52 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 49.8%

Maximum value of SAR (measured) = 24.5 W/kg

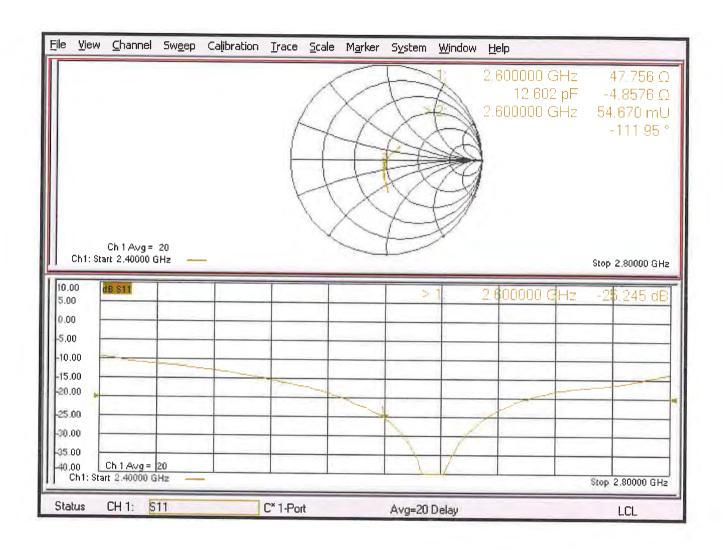


0 dB = 24.5 W/kg = 13.89 dBW/kg

Certificate No: D2600V2-1020\_Aug21

Page 5 of 6

# Impedance Measurement Plot for Head TSL



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





S Schweizerischer Kalibrierdienst
Service suisse d'étalonnage
Servizio svizzero di taratura

Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

**B.V. ADT (Auden)** 

Certificate No: D3500V2-1007\_Jan21

# **CALIBRATION CERTIFICATE**

Object D3500V2 - SN:1007

Calibration procedure(s) QA CAL-22.v5

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date: January 20, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 3503	30-Dec-20 (No. EX3-3503_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	Y Va
Approved by:	Katja Pokovic	Technical Manager	Mari
,			secret.

Issued: January 25, 2021

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

Certificate No: D3500V2-1007\_Jan21

Page 1 of 6

# **Calibration Laboratory of**

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





S Schweizerischer Kalibrierdienst Service suisse d'étalonnage

C Service suisse d'étaionnage Servizio svizzero di taratura S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

## Glossary:

**TSL** 

tissue simulating liquid

ConvF

sensitivity in TSL / NORM x,y,z

N/A not applicable or not measured

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

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# **Additional Documentation:**

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

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

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

Certificate No: D3500V2-1007\_Jan21

Page 2 of 6

# **Measurement Conditions**

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

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4  mm, dz = 1.4  mm	Graded Ratio = 1.4 (Z direction)
Frequency	3500 MHz ± 1 MHz	

# **Head TSL parameters**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.9	2.91 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.4 ± 6 %	2.88 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	<u> 504</u>	

# **SAR** result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.56 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	65.6 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	2.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg ± 19.5 % (k=2)

Certificate No: D3500V2-1007\_Jan21

Page 3 of 6

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

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

Impedance, transformed to feed point	53.0 Ω - 5.4 jΩ
Return Loss	- 24.4 dB

# **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.135 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

Certificate No: D3500V2-1007\_Jan21 Page 4 of 6

# **DASY5 Validation Report for Head TSL**

Date: 20.01.2021

Test Laboratory: SPEAG, Zurich, Switzerland

## DUT: Dipole 3500 MHz; Type: D3500V2; Serial: D3500V2 - SN:1007

Communication System: UID 0 - CW; Frequency: 3500 MHz

Medium parameters used: f = 3500 MHz;  $\sigma = 2.88 \text{ S/m}$ ;  $\varepsilon_r = 37.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

## **DASY52** Configuration:

• Probe: EX3DV4 - SN3503; ConvF(7.91, 7.91, 7.91) @ 3500 MHz; Calibrated: 30.12.2020

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn601; Calibrated: 02.11.2020

• Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

• DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

# Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=3500MHz/Zoom Scan,

dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 72.81 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.8 W/kg

# SAR(1 g) = 6.56 W/kg; SAR(10 g) = 2.46 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 75.1%

Maximum value of SAR (measured) = 12.5 W/kg

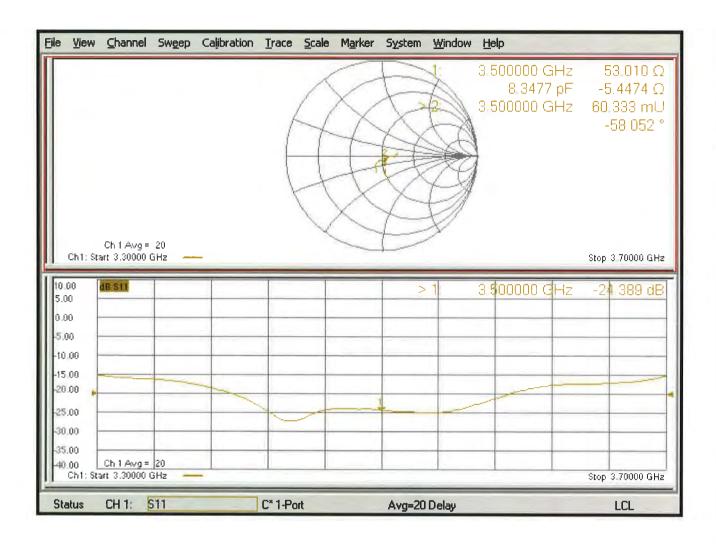


0 dB = 12.5 W/kg = 10.97 dBW/kg

Certificate No: D3500V2-1007\_Jan21

Page 5 of 6

# Impedance Measurement Plot for Head TSL

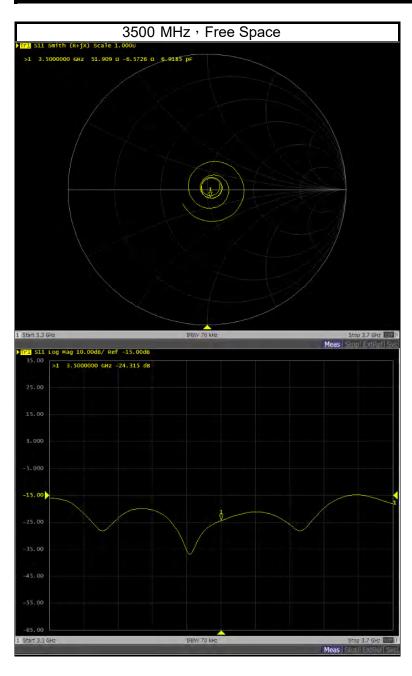




# Annual Confirmation of SAR Reference Dipole

Model: D3500V2 S/N: 1007 Measurement Date: 2022/1/19

Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	53.010	51.909	-1.10	±5Ω	PASS
3500	Free Space	Imaginary Impedance	-5.0000	-6.5726	-1.57	±5Ω	PASS
		Return Loss	-24.389	-24.315	-0.30%	±20%	PASS



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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Client

B.V. ADT (Auden)

Certificate No: D3700V2-1017\_Aug21

# CALIBRATION CERTIFICATE

Object D3700V2 - SN:1017

Calibration procedure(s) QA CAL-22.v6

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date: August 19, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

ID #	Cal Date (Certificate No.)	Scheduled Calibration
SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
SN: 103244	09-Apr-21 (No. 217-03291)	Apr-22
SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
SN: BH9394 (20k)	09-Apr-21 (No. 217-03343)	Apr-22
SN: 310982 / 06327	09-Apr-21 (No. 217-03344)	Apr-22
SN: 3503	30-Dec-20 (No. EX3-3503_Dec20)	Dec-21
SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
ID#	Check Date (in house)	Scheduled Check
SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
Name	Function	Signature
Jeton Kastrati	Laboratory Technician	924
Katja Pokovic	Technical Manager	des
	SN: 104778 SN: 103244 SN: 103245 SN: 8H9394 (20k) SN: 310982 / 06327 SN: 3503 SN: 601  ID # SN: GB39512475 SN: US37292783 SN: MY41092317 SN: 100972 SN: US41080477  Name Jeton Kastrati	SN: 104778

Issued: August 19, 2021

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

Certificate No: D3700V2-1017\_Aug21

Report No.: SFBFLF-WTW-P21123600A

# Calibration Laboratory of

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





S Schwelzerlscher Kallbrierdienst

Service sulsse d'étalonnage
Servizio svizzero di taratura

Swiss Calibration Service

Accreditation No.: SCS 0108

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

# Glossary:

TSL

tissue simulating liquid

ConvF N/A sensitivity in TSL / NORM x,y,z

not applicable or not measured

# Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation:

c) DASY 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 source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. 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%.

Certificate No: D3700V2-1017\_Aug21

Report No.: SFBFLF-WTW-P21123600A

# **Measurement Conditions**

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4  mm, dz = 1.4  mm	Graded Ratio ≈ 1.4 (Z direction)
Frequency	3700 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.7	3.12 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.7 ± 6 %	3.12 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.67 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	66.7 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	2.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg ± 19.5 % (k=2)

Certificate No: D3700V2-1017\_Aug21

Page 3 of 6

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

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.0 Ω - 7.5 jΩ
Return Loss	- 22.4 dB

# General Antenna Parameters and Design

Electrical Delay (one direction)	1.137 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

Certificate No: D3700V2-1017\_Aug21 Page 4 of 6

# **DASY5 Validation Report for Head TSL**

Date: 19.08.2021

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: D3700V2 - SN:1017

Communication System: UID 0 - CW; Frequency: 3700 MHz

Medium parameters used: f = 3700 MHz;  $\sigma = 3.12 \text{ S/m}$ ;  $\varepsilon_r = 37.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

Probe: EX3DV4 - SN3503; ConvF(7.73, 7.73, 7.73) @ 3700 MHz; Calibrated: 30.12.2020

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

• DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

# Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=3700MHz/Zoom Scan,

dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 70.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.1 W/kg

# SAR(1 g) = 6.67 W/kg; SAR(10 g) = 2.46 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 73.5%

Maximum value of SAR (measured) = 13.0 W/kg

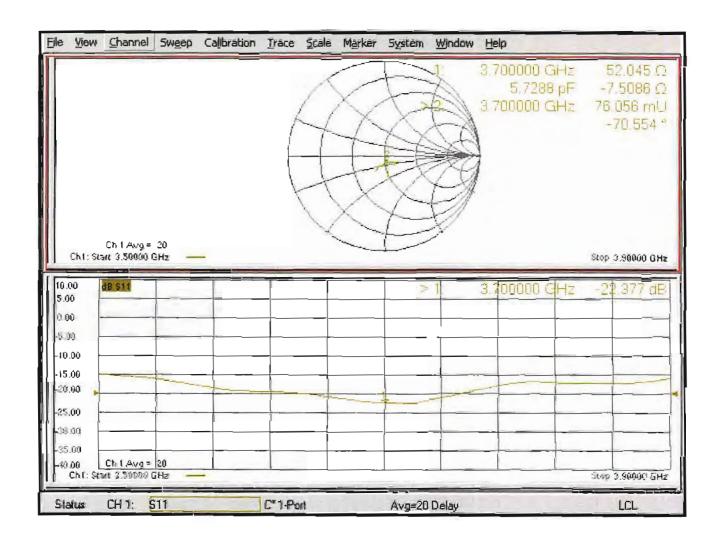


0 dB = 13.0 W/kg = 11.15 dBW/kg

Certificate No: D3700V2-1017\_Aug21

Page 5 of 6

# Impedance Measurement Plot for Head TSL



# **Calibration Laboratory of**

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

**B.V. ADT (Auden)** 

Certificate No: D3900V2-1020\_May21

# **CALIBRATION CERTIFICATE**

Object

D3900V2 - SN:1020

Calibration procedure(s)

QA CAL-22.v6

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date:

May 21, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
Power sensor NRP-Z91	SN: 103244	09-Apr-21 (No. 217-03291)	Apr-22
Power sensor NRP-Z91	SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
Reference 20 dB Attenuator	SN: BH9394 (20k)	09-Apr-21 (No. 217-03343)	Apr-22
Type-N mismatch combination	SN: 310982 / 06327	09-Apr-21 (No. 217-03344)	Apr-22
Reference Probe EX3DV4	SN: 3503	30-Dec-20 (No. EX3-3503_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
	10		
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	1 41
			d. 62
Approved by:	Katja Pokovic	Technical Manager	1000
	THE REAL PROPERTY.		de de

Issued: May 21, 2021

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

Certificate No: D3900V2-1020\_May21

Report No.: SFBFLF-WTW-P21123600A

Page 1 of 7

# **Calibration Laboratory of**

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





S Schweizerischer Kalibrierdienst
Service suisse d'étalonnage
Servizio svizzero di taratura

Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

# Glossary:

TSL tissue simulating liquid

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

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### **Additional Documentation:**

e) DASY4/5 System Handbook

#### **Methods Applied and Interpretation of Parameters:**

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

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

Certificate No: D3900V2-1020\_May21 Page 2 of 7

# **Measurement Conditions**

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

DASY Version	DASY5	V52.10.4
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	3900 MHz ± 1 MHz 4100 MHz ± 1 MHz	

# Head TSL parameters at 3900 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.5	3.32 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	36.6 ± 6 %	3.25 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		700

# SAR result with Head TSL at 3900 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.10 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	70.9 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	2.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.5 W/kg ± 19.5 % (k=2)

# Head TSL parameters at 4100 MHz

The following parameters and calculations were applied

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.2	3.53 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	36.4 ± 6 %	3.42 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		4-04

# SAR result with Head TSL at 4100 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.93 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	69.3 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	2.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg ± 19.5 % (k=2)

Certificate No: D3900V2-1020\_May21 Page 3 of 7

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

#### Antenna Parameters with Head TSL at 3900 MHz

Impedance, transformed to feed point	47.7 Ω - 3.0 jΩ
Return Loss	- 28.4 dB

#### Antenna Parameters with Head TSL at 4100 MHz

Impedance, transformed to feed point	56.8 Ω + 0.0 jΩ		
Return Loss	- 23.9 dB		

# **General Antenna Parameters and Design**

*	
Electrical Delay (one direction)	1.104 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
-----------------	-------

Certificate No: D3900V2-1020\_May21

# **DASY5 Validation Report for Head TSL**

Date: 21.05.2021

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole 3900 MHz; Type: D3900V2; Serial: D3900V2 - SN:1020

Communication System: UID 0 - CW; Frequency: 3900 MHz, Frequency: 4100 MHz Medium parameters used: f = 3900 MHz;  $\sigma$  = 3.25 S/m;  $\epsilon_r$  = 36.6;  $\rho$  = 1000 kg/m³ Medium parameters used: f = 4100 MHz;  $\sigma$  = 3.42 S/m;  $\epsilon_r$  = 36.4;  $\rho$  = 1000 kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### **DASY52** Configuration:

Probe: EX3DV4 - SN3503; ConvF(7.39, 7.39, 7.39) @ 3900 MHz, ConvF(7.26, 7.26, 7.26) @ 4100 MHz; Calibrated: 30.12.2020

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn601; Calibrated: 02.11.2020

• Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

# Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=3900MHz/Zoom Scan,

dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 74.44 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 20.2 W/kg

#### SAR(1 g) = 7.10 W/kg; SAR(10 g) = 2.46 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 73.3%

Maximum value of SAR (measured) = 14.1 W/kg

## Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=4100MHz/Zoom Scan,

dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 72.16 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 19.6 W/kg

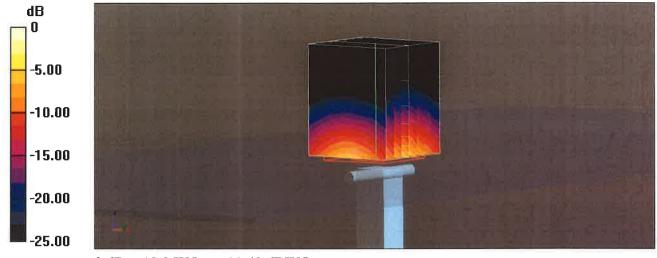
# SAR(1 g) = 6.93 W/kg; SAR(10 g) = 2.40 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 73.2%

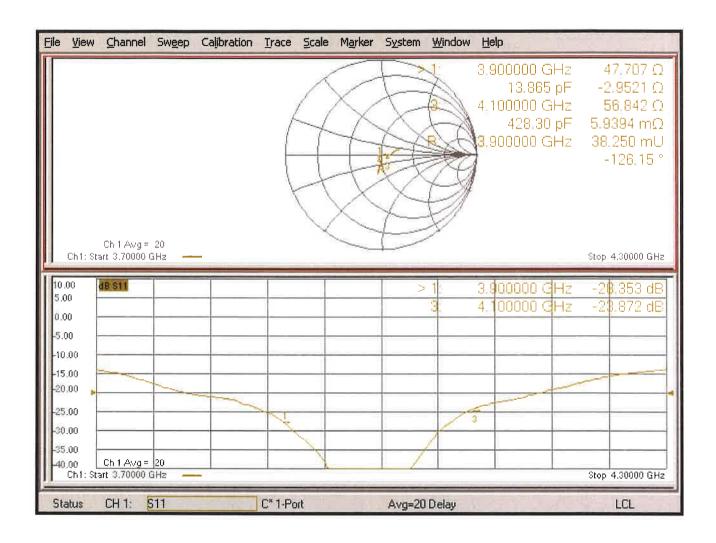
Maximum value of SAR (measured) = 13.9 W/kg

Certificate No: D3900V2-1020\_May21



0 dB = 13.9 W/kg = 11.42 dBW/kg

# Impedance Measurement Plot for Head TSL

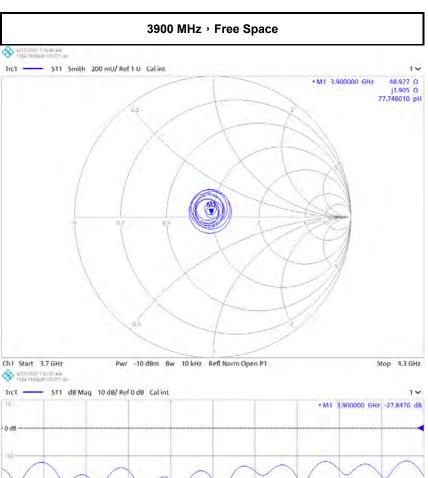




# **Annual Confirmation of SAR Reference Dipole**

Model: D3900V2 S/N: 1045 Measurement Date: 2022/5/20

Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	47.707	48.927	1.22	±5Ω	PASS
3900	Free Space	Imaginary Impedance	-2.9521	1.9050	4.86	±5Ω	PASS
		Return Loss	-28.353	-27.848	-1.78%	±20%	PASS





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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

**B.V. ADT (Auden)** 

Certificate No: D5GHzV2-1019\_Mar21

# **CALIBRATION CERTIFICATE**

Object D5GHzV2 - SN:1019

Calibration procedure(s) QA CAL-22.v6

Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date:

March 19, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

I .	i contract of the contract of		
Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 3503	30-Dec-20 (No. EX3-3503_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
			^
	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
			(41)
			99
Approved by:	Katja Pokovic	Technical Manager	1000
			el de

Issued: March 19, 2021

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

Certificate No: D5GHzV2-1019\_Mar21

Page 1 of 8

# **Calibration Laboratory of**

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

## Glossary:

TSL tissue simulating liquid

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

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### **Additional Documentation:**

e) DASY4/5 System Handbook

# **Methods Applied and Interpretation of Parameters:**

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

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

Certificate No: D5GHzV2-1019\_Mar21 Page 2 of 8

#### **Measurement Conditions**

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

DASY Version	DASY5	V52.10.4
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	5250 MHz ± 1 MHz 5600 MHz ± 1 MHz 5750 MHz ± 1 MHz	

# **Head TSL parameters at 5250 MHz**

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.71 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.7 ± 6 %	4.51 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

# SAR result with Head TSL at 5250 MHz

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.13 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.6 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.32 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.0 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	34.2 ± 6 %	4.86 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	انمنا	

# 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	8.32 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	82.4 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	2.36 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.3 W/kg ± 19.5 % (k=2)

Certificate No: D5GHzV2-1019\_Mar21

Page 3 of 8

# Head TSL parameters at 5750 MHz The following parameters and calculations were applied.

The following parameters and edicalations were approximately	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.4	5.22 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.0 ± 6 %	5.01 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	<b>88775</b> 2	

# SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.02 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.4 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	22.4 W/kg ± 19.5 % (k=2)

Certificate No: D5GHzV2-1019\_Mar21

Page 4 of 8

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

#### Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	54.1 Ω - 6.4 jΩ	
Return Loss	- 22.7 dB	

# Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	57.6 Ω - 2.5 jΩ	
Return Loss	- 22.6 dB	

## Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	57.9 Ω + 3.1 jΩ	
Return Loss	- 22.1 dB	

# **General Antenna Parameters and Design**

Electrical Delay (one direction)	1,203 ns	
Electrical Delay (one direction)	1.203 118	

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

Certificate No: D5GHzV2-1019\_Mar21

# **DASY5 Validation Report for Head TSL**

Date: 19.03.2021

Test Laboratory: SPEAG, Zurich, Switzerland

# DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1019

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz

Medium parameters used: f = 5250 MHz;  $\sigma = 4.51$  S/m;  $\epsilon_r = 34.7$ ;  $\rho = 1000$  kg/m<sup>3</sup> Medium parameters used: f = 5600 MHz;  $\sigma = 4.86$  S/m;  $\epsilon_r = 34.2$ ;  $\rho = 1000$  kg/m<sup>3</sup> Medium parameters used: f = 5750 MHz;  $\sigma = 5.01$  S/m;  $\epsilon_r = 34$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.5, 5.5, 5.5) @ 5250 MHz, ConvF(5.1, 5.1, 5.1) @ 5600 MHz, ConvF(5.08, 5.08, 5.08) @ 5750 MHz; Calibrated: 30.12.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 02.11.2020
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

# Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan,

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

Reference Value = 79.20 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 27.6 W/kg

# SAR(1 g) = 8.13 W/kg; SAR(10 g) = 2.32 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 70.7%

Maximum value of SAR (measured) = 18.1 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 = 77.00 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 31.0 W/kg

# SAR(1 g) = 8.32 W/kg; SAR(10 g) = 2.36 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 19.6 W/kg

Certificate No: D5GHzV2-1019\_Mar21

Page 6 of 8

## Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan,

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

Reference Value = 74.22 V/m; Power Drift = -0.08 dB

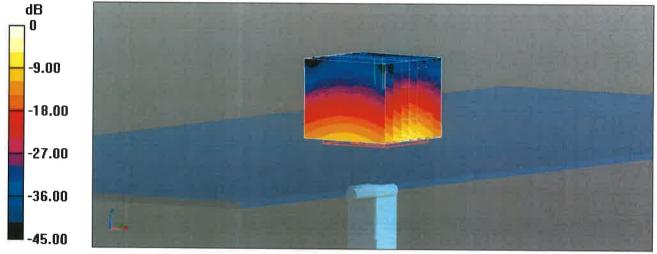
Peak SAR (extrapolated) = 31.6 W/kg

SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

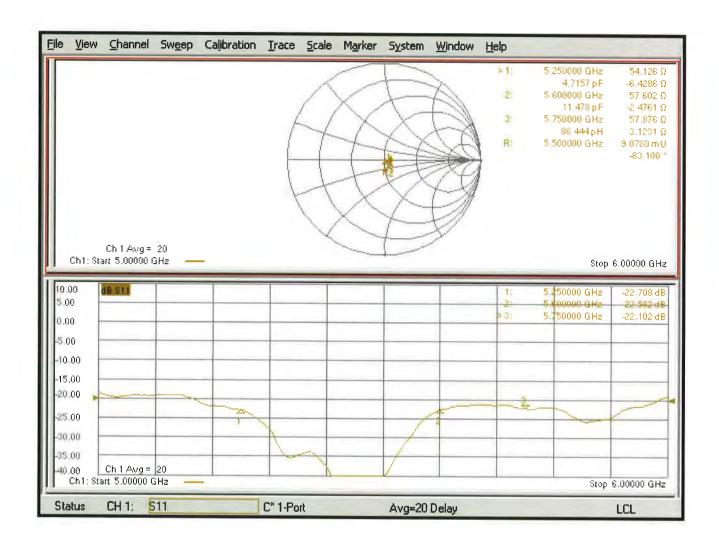
Ratio of SAR at M2 to SAR at M1 = 65%

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.6 W/kg = 12.92 dBW/kg

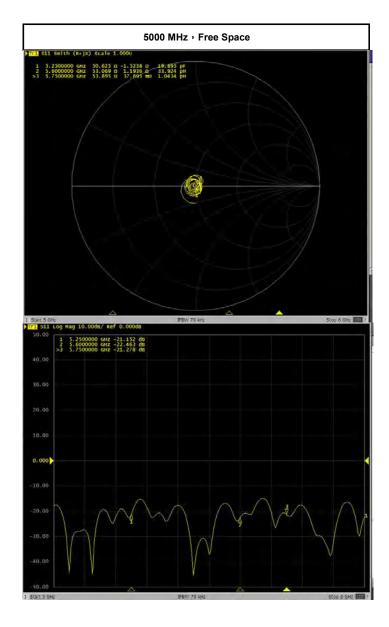
## Impedance Measurement Plot for Head TSL





## **Annual Confirmation of SAR Reference Dipole**

Model:	D5000V2	D5000V2 S/N: 1019 Mea		Measurement	easurement Date :		
Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	54.126	50.625	-3.501	±5Ω	PASS
5250	Free Space	Imaginary Impedance	0.09070	-1.5238	-1.61	±5Ω	PASS
		Return Loss	-22.708	-21.152	-6.85%	±20%	PASS
Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	57.602	53.069	-4.533	±5Ω	PASS
5600	Free Space	Imaginary Impedance	0.0907	1.1936	1.10	±5Ω	PASS
		Return Loss	-22.582	-22.463	-0.53%	±20%	PASS
Frequency (MHz)	Туре	Item	Previous Measurement	Annual Check	Deviation	Accepted Tolerance	Result
		Real Impedance	57.876	53.895	-3.981	±5Ω	PASS
5750	Free Space	Imaginary Impedance	0.0907	0.0377	-0.05	±5Ω	PASS
		Return Loss	-22.102	-21.278	-3.73%	±20%	PASS



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





S

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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of catibration certificates

Client B.V. ADT (Auden)

Certificate No: EX3-7472-Jun21

## CALIBRATION CERTIFICATE

Object EX3DV4 - SN:7472

Calibration procedure(s) QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v6, QA CAL-23.v5, QA

CAL-25.v7

Calibration procedure for dosimetric E-field probes

Calibration date: June 3, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
Power sensor NRP-Z91	SN: 103244	09-Apr-21 (No 217-03291)	Apr-22
Power sensor NRP-Z91	SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
Reference 20 dB Attenuator	SN: CC2552 (20x)	09-Apr-21 (No. 217-03343)	Apr-22
DAE4	SN: 660	23-Dec-20 (No DAE4-660_Dec20)	Dec-21
Reference Probe ES3DV2	SN: 3013	30-Dec-20 (No. ES3-3013_Dec20)	Dec-21
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-20)	In house check, Jun-22
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: 000110210	08-Apr-16 (in house check Jun-20)	In house check: Jun-22
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-20)	In hause check: Jun-22
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21

Calibrated by:

Name
Function
Signature

Jeton Kastrati
Laboratory Technician

Approved by:

Katja Pokovic
Technical Manager

Issued: June 3, 2021

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

Certificate No: EX3-7472-Jun21 Page 1 of 23

## Calibration Laboratory of

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





S Schweizerlscher Kalibrierdlenst
C Service sulsse d'étalonnage
Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossary:

TSL tissue simulating fiquid
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 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. ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide).
   NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty Inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: EX3-7472-Jun21 Page 2 of 23

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7472

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.59	0.49	0.42	± 10.1 %
DCP (mV)B	97.4	93.2	98.8	

Calibration Results for Modulation Response

UID	Communication System Name		Α	В	С	D	VR	Max	Max
			dB	dΒ√μV		dB	mV	dev.	Unc∈
									(k=2)
0	CW	_X	0.00	0.00	1.00	0.00	129.5	± 3.5 %	± 4.7 %
		Υ	0.00	0.00	1.00		140.4		
		Z	0.00	0.00	1.00		145.6		
10352-	Pulse Waveform (200Hz, 10%)	X	20.00	95.53	22.84	10.00	60.0	± 3.2 %	± 9.6 %
AAA		Υ	1.97	63.81	8.93		60.0		
		Z	2.84	67.27	10.89		60.0		
10353-	Pulse Waveform (200Hz, 20%)	X	20.00	108.60	28.23	6.99	80.0	± 2.6 %	± 9.6 %
AAA		Υ	1.07	62.38	7.39		80.0		
		Z	1.88	67.33	10.01		80.0		
10354-	Pulse Waveform (200Hz, 40%)	X	20.00	124.75	34.38	3.98	95.0	± 1.8 %	± 9.6 %
AAA		Υ	0.94	65.40	8.02		95.0		
		Z	12.51	84.49	14.30		95.0		
103 <b>55</b> ~	Pulse Waveform (200Hz, 60%)	X	16.44	160.00	49.60	2.22	120.0	± 1.6 %	± 9.6 %
AAA		Y	20.00	93.37	16.64		120.0		
		Z	20.00	94.85	17.27		120.0		
10387-	QPSK Waveform, 1 MHz	X	2.17	70.84	18.12	1.00	150.0	± 2.3 %	± 9.6 %
AAA		Υ	1.93	69.99	17.06		150.0		
		Z	1.53	65.87	14.49		150.0		
10388-	QPSK Waveform, 10 MHz	X	2.99	73.22	18.82	0.00	150.0	± 1.9 %	± 9.6 %
AAA		Y	2.41	69.95	17.21		150.0		
		Z	2.02	66.67	15.14		150.0		
10396-	64-QAM Waveform, 100 kHz	X	3,13	72.69	20.91	3.01	150.0	± 1.6 %	± 9.6 %
AAA		Υ	2.79	71.84	20.31		150.0		
		Z	2.28	67.78	17.71		150.0		
10399-	64-QAM Waveform, 40 MHz	X	3.81	68.61	17.01	0.00	150.0	± 1.8 %	± 9.6 %
AAA		Y	3.61	67.79	16.45		150.0		
		Z	3.40	66.61	15.52		150.0		
10414-	WLAN CCDF, 64-QAM, 40MHz	X	5.02	66.09	16.14	0.00	150.0	± 2.0 %	± 9.6 %
AAA		Y	4.86	66.03	15.98		150.0		
		2	4.72	65.52	15.45		150.0	1	

Note: For details on UID parameters see Appendix

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%.

Certificate No: EX3-7472-Jun21

<sup>&</sup>lt;sup>1</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

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

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

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:7472

#### **Sensor Model Parameters**

									_
	C1	C2	α	T1	T2	T3	T4	T5	Т6
	fF	fF	V <sup>-1</sup>	ms.V-2	ms.V <sup>-1</sup>	ms	V-3	V <sup>-1</sup>	
X	48.5	369.64	37.24	9.47	0.00	5.09	0.39	0.33	1.01
Y	35.9	271.40	36.52	5.08	0.00	4.95	1.66	0.00	1.01
Z	34.5	256.44	35.29	3.01	0.00	4.98	1.38	0.00	1.01

### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	-96
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

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

Certificate No: EX3-7472-Jun21 Page 4 of 23

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7472

### Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
6	55.0	0.75	19.58	19.58	19.58	0.00	1.00	± 13.3 %
13	55.0	0.75	17.64	17.64	17.64	0.00	1.00	± 13.3 %
450	43.5	0.87	11.47	11.47	11,47	0.16	1.30	± 13.3 %
750	41.9	0.89	10.32	10.32	10.32	0.36	1.00	± 12.0 %
835	41.5	0.90	10.05	10.05	10.05	0.36	0.97	± 12.0 %
900	41.5	0.97	9.91_	9.91	9.91	0.50	0.80	± 12.0 %
1450	40.5	1.20	9.00	9.00	9.00	0.36	0.80	± 12.0 %
1640	40.2	1.31	8.85	8.85	8.85	0.37	0.80	± 12.0 %
1750	40.1	1.37	8.77	8.77	8.77	0.36	0.80	± 12.0 %
1900	40.0	1.40	8.43	8.43	8.43	0.31	0.80	± 12.0 %
2000	40.0	1.40	8.31	8.31	8.31	0.27	0.80	± 12.0 %
2300	39.5	1.67	8.13	8.13	8.13	0.33	0.80	± 12.0 %
2450	39.2	1.80	7.89	7.89	7.89	0.35	0.80	± 12.0 %
2600	39.0	1.96	7.58	7.58	7.58	0.24	1.14	± 12.0 %
3300	38.2	2.71	7.27	7.27	7.27	0.35	1.35	± 13.1 %
3500	37.9	2.91	7.17	7.17	7.17	0.35	1.35	± 13.1 %
3700	37.7	3.12	7.12	7.12	7.12	0.40	1.35	± 13.1 %
3900	37.5	3.32	6.90	6.90	6.90	0.40	1.60	± 13.1 %
4100	37.2	3.53	6.60	6.60	6.60	0.40	1.60	± 13.1 %
4200	37.1	3.63	6,53	6.53	6.53	0.40	1.60	± 13.1 %
4400	36.9	3.84	6.40	6.40	6.40	0.40	1.70	± 13.1 %
4600	36.7	4.04	6.35	6.35	6.35	0.40	1.70	± 13.1 %
4800	36.4	4.25	6.30	6.30	6.30	0.40	1.80	± 13.1 %
4950	36.3	4.40	6.00	6.00	6.00	0.40	1.80	± 13.1 %
5250	35.9	4.71	5.78	5.78	5.78	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.95	4.95	4.95	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.25	5.25	5.25	0.40	1.80	± 13.1 %

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. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

Certificate No: EX3-7472-Jun21

<sup>6</sup> MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

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

the ConvF uncertainty for indicated target tissue parameters.

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.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7472

## Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
6500	34.5	6.07	5.65	5.65	5.65	0.25	2.50	± 18.6 %

<sup>&</sup>lt;sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for OASY 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. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz. Fat 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

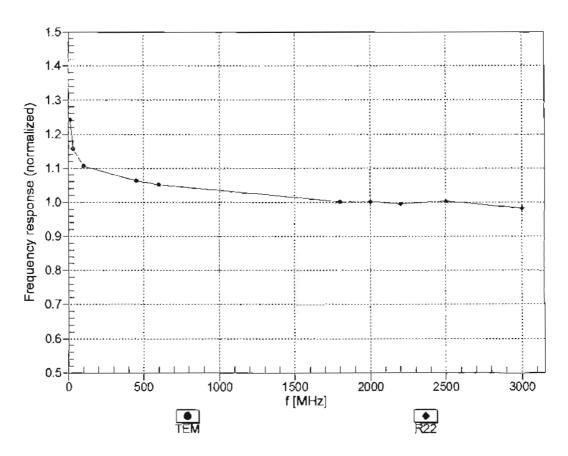
Certificate No: EX3-7472-Jun21 Page 6 of 23

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

the ConvF uncertainty for indicated target tissue parameters.

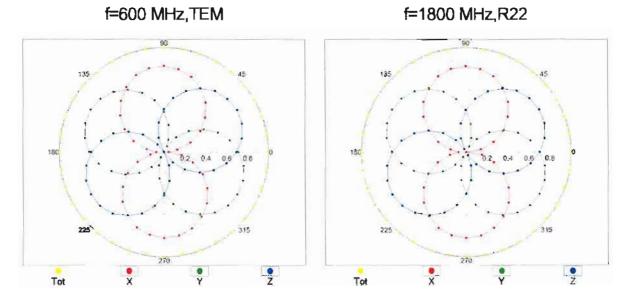
Galpha/Depth are determined during calibration, SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the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

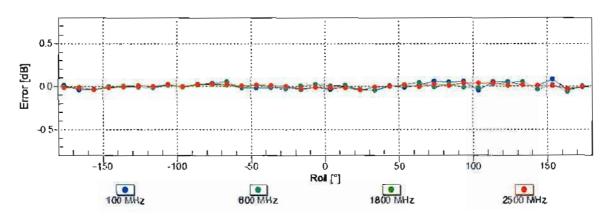
# Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



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

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

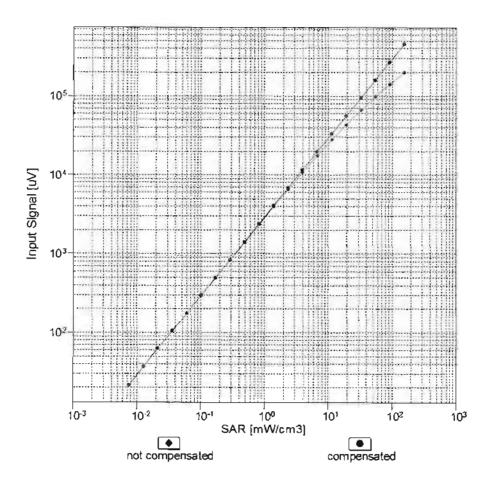


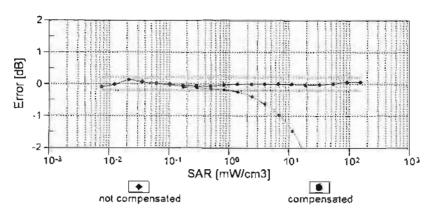


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

EX3DV4-SN:7472

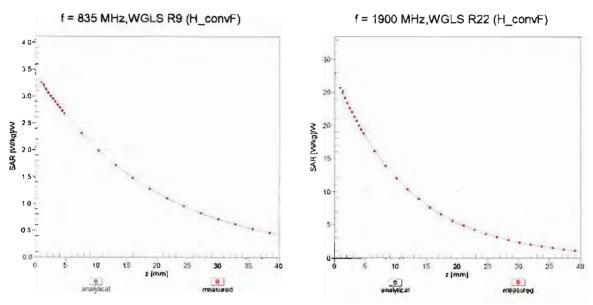
# Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)



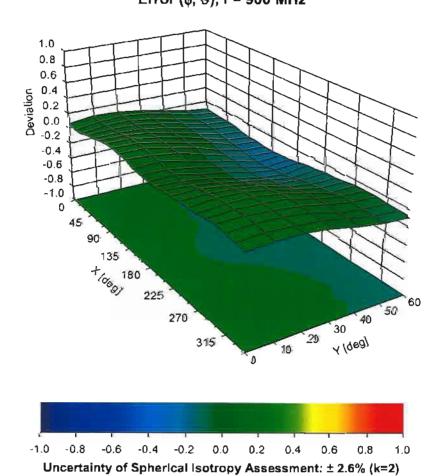


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

## **Conversion Factor Assessment**



Deviation from Isotropy in Liquid Error (φ, θ), f = 900 MHz



Certificate No: EX3-7472-Jun21 Page 10 of 23

## **Appendix: Modulation Calibration Parameters**

aiu	Rev	Communication System Name	Group	PAR	Unc
				(dB)	(k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GM\$K)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9,55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802,15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10,79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1,28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.116 WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAD	IEEE 802.11a/n WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	_	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.12	
10069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6%
10071	CAD	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN		± 9.6 %
10071	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mops)	WLAN	9.62	±9.6%
10073	CAB			9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.30	± 9.6 %
	CAB			10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %

Certificate No: EX3-7472-Jun21

10100   CAC   LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 0FSK)   LTE-FDD   5.67   ± 9.6	40000		COOF FOR /TRNA ADOL/ THA A			
10101   CAB	10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6%
10102   CAB						± 9.6 %
10103   DAC						± 9.6 %
10104   CAE						± 9.6 %
10105   CAE	-					± 9.6 %
10108   CAE						± 9.6 %
10109   CAG		CAE				± 9.6 %
10110   CAG		CAE				± 9.6 %
10111   CAG   LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   LTE-FDD   6.44   19.6     10112   CAG   LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)   LTE-FDD   6.59   19.6     10113   CAG   LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   LTE-FDD   6.62   19.6     10114   CAG   LEEE B02.11n (HT Greenfield, 13.5 Mbps, BPSK)   WILAN   8.10   19.6     10115   CAG   LEEE 802.11n (HT Greenfield, 31.5 Mbps, BPSK)   WILAN   8.10   19.6     10116   CAG   LEEE 802.11n (HT Greenfield, 13.5 Mbps, B4-QAM)   WILAN   8.46   19.6     10117   CAG   LEEE 802.11n (HT Greenfield, 13.5 Mbps, B4-QAM)   WILAN   8.15   19.6     10118   CAG   LEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)   WILAN   8.07   19.6     10119   CAG   LEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)   WILAN   8.07   19.6     10119   CAD   LEEE 802.11n (HT Mixed, 13.5 Mbps, B4-QAM)   WILAN   8.59   19.6     10119   CAD   LEEE 802.11n (HT Mixed, 13.5 Mbps, B4-QAM)   WILAN   8.13   19.6     10140   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   UTE-FDD   6.49   19.6     10141   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   LTE-FDD   6.53   19.6     10142   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QFSK)   LTE-FDD   6.53   19.6     10143   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 26-QAM)   LTE-FDD   6.53   19.6     10144   CAC   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 26-QAM)   LTE-FDD   6.65   19.6     10145   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 64-QAM)   LTE-FDD   6.65   19.6     10146   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 64-QAM)   LTE-FDD   6.65   19.6     10147   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 64-QAM)   LTE-FDD   6.65   19.6     10149   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)   LTE-FDD   6.41   19.6     10150   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   19.6     10151   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   19.6     10152   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   19.6     10153   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.43   19.6     10155   CAE   LTE-FD		CAG				± 9.6 %
10112   CAG		CAG			5.75	± 9.6 %
10113   CAG		CAG	, , , , , , , , , , , , , , , , , , , ,	LTE-FDD	6.44	± 9.6 %
10114   CAG   IEEE 802.11n (HT Greenfield, 11.5 Mbps, BPSK)   WLAN   8.10   ±9.6     10115   CAG   IEEE 802.11n (HT Greenfield, 81 Mbps, 18-QAM)   WLAN   8.46   ±9.6     10116   CAG   IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)   WLAN   8.15   ±9.6     10117   CAG   IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)   WLAN   8.07   ±9.6     10118   CAD   IEEE 802.11n (HT Mixed, 81 Mbps, 18-QAM)   WLAN   8.59   ±9.6     10119   CAD   IEEE 802.11n (HT Mixed, 81 Mbps, 18-QAM)   WLAN   8.13   ±9.6     10119   CAD   IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)   WLAN   8.13   ±9.6     101140   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   LTE-FDD   6.49   ±9.6     10141   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 20 MM)   LTE-FDD   6.53   ±9.6     10142   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 20 MM)   LTE-FDD   6.53   ±9.6     10143   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 20 MM)   LTE-FDD   6.55   ±9.6     10144   CAC   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   LTE-FDD   6.65   ±9.6     10145   CAC   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   LTE-FDD   6.65   ±9.6     10146   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.65   ±9.6     10147   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.41   ±9.6     10147   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.41   ±9.6     10150   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)   LTE-FDD   6.42   ±9.6     10151   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6     10152   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.60   ±9.6     10153   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.60   ±9.6     10153   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.49   ±9.6     10153   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.49   ±9.6     10153   CAE   LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6     10153   CAE   LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   LTE-FDD   6.62   ±9.6     10154   CAG   LTE-FDD (SC-FDMA, 5		CAG		LTE-FDD	6.59	± 9.6 %
10115   CAG   IEEE 802.11n (HT Greenfield, 81 Mbps, 18-QAM)   WLAN   8.46   ±9.6   10116   CAG   IEEE 802.11n (HT Greenfield, 135 Mbps, 84-QAM)   WLAN   8.15   ±9.6   10117   CAG   IEEE 802.11n (HT Mixed, 135 Mbps, BPSK)   WLAN   8.07   ±9.6   10118   CAD   IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)   WLAN   8.59   ±9.6   10118   CAD   IEEE 802.11n (HT Mixed, 13.5 Mbps, 16-QAM)   WLAN   8.13   ±9.6   10119   CAD   IEEE 802.11n (HT Mixed, 135 Mbps, 16-QAM)   WLAN   8.13   ±9.6   10140   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   LTE-FDD   6.49   ±9.6   10141   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   LTE-FDD   6.53   ±9.6   10142   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   LTE-FDD   6.53   ±9.6   10143   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   LTE-FDD   6.35   ±9.6   10144   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 16-QAM)   LTE-FDD   6.65   ±9.6   10145   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 16-QAM)   LTE-FDD   6.65   ±9.6   10145   CAC   LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 16-QAM)   LTE-FDD   6.65   ±9.6   10146   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.41   ±9.6   10147   CAC   LTE-FDD (SC-FDMA, 500% RB, 20 MHz, 64-QAM)   LTE-FDD   6.72   ±9.6   10147   CAC   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6   10150   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6   10151   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6   10152   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6   10153   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6   10153   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6   10155   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6   10155   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6   10156   CAE   LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6   10159   CAE   LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   LTE-FDD   6.69   ±9.6		CAG		LTE-FDD	6.62	± 9.6 %
10116   CAG   IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)   WLAN   8.15   ±9.6     10117   CAG   IEEE 802.11n (HT Mixed, 13.5 Mbps, 8PSK)   WLAN   8.07   ±9.6     10118   CAD   IEEE 802.11n (HT Mixed, 13.5 Mbps, 16-QAM)   WLAN   8.59   ±9.6     10119   CAD   IEEE 802.11n (HT Mixed, 13.5 Mbps, 64-QAM)   WLAN   8.13   ±9.6     10110   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)   LTE-FDD   6.49   ±9.6     10141   CAD   LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)   LTE-FDD   6.53   ±9.6     10142   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)   LTE-FDD   5.73   ±9.6     10143   CAD   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   LTE-FDD   6.35   ±9.6     10144   CAC   LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   LTE-FDD   6.65   ±9.6     10145   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   LTE-FDD   5.76   ±9.6     10146   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.41   ±9.6     10147   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   LTE-FDD   6.41   ±9.6     10148   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)   LTE-FDD   6.42   ±9.6     10149   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6     10150   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.60   ±9.6     10151   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.60   ±9.6     10152   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.60   ±9.6     10153   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-TDD   9.28   ±9.6     10154   CAE   LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.42   ±9.6     10155   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   6.43   ±9.6     10156   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6     10157   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6     10158   CAE   LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)   LTE-FDD   5.75   ±9.6     10157   CAE   LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   LTE-FDD   6.49   ±9.6     10158   CAE   LTE-FDD (SC-FDMA,	10114	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10117   CAG   IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)   WLAN   8.07 ± 9.6	10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 18-QAM)	WLAN	8.46	± 9.6 %
10118	10116	CAG	, , ,	WLAN	8.15	± 9.6 %
10119	10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10140 CAD LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) LTE-FDD 6.49 ± 9.6 10141 CAD LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 84-QAM) LTE-FDD 6.53 ± 9.6 10142 CAD LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 84-QAM) LTE-FDD 5.73 ± 9.6 10143 CAD LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) LTE-FDD 6.53 ± 9.6 10144 CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) LTE-FDD 6.635 ± 9.6 10145 CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 84-QAM) LTE-FDD 5.76 ± 9.6 10146 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) LTE-FDD 5.76 ± 9.6 10147 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.41 ± 9.6 10149 CAE LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.42 ± 9.6 10150 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 6.42 ± 9.6 10151 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 9.28 ± 9.6 10152 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.28 ± 9.6 10153 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.28 ± 9.6 10154 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.28 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-TDD 10.05 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-TDD 10.05 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-FDD 5.75 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-FDD 6.43 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-FDD 5.79 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.43 ± 9.6 10156 CAF LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 5.79 ± 9.6 10157 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.62 ± 9.6 10159 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.56 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.56 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.58 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.58 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.58 ± 9.6 10168 CAG LTE-FDD (SC-FDMA, 50% RB, 14 MHz, QPSK) LTE-FDD 6.57 ± 9.6 10168 CAG LTE-FDD (SC-FDMA, 50% RB, 14 MHz, QPSK) LTE-FD	10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10141 CAD LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  10142 CAD LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)  10143 CAD LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)  10144 CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)  10144 CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)  10145 CAC LTE-FDD (SC-FDMA, 100% RB, 14 MHz, QPSK)  10146 CAC LTE-FDD (SC-FDMA, 100% RB, 14 MHz, 16-QAM)  10147 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)  10148 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)  10149 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10150 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10151 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)  10152 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10153 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10154 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10155 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10156 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  10157 CAE LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10158 CAE LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10159 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10150 CAE LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10151 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10156 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10157 CAE LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10158 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)  10159 CAG LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)  10160 CAG LTE-FDD (SC-FD	10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10142   CAD	10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10143   CAD	10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10144 CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 84-QAM) LTE-FDD 6.65 ± 9.6 10145 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) LTE-FDD 5.76 ± 9.6 10146 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.41 ± 9.6 10147 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.72 ± 9.6 10149 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 6.42 ± 9.6 10150 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 6.60 ± 9.6 10151 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 9.28 ± 9.6 10152 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.29 ± 9.6 10153 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-TDD 9.92 ± 9.6 10154 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-FDD 5.75 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) LTE-FDD 5.75 ± 9.6 10156 CAF LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 5.79 ± 9.6 10157 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 6.49 ± 9.6 10158 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 5.79 ± 9.6 10159 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM) LTE-FDD 6.49 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM) LTE-FDD 6.50 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.50 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.51 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.51 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.51 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.51 ± 9.6 10162 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.52 ± 9.6 10163 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.52 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.52 ± 9.6	10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10145 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) LTE-FDD 5.76 ± 9.6 10146 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.41 ± 9.6 10147 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) LTE-FDD 6.72 ± 9.6 10149 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 6.42 ± 9.6 10150 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-FDD 6.60 ± 9.6 10151 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-FDD 9.28 ± 9.6 10152 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.28 ± 9.6 10153 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.92 ± 9.6 10154 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 10.05 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) LTE-FDD 5.75 ± 9.6 10156 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) LTE-FDD 6.43 ± 9.6 10157 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 5.79 ± 9.6 10158 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) LTE-FDD 6.49 ± 9.6 10159 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 6.49 ± 9.6 10159 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 0PSK) LTE-FDD 6.49 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10162 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10163 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6 10166 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.51 ± 9.6 10167 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.51 ± 9.6 10168 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.51 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.51 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.51 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.52 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.52 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) LTE-FDD 6.52 ± 9.6 1016	10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10146 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.41 ± 9.6 10147 CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD 6.72 ± 9.6 10149 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-FDD 6.42 ± 9.6 10150 CAE LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-FDD 6.60 ± 9.6 10151 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) LTE-TDD 9.28 ± 9.6 10152 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) LTE-TDD 9.92 ± 9.6 10153 CAE LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) LTE-TDD 10.05 ± 9.6 10154 CAF LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) LTE-FDD 5.75 ± 9.6 10155 CAF LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) LTE-FDD 6.43 ± 9.6 10156 CAF LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 6.43 ± 9.6 10157 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) LTE-FDD 6.49 ± 9.6 10158 CAE LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) LTE-FDD 6.49 ± 9.6 10159 CAG LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-FDD 6.62 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.56 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.56 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.56 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.43 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.43 ± 9.6 10161 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) LTE-FDD 6.43 ± 9.6 10162 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.43 ± 9.6 10163 CAG LTE-FDD (SC-FDMA, 50% RB, 15 MHz, G4-QAM) LTE-FDD 6.43 ± 9.6 10164 CAG LTE-FDD (SC-FDMA, 50% RB, 14 MHz, 16-QAM) LTE-FDD 6.21 ± 9.6 10165 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.21 ± 9.6 10166 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.573 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.59 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.59 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.59 ± 9.6 10169 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.59 ± 9.6 10160 CAG LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, G4-QAM) LTE-FDD 6.59 ± 9	10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10146	10145		LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10147   CAC   LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)   LTE-FDD   6.72   ± 9.6	10146		LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10149         CAE         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         LTE-FDD         6.42         ± 9.6           10150         CAE         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         LTE-FDD         6.60         ± 9.6           10151         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)         LTE-TDD         9.28         ± 9.6           10152         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         LTE-TDD         9.92         ± 9.6           10153         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         LTE-TDD         10.05         ± 9.6           10154         CAE         LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         LTE-FDD         5.75         ± 9.6           10155         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         LTE-FDD         5.75         ± 9.6           10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 0PSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FD	10147		LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10150   CAE	10149			LTE-FDD		± 9.6 %
10151   CAE	10150		LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10152         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)         LTE-TDD         9.92         ± 9.6           10153         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         LTE-TDD         10.05         ± 9.6           10154         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         LTE-FDD         5.75         ± 9.6           10155         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         LTE-FDD         6.43         ± 9.6           10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD	10151			LTE-TOD	9.28	± 9.6 %
10153         CAE         LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)         LTE-TDD         10.05         ± 9.6           10154         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         LTE-FDD         5.75         ± 9.6           10155         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD<	10152		LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10154         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)         LTE-FDD         5.75         ± 9.6           10155         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD<	10153			LTE-TDD		± 9.6 %
10155         CAF         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         5.26         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD<	10154					± 9.6 %
10156         CAF         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         LTE-FDD         5.79         ± 9.6           10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         5.73         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 18-QAM)         LTE-F	10155			LTE-FDD		± 9.6 %
10157         CAE         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)         LTE-FDD         6.49         ± 9.6           10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>± 9.6 %</td>						± 9.6 %
10158         CAE         LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)         LTE-FDD         6.62         ± 9.6           10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD <td></td> <td></td> <td></td> <td></td> <td></td> <td>± 9.6 %</td>						± 9.6 %
10159         CAG         LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)         LTE-FDD         6.56         ± 9.6           10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10182         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6		-				± 9.6 %
10160         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)         LTE-FDD         5.82         ± 9.6           10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10182         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6		-				± 9.6 %
10161         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)         LTE-FDD         6.43         ± 9.6           10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10162         CAG         LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)         LTE-FDD         6.58         ± 9.6           10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10166         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)         LTE-FDD         5.46         ± 9.6           10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10167         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)         LTE-FDD         6.21         ± 9.6           10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10168         CAG         LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)         LTE-FDD         6.79         ± 9.6           10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 18-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10169         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)         LTE-FDD         5.73         ± 9.6           10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10170         CAG         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)         LTE-FDD         6.52         ± 9.6           10171         CAE         LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)         LTE-FDD         6.49         ± 9.6						± 9.6 %
10171 CAE LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) LTE-FDD 6.49 ± 9.6						± 9.6 %
						± 9.6 %
10172   CAE   LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)   LTE-TDD   9.21   ± 9.6	10171		LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD		± 9.6 %
						± 9.6 %
						± 9.6 %
						± 9.6 %
						± 9.6 %
						± 9.6 %
3/2 (1002 200						± 9.6 %
						± 9.6 %
10180 CAG LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) LTE-FDD 6.50 ± 9.6	10180	CAG	LIE-FDD (30-FDIVIA, 1 KB, 3 MITZ, 64-QAM)	LIE-FUU	η.50	± 9.6 %

10181	040	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	E 70	\ 0.6.0V
10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QFSK)	LTE-FDD	5.72	± 9.6 %
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)		6.52	± 9.6 %
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	6.50	± 9.6 %
10185	CAG		LTE-FDD	5.73	± 9.6 %
10186	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)		6.51	± 9.6 %
	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 84-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAF	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAF	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %
10220	AAF	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAD	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9,22	± 9.6 %
10229	DAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TOD	10.25	± 9,6 %
10234	CAD	LTE-TOD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDO	9.21	± 9.6 %
10235	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 84-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAB	LTE-TOD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% R8, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TOD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TOD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9,96	± 9.6 %
10257	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
				0.00	2010 /0

Certificate No: EX3-7472-Jun21

40000				_	
10260	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6%
10286	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAD	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAD	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAD	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAG	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	CAG	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	CAG	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	CAG	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	CAG	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	CAG	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %
10300	CAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	CAC	IEEE 802.18e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	CAB	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WIMAX	12.57	± 9.6 %
10303	CAB	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	CAB	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	±9.6 %
10305	CAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WIMAX	15.24	± 9.6 %
10306	CAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	± 9.6 %
10307	AAB	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	± 9.6 %
10308	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)	WiMAX	14.58	± 9.6 %
10310	AAB	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3	WiMAX	14.57	± 9.6 %
10311	AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	
10313		iDEN 1;3	iDEN	10.51	± 9.6 %
10314	AAD	IDEN 1:6		13.48	± 9.6 %
10315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	IDEN		± 9.6 %
10316	AAD	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	1.71	± 9.6 %
	AAD		WLAN	8.36	± 9.6 %
10317 10352	AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6%
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.37	± 9.6 %
10401	AAA	IEEE 802.11ac WIFI (40MHz, 64-QAM, 99pc dc)	WLAN	8.60	± 9.6 %
10402	AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A) CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000 CDMA2000	3.77	± 9.6 %

10410	AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.116 WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10417	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	± 9.6 %
10422	AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbgs, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAE	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAE	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426		IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAE	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD		_
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAB	LTE-FDD (OFDMA, 13 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAC			8.34	± 9.6 %
10434	AAG	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8,60	± 9.6 %
10435	AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)  LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.82	± 9.6 %
10447	AAA		LTE-FDD	7.56	± 9.6 %
	AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7,51	±9.6 %
10450	AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10453	AAC	Validation (Square, 10ms, 1ms)	Test	10.00	± 9.6 %
10456	AAC	IEEE 802.11ac WiFi (160MHz, 84-QAM, 99pc dc)	WLAN	8.63	± 9.6 %
10457	AAC	UMTS-FDD (DC-HSDPA)	WCDMA	6,62	± 9.6 %
10458	AAC	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAC	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAC	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	± 9.6 %
10463	AAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	± 9.6 %
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10467	AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10469	AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	± 9.6 %
10470	AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10471	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10472	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10473	AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10474	AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TOD	8.32	± 9.6 %
10475	AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10477	AAC	LTE-TOD (SC-FDMA, 1 R8, 20 MHz, 16-QAM, UL Sub)	LTE-TOD	8.32	± 9.6 %
10478	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TOD	8.57	± 9.6 %
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TOD	7.74	± 9.6 %
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	± 9.6 %
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	± 9.6 %
10482	AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	± 9.6 %
	AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub)	LTE-TDD	8.39	± 9.6 %
10483		LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	± 9.6 %
10483 10484	AAB				
	AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.59	± 9.6 %
10484					± 9.6 % ± 9.6 %

Certificate No: EX3-7472-Jun21 Page 15 of 23

10400		LITE TOD (CC FOLIA FOW CO ACANIC OPEN IN COL)	1175 700		
10488	AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TOD	7.70	± 9.6 %
10489	AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TOD	8.31	± 9.6 %
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TD0	7.74	± 9.6 %
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.41	± 9.6 %
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)	LTE-TOD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.37	± 9.6 %
10496	AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10497	AAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	± 9.6 %
10498	AAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	± 9.6 %
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	± 9.6 %
10500	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TOD	7.67	± 9.6 %
10501	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	± 9.6 %
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	± 9.6 %
10503	AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.72	± 9.6 %
10504	AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	± 9.6 %
10505	AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TOD	8.54	± 9.6 %
10506	AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10507	AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.36	± 9.6 %
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	± 9.6 %
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.99	± 9.6 %
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.49	± 9.6 %
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)	LTE-TD0	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TOD	8.42	± 9.6 %
10514	AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TOD	8.45	± 9.6 %
10515	AAE	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10516	AAE	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc)	WLAN	1.57	±9.6%
10517	AAF	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10518	AAF	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10519	AAF	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc dc)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)	WLAN	8.08	± 9.6 %
10524	AAC	IEEE 802.11a/h Wifi 5 GHz (OFDM, 54 Mbps, 99pc dc)	WLAN	8.27	± 9.6 %
10525	AAC	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)	WLAN	8.36	± 9.6 %
10526	AAF	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc)	WLAN	8.42	± 9.6 %
10527	AAF	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)	WLAN	8.21	± 9.6 %
10528	AAF	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)	WLAN	8.36	± 9.6 %
10529	AAF	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)	WLAN	8.36	± 9.6 %
10531	AAF	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)	WLAN	8.43	± 9.6 %
10532	AAF	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10533	AAE	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc)	WLAN	8.38	± 9.6 %
10533	_	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)	WLAN	8.45	± 9.6 %
10535	AAE	IEEE 802.11ac WiF1 (40MHz, MCS1, 99pc dc)	WLAN	8.45	± 9.6 %
10536	AAE	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc)	WLAN	8.32	± 9.6 %
10537	AAF	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)	WLAN	8.44	± 9.6 %
10537	AAF	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)	WLAN	8.54	
10538	AAF	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)	WLAN	8.39	±9.6%
10540	AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc 6c)	WLAN	8.39	± 9.6 %
	AAA				± 9.6 %
10542	AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc dc)	WLAN	8.65	± 9.6 %
10543	AAC	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)	WLAN	8.65	±9.6%
10544 10545	AAC	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)	WLAN	8.47	± 9.6 %
10040	AAC	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc dc)	WLAN	8.55	± 9.6 %

Certificate No: EX3-7472-Jun21

40546	T	(FFF 000 44 . WE (0014) . 11000 00	Tana ar		
10546	AAC	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc dc)	WLAN	8.35	± 9.6 %
10547	AAC	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc dc)	WLAN	8.49	± 9.6 %
10548	AAC	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc dc)	WLAN	8.37	± 9.6 %
10550	AAC	IEEE 802.11ac WIFi (80MHz, MCS6, 99pc dc)	WLAN	8.38	± 9.6 %
10551	AAC	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc dc)	WLAN	8.50	± 9.6 %
10552	AAC	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc dc)	WLAN	8.42	± 9.6 %
10553	AAC	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc dc)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc dc)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc dc)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc dc)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc dc)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc dc)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc dc)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc dc)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc dc)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc dc)	WLAN	8.77	± 9.6 %
10564	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)	WLAN	8.25	± 9.6 %
10565	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10566	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)	WLAN	8,13	± 9.6 %
10567	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	± 9.6 %
10568	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLĀN	8,37	± 9.6 %
10569	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	± 9.6 %
10570	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-QFDM, 54 Mbps, 99pc dc)	WLAN	8.30	± 9.6 %
10571	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10572	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10573	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10574	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10575	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10576	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10577	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-QFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10578	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10579	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10580		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10581	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10581	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN		
10583	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10583	AAD		WLAN	8.59	± 9.6 %
	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)		8.60	± 9.6 %
10585	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10586	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10587	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10588	AAA	IEEE 802.11a/h WIFi 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10589	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10590	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10591	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc dc)	WLAN	8.63	± 9.6 %
10592	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10593	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc dc)	WLAN	8.64	± 9.6 %
10594	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc dc)	WLAN	8,74	± 9.6 %
10595	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc dc)	WLAN	8.74	± 9.6 %
10596	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc dc)	WLAN	8.71	± 9.6 %
10597	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc dc)	WLAN	8.72	± 9.6 %
10598	AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc dc)	WLAN	8.50	± 9.6 %
10599	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc dc)	WLAN	8.79	± 9.6 %
10600	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10601	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc dc)	WLAN	8.82	± 9.6 %
10602	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc dc)	WLAN	8.94	± 9.6 %
10603		IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc dc)	WLAN	9.03	± 9.6 %

10004	٦	IEEE 000 144 (IVI 15 and 1011) (a 1400 5 00 - 14)		1	
10604	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)	WLAN	8.76	± 9.6 %
	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)	WLAN	8.97	± 9.6 %
10606	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10607	AAC	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)	WLAN	8.64	± 9.6 %
10608	AAC	IEEE 802.11ac WIFi (20MHz, MCS1, 90pc dc)	WLAN	8.77	± 9.6 %
10609	AAC	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)	WLAN	8.57	± 9.6 %
10610	AAC	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)	WLAN	8.78	± 9.6 %
10611	AAC	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc dc)	WLAN	8.70	± 9.6 %
10612	AAC	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10613	AAC	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)	WLAN	8.94	± 9.6 %
10614	AAC	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)	WLAN	8.59	± 9.6 %
10615	AAC	IEEE 802.11sc WiFi (20MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10616	AAC	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc dc)	WLAN	8.82	± 9.6 %
10617	AAC	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)	WLAN	8.81	± 9.6 %
10618	AAC	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)	WLAN	8.58	± 9.6 %
10619	AAC	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)	WLAN	8.86	± 9.6 %
10620	AAC	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)	WLAN	8.87	± 9.6 %
10621	AAC	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10622	AAC	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc dc)	WLAN	8.68	± 9.6 %
10623	AAC	IEEE 802.11ac WIFi (40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10624	AAC	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)	WLAN	8.96	± 9.6 %
10625	AAC	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)	WLAN	8.96	± 9.6 %
10626	AAC	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %
10627	AAC	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10628		IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)	WLAN	8.71	± 9.6 %
10629	AAC	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)	WLAN		
10630	AAC	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)	WLAN	8.85	± 9.6 %
10631	AAC			8.72	± 9.6 %
	AAC	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc dc)	WLAN	8.81	± 9.6 %
10632	AAC	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %
10633	AAC	IEEE 802.11ac WiFi (80MHz, MC\$7, 90pc dc)	WLAN	8.83	±9.6%
10634	AAC	IEEE 802.11ac WIFi (80MHz, MCS8, 90pc dc)	WLAN	8.80	± 9.6 %
10635	AAC	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc dc)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)	WLAN	9.11	± 9.6 %
10648	AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TOD	11.96	± 9.6 %
10647	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11,96	± 9.6 %
10648	AAC	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654	AAC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %
10655	AAC	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658		Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAC	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAC	Pulse Waveform (200Hz, 40%)	Test	3.98	
10661	AAC	Pulse Waveform (200Hz, 60%)			± 9.6 %
	AAC	, , , , , , , , , , , , , , , , , , , ,	Test	2.22	± 9.6 %
10662	AAC	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAC	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %
10671	AAD	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	9.09	± 9.6 %

Certificate No: EX3-7472-Jun21

10672	145	HEEE 802.11ax (20MHz, MCS1, 90pc dc)	\A/I ANS	0.57	
10672	AAD		WLAN	8.57	± 9.6 %
10673	AAD	IEEE 802.11ax (20MHz, MCS2, 90pc dc)  IEEE 802.11ax (20MHz, MCS3, 90pc dc)	WLAN	8.78	± 9.6 %
10674	AAD		WLAN	8.74	± 9.6 %
	AAD	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.90	± 9.6 %
10676	AAD	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10677	AAD	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.73	± 9.6 %
10678	AAD	IEEE 802.11ax (20MHz, MC\$7, 90pc dc)	WLAN	8.78	± 9.6 %
10679	AAD	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.89	± 9.6 %
10680	AAD	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.80	± 9.6 %
10681	AAG	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.62	± 9.6 %
10682	AAF	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.83	± 9.6 %
10683	AAA	IEEE 802.11ax (20MHz, MCS0, 99pc dc)	WLAN	8.42	± 9.6 %
10684	AAC	IEEE 802.11ax (20MHz, MCS1, 99pc dc)	WLAN	8.26	± 9.6 %
10685	AAC	IEEE 802.11ax (20MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10686	AAC	IEEE 802.11ax (20MHz, MCS3, 99pc dc)	WLAN	8.28	± 9.6 %
10887	AAE	IEEE 802.11ax (20MHz, MCS4, 99pc dc)	WLAN	8.45	± 9.6 %
10688	AAE	IEEE 802.11ax (20MHz, MCS5, 99pc dc)	WLAN	8.29	± 9.6 %
10689	AAD	IEEE 802.11ax (20MHz, MCS6, 99pc dc)	WLAN	8.55	± 9.6 %
10690	AAE	IEEE 802.11ax (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10691	AAB	IEEE 802.11ax (20MHz, MCS8, 99pc dc)	WLAN	8.25	± 9.6 %
10692	AAA	IEEE 802.11ax (20MHz, MCS9, 99pc dc)	WLAN	8.29	± 9.6 %
10693	AAA	IEEE 802.11ax (20MHz, MCS10, 99pc dc)	WLAN	8.25	± 9.6 %
10694	AAA	IEEE 802.11ax (20MHz, MCS11, 99pc dc)	WLAN	8.57	± 9.6 %
10695	AAA	IEEE 802.11ax (40MHz, MCS0, 90pc dc)	WLAN	8.78	± 9.6 %
10696		IEEE 802.11ax (40MHz, MCS1, 90pc dc)	WLAN	8.91	± 9.6 %
10697	AAA	IEEE 802.11ax (40MHz, MCS2, 90pc dc)	WLAN		
10698	AAA			8.61	± 9.6 %
10698	AAA	IEEE 802.11ax (40MHz, MCS3, 90pc dc)	WLAN	8.89	± 9.6 %
	AAA	IEEE 802.11ax (40MHz, MCS4, 90pc dc)	WLAN	8.82	± 9.6 %
10700	AAA	IEEE 802.11ax (40MHz, MCS5, 90pc dc)	WLAN	8.73	± 9.6 %
10701	AAA	IEEE 802.11ax (40MHz, MCS6, 90pc dc)	WLAN	8.86	± 9.6 %
10702	AAA	IEEE 802.11ax (40MHz, MCS7, 90pc dc)	WLAN	8.70	± 9.6 %
10703	AAA	IEEE 802.11ax (40MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10704	AAA	IEEE 802.11ax (40MHz, MCS9, 90pc dc)	WLAN	8.56	± 9.6 %
10705	AAA	IEEE 802.11ax (40MHz, MCS10, 90pc dc)	WLAN	8.69	± 9.6 %
10706	AAC	IEEE 802.11ax (40MHz, MC\$11, 90pc dc)	WLAN	8.66	± 9.6 %
10707	AAC	IEEE 802.11ax (40MHz, MCS0, 99pc dc)	WLAN	8.32	± 9.6 %
10708	AAC	IEEE 802.11ax (40MHz, MC\$1, 99pc dc)	WLAN	8.55	± 9.6 %
10709	AAC	IEEE 802.11ax (40MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10710	AAC	IEEE 802.11ax (40MHz, MCS3, 99pc dc)	WLAN	8.29	± 9.6 %
10711	AAC	IEEE 802.11ax (40MHz, MCS4, 99pc dc)	WLAN	8.39	± 9.6 %
10712	AAC	IEEE 802.11ax (40MHz, MCS5, 99pc dc)	WLAN	8.67	± 9.6 %
10713	AAC	IEEE 802.11ax (40MHz, MCS6, 99pc dc)	WLAN	8.33	± 9.6 %
10714	AAC	IEEE 802.11ax (40MHz, MCS7, 99pc dc)	WLAN	8.26	± 9.6 %
10715	AAC	IEEE 802.11ax (40MHz, MCS8, 99pc dc)	WLAN	8.45	± 9.6 %
10716	AAC	IEEE 802.11ax (40MHz, MCS9, 99pc dc)	WLAN	8.30	± 9.6 %
10717	AAC	IEEE 802.11ax (40MHz, MCS10, 99pc dc)	WLAN	8.48	± 9.6 %
10718	AAC	IEEE 802.11ax (40MHz, MCS11, 99pc dc)	WLAN	8.24	± 9.6 %
10719	AAC	IEEE 802.11ax (80MHz, MCS0, 90pc dc)	WLAN	8.81	± 9.6 %
10720	AAC	IEEE 802.11ax (80MHz, MCS1, 90pc dc)	WLAN	8.87	± 9.6 %
10721	_	IEEE 802.11ax (80MHz, MCS2, 90pc dc)	WLAN	8.76	± 9.6 %
10721	AAC	IEEE 802.11ax (80MHz, MCS3, 90pc dc)	WLAN	8.55	
10722	AAC		WLAN		± 9.6 %
	AAC_	IEEE 802.11ax (80MHz, MCS4, 90pc dc)		8.70	± 9.6 %
10724	AAC	IEEE 802.11ax (80MHz, MCS5, 90pc dc)	WLAN	8.90	± 9.6 %
10725	AAC	IEEE 802.11ax (80MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %
10726	AAC	IEEE 802.11ax (80MHz, MCS7, 90pc dc)	WLAN	8.72	± 9.6 %
10727	AAC	IEEE 802.11ax (80MHz, MC\$8, 90pc dc)	WLAN	8.66	± 9.6 %

		the same of the sa			
	AAC	IEEE 802.11ax (80MHz, MCS9, 90pc dc)	WLAN	8.65	±9.6%
	AAC	IEEE 802.11ax (80MHz, MCS10, 90pc dc)	WLAN	8.64	± 9.6 %
	AAC	IEEE 802.11ax (80MHz, MCS11, 90pc dc)	WLAN	8.67	± 9.6 %
	AAC	IEEE 802.11ax (80MHz, MCS0, 99pc dc)	WLAN	8.42	± 9.6 %
	AAC	IEEE 802.11ax (80MHz, MCS1, 99pc dc)	WLAN	8.46	± 9.6 %
10733	AAC	IEEE 802.11ax (80MHz, MCS2, 99pc dc)	WLAN	8.40	± 9.6 %
10734	AAC	IEEE 802.11ax (80MHz, MCS3, 99pc dc)	WLAN	8.25	± 9.6 %
10735	AAC	IEEE 802.11ax (80MHz, MCS4, 99pc dc)	WLAN	8.33	± 9.6 %
10736	AAC	IEEE 802.11ax (80MHz, MCS5, 99pc dc)	WLAN	8.27	± 9.6 %
10737	AAC	IEEE 802.11ax (80MHz, MCS6, 99pc dc)	WLAN	8.36	± 9.6 %
10738	AAC	IEEE 802.11ax (80MHz, MCS7, 99pc dc)	WLAN	8.42	± 9.6 %
10739	AAC	IEEE 802.11ax (80MHz, MCS8, 99pc dc)	WLAN	8.29	± 9.6 %
10740	AAC	IEEE 802.11ax (80MHz, MCS9, 99pc dc)	WLAN	8.48	± 9.6 %
10741	AAC	IEEE 802.11ax (80MHz, MCS10, 99pc dc)	WLAN	8.40	± 9.6 %
	AAC	IEEE 802.11ax (80MHz, MCS11, 99pc dc)	WLAN	8.43	± 9.6 %
1000	AAC	IEEE 802.11ax (160MHz, MCS0, 90pc dc)	WLAN	8,94	± 9.6 %
12511	AAC	IEEE 802,11ax (160MHz, MCS1, 90pc dc)	WLAN	9.16	± 9.6 %
12212	AAC	IEEE 802.11ax (160MHz, MCS2, 90pc dc)	WLAN	8.93	± 9.6 %
<u> </u>	AAC	IEEE 802.11ax (160MHz, MCS3, 90pc dc)	WLAN	9.11	± 9.6 %
10717	AAC	REEE 802.11ax (160MHz, MCS4, 90pc dc)	WLAN	9,04	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS5, 90pc dc)	WLAN	8.93	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS6, 90pc dc)	WLAN	8.90	± 9.6 %
1000	AAC	IEEE 802.11ax (160MHz, MCS7, 90pc dc)	WLAN	8,79	± 9.6 %
1222	AAC	IEEE 802.11ax (160MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
(40-4		IEEE 802.11ax (160MHz, MCS9, 90pc dc)	WLAN		
	AAC	IEEE 802.11ax (160MHz, MCS10, 90pc dc)	WLAN	8.81	± 9.6 %
407=4	AAC	IEEE 802.11ax (160MHz, MCS11, 90pc dc)	WLAN	9.00	± 9.6 %
/	AAC	IEEE 802.11ax (160MHz, MCS0, 99pc dc)	WLAN	8,94	± 9.6 %
	AAC		WLAN	8.64	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS1, 99pc dc)		8.77	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS2, 99pc dc)	WLAN	8,77	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS3, 99pc dc)	WLAN	8.69	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS4, 99pc dc)	WLAN	8.58	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS5, 99pc dc)	WLAN	8.49	± 9.6 %
12522	AAC	IEEE 802.11ax (160MHz, MCS6, 99pc dc)	WLAN	8.58	± 9.6 %
$\overline{}$	AAC	IEEE 802.11ax (160MHz, MCS7, 99pc dc)	WLAN	8.49	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS8, 99pc dc)	WLAN	8.53	± 9.6 %
1	AAC_	IEEE 802.11ax (160MHz, MCS9, 99pc dc)	WLAN	8.54	± 9.6 %
(2222	AAC	IEEE 802.11ax (160MHz, MCS10, 99pc dc)	WLAN	8.54	± 9.6 %
	AAC	IEEE 802.11ax (160MHz, MCS11, 99pc dc)	WLAN	8.51	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
1	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	± 9.6 %
	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	± 9.6 %
10774	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10775	AAC	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10776	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
	AAC	5G NR (CP-OFDM, 50% RB. 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
<del> </del>	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
		<u> </u>			

40704	1	FO NO (OD OFFILL 1999) PD 49441 ODGY (SAIN)	F6 110 FD 1 77 F		
10784	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	± 9.6 %
10785	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10786	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10787	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	± 9.6 %
10788	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10789	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10790	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz. QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10791	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	± 9.6 %
10792	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	± 9.6 %
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	± 9.6 %
10794	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10795	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	7.84	± 9.6 %
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10797	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10798	AAC	5G NR (CP-OFOM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10799	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10801	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10802	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	± 9.6 %
10803	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	7.93	± 9.6 %
10805	AAD	5G NR (CP-OFDM, 50% R8, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10806		5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	
10810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		± 9.6 %
	AAD			8.34	± 9.6 %
10812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10817	AAD	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	± 9.6 %
10820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±9.6%
10821	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10823	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QP\$K, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10828	AAE	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10829	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10830	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	± 9.6 %
10831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	± 9.6 %
10832	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	± 9.6 %
10833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10834	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	± 9.6 %
10835	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10836	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	± 9.6 %
10837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	± 9.6 %
10839	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10840	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	± 9.6 %
10841	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	± 9.6 %
10843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	± 9.6 %
10844		5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10854	AAD	5G NR (CP-OFDM, 30 % RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	
10854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD		± 9.6 %
	AAD			8.36	± 9.6 %
10856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 80 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10858	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10859	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %

10000		FO AID (OD OFDA) 4000/ DD COAMIC ODDI( COALID)	FO ND FD4 TDD	5.44	. 0.00
10860	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10861	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10864	AAE	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10865	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5,89	± 9.6 %
10869	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10870	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	± 9.6 %
10871	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	± 9.6 %
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.65	± 9.6 %
10875	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10876	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	± 9.6 %
10877	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	± 9.6 %
10878	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10879	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	± 9.6 %
10880	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	± 9.6 %
10881	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10882	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	± 9.6 %
10883	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	± 9.6 %
10884	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	± 9.6 %
10885	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10886	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10887	_	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10888	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	± 9.6 %
10889	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	± 9.6 %
10890	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	± 9.6 %
10891	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 1602AM, 120 KHz)	5G NR FR2 TDD	8.13	± 9.6 %
10892	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10892	AAD	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		
10897	AAD			5.66	± 9.6 %
	AAD	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	± 9.6 %
10899	AAD	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)		5.67	± 9.6 %
10900	AAD	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10901	AAD	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10902	AAD	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10903	AAD	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10904	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10905	AAD	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10906	AAD	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10907	AAD	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	± 9.6 %
10908	AAD	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	± 9.6 %
10909	AAD	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	± 9.6 %
10910	AAD	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	± 9.6 %
10911	AAD	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	± 9.6 %
10912	AAD	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10913	AAD	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10914	AAD	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	± 9.6 %
10915	AAD	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	± 9.6 %
10916	AAD	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	± 9.6 %
10917	AAD	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	± 9.6 %
10918	AAD	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	± 9.6 %
10919	AAD	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	± 9.6 %
10920	AAD	5G NR (DFT-s-0FDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	± 9.6 %
10921	AAD	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
		, , , , , , , , , , , , , , , , , , , ,			

Certificate No: EX3-7472-Jun21 Page 22 of 23

19922   AAD   SG NR (DFT-s-OFDM, 100% RB, 25 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.82 ± 9.6 %   19924   AAD   SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.84 ± 9.6 %   19925   AAD   SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.84 ± 9.6 %   19925   AAD   SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.84 ± 9.6 %   19926   AAD   SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.84 ± 9.6 %   19927   AAD   SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.94 ± 9.6 %   19928   AAD   SG NR (DFT-s-OFDM, 178, 50 MHz, QFSK, 30 MHz)   SG NR FRI TDD   5.94 ± 9.6 %   19928   AAD   SG NR (DFT-s-OFDM, 178, 50 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.52 ± 9.6 %   19939   AAD   SG NR (DFT-s-OFDM, 178, 15 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.52 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 15 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.52 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 35 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 35 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 55 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.51 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 178, 55 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.90 ± 9.6 %   19930   AAD   SG NR (DFT-s-OFDM, 50% RB, 55 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.90 ± 9.6 %   19930   AAB   SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.90 ± 9.6 %   19930   AAB   SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QFSK, 15 MHz)   SG NR FRI FDD   5.90 ± 9.6 %   19930   AAB   SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QFSK, 15		_				
19925   AAD   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 MHz)   SG NR FR1 TDD   5,95 ± 9,6 %   19926   AAD   SG NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 MHz)   SG NR FR1 TDD   5,95 ± 9,6 %   19927   AAD   SG NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 MHz)   SG NR FR1 TDD   5,94 ± 9,6 %   19928   AAD   SG NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 MHz)   SG NR FR1 TDD   5,94 ± 9,6 %   19928   AAD   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,54 ± 9,6 %   19928   AAD   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,52 ± 9,6 %   19928   AAD   SG NR (DFT-s-OFDM, 18 B, 10 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,52 ± 9,6 %   19930   AAD   SG NR (DFT-s-OFDM, 18 B, 10 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,52 ± 9,6 %   19931   AAD   SG NR (DFT-s-OFDM, 18 B, 20 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19932   AAB   SG NR (DFT-s-OFDM, 18 B, 20 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19933   AAD   SG NR (DFT-s-OFDM, 18 B, 20 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19934   AAA   SG NR (DFT-s-OFDM, 18 B, 30 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19934   AAA   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19935   AAA   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19935   AAA   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19935   AAA   SG NR (DFT-s-OFDM, 18 B, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19935   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,51 ± 9,6 %   19934   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,50 ± 9,6 %   19934   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,80 ± 9,6 %   19934   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,82 ± 9,6 %   19934   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 MHz)   SG NR FR1 FDD   5,82 ± 9,6 %   19934   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz,	10922	AAD	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		± 9.6 %
19926 AAD 5G NR (DFT-4-OFDM, 100% RB, 50 MHz, QPSK, 30 MHz) 5G NR FR1 TDD 5.84 ± 9.6 % 19928 AAD 5G NR (DFT-4-OFDM, 100% RB, 80 MHz, QPSK, 30 MHz) 5G NR FR1 TDD 5.84 ± 9.6 % 19928 AAD 5G NR (DFT-4-OFDM, 100% RB, 80 MHz, QPSK, 15 MHz) 5G NR FR1 TDD 5.94 ± 9.6 % 19928 AAD 5G NR (DFT-4-OFDM, 100% RB, 80 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.52 ± 9.6 % 19928 AAD 5G NR (DFT-4-OFDM, 178, 10 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.52 ± 9.6 % 19939 AAD 5G NR (DFT-4-OFDM, 178, 10 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.52 ± 9.6 % 19939 AAD 5G NR (DFT-4-OFDM, 178, 15 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.52 ± 9.6 % 19932 AAD 5G NR (DFT-4-OFDM, 178, 15 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19932 AAB 5G NR (DFT-4-OFDM, 178, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19932 AAB 5G NR (DFT-4-OFDM, 178, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19933 AAA 5G NR (DFT-4-OFDM, 178, 30 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19933 AAA 5G NR (DFT-4-OFDM, 178, 30 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19935 AAA 5G NR (DFT-4-OFDM, 178, 50 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19935 AAA 5G NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19936 AAC 5G NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19937 AAB 5G NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.51 ± 9.6 % 19937 AAB 5G NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.57 ± 9.6 % 19938 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.59 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939 AAB 5G NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz) 5G NR FR1 FDD 5.82 ± 9.6 % 19939		AAD			5.84	± 9.6 %
19926   AAD   \$G NR (DFT-s-OFDM, 100% RB, 60 NHz, QPSK, 30 NHz)   \$G NR FR1 FDD   \$.84   ± 9.6 %   \$9.6 %   \$9.6 %   \$0.0 %   \$G NR (DFT-s-OFDM, 100% RB, 50 NHz, QPSK, 15 NHz)   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$9.6 %   \$0.0 %   \$G NR (DFT-s-OFDM, 1RB, 5 NHz, QPSK, 15 NHz)   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$9.6 %   \$0.0 %   \$G NR (DFT-s-OFDM, 1RB, 10 NHz, QPSK, 15 NHz)   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.51   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.52   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %   \$0.0 %   \$G NR FR1 FDD   \$.50   ± 9.6 %		AAD		5G NR FR1 TDD		± 9.6 %
10927   AAD   SG NR   DPT-\$-OFDM, 100% RB, 80 MHz, QPSK, 30 MHz)   SG NR RF1 FDD   S.94   2.9.6 %   10928   AAD   SG NR   (DPT-\$-OFDM, 1 RB, 51 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.52   2.9.6 %   10929   AAD   SG NR   (DPT-\$-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.52   2.9.6 %   10930   AAD   SG NR   (DPT-\$-OFDM, 1 RB, 16 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.52   2.9.6 %   10930   AAD   SG NR   (DPT-\$-OFDM, 1 RB, 16 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10932   AAB   SG NR   (DPT-\$-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10933   AAA   SG NR   (DPT-\$-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10933   AAA   SG NR   (DPT-\$-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10934   AAA   SG NR   (DPT-\$-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10935   AAA   SG NR   (DPT-\$-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10935   AAA   SG NR   (DPT-\$-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10937   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.51   2.9.6 %   10937   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.90   2.9.6 %   10938   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.90   2.9.6 %   10939   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.90   2.9.6 %   10939   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.82   2.9.6 %   10940   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.82   2.9.6 %   10942   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.82   2.9.6 %   10942   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.82   2.9.6 %   10944   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR RF1 FDD   S.83   2.9.6 %   10944   AAB   SG NR   (DPT-\$-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)		AAD			5.95	
10929   AAD   SG NR (DFT-4-OFDM, 1 RB, 5 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.52   ± 9.6 %   10929   AAD   SG NR (DFT-4-OFDM, 1 RB, 10 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.52   ± 9.6 %   10930   AAD   SG NR (DFT-4-OFDM, 1 RB, 11 KMz, QPSK, 15 KHz)   SG NR FR1 FDD   S.52   ± 9.6 %   10931   AAD   SG NR (DFT-4-OFDM, 1 RB, 20 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10932   AAB   SG NR (DFT-4-OFDM, 1 RB, 22 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10933   AAA   SG NR (DFT-4-OFDM, 1 RB, 20 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10934   AAA   SG NR (DFT-4-OFDM, 1 RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10935   AAA   SG NR (DFT-4-OFDM, 1 RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10935   AAA   SG NR (DFT-4-OFDM, 50% RB, 5 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10935   AAA   SG NR (DFT-4-OFDM, 50% RB, 5 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.50   ± 9.6 %   10936   AAC   SG NR (DFT-4-OFDM, 50% RB, 5 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.50   ± 9.6 %   10938   AAB   SG NR (DFT-4-OFDM, 50% RB, 15 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.90   ± 9.6 %   10938   AAB   SG NR (DFT-4-OFDM, 50% RB, 15 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.90   ± 9.6 %   10939   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.90   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.82   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.82   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.83   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.83   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.83   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10934   AAB   SG NR (DFT-4-OFDM, 50% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10934		AAD			5.84	± 9.6 %
10929   AAD   SG NR (DFT-s-OFDM, 1 RB, 10 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   5.52   ±9.6 %   10930   AAD   SG NR (DFT-s-OFDM, 1 RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   5.51   ±9.6 %   10932   AAB   SG NR (DFT-s-OFDM, 1 RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10933   AAA   SG NR (DFT-s-OFDM, 1 RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10933   AAA   SG NR (DFT-s-OFDM, 1 RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10933   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10934   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10935   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10936   AAC   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.51   ±9.6 %   10937   AAB   SG NR (DFT-s-OFDM, SR RB, 5 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.77   ±9.6 %   10937   AAB   SG NR (DFT-s-OFDM, SW, RB, 5 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.77   ±9.6 %   10938   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.70   ±9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.82   ±9.6 %   10940   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.82   ±9.6 %   10941   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.82   ±9.6 %   10942   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.83   ±9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.83   ±9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.85   ±9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.85   ±9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.85   ±9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 15 kHz)   SG NR FR1 FDD   S.81   ±9.6 %   10944   AAB   SG NR (DFT-s-O		AAD				
10930   AAD   5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.52   ± 9.6 %   10931   AAD   5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10932   AAB   5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10934   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10934   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10935   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10936   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10936   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10937   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.82   ± 9.6 %   109340   AAB   5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.82   ± 9.6 %   109341   AAB   5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.82   ± 9.6 %   109342   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109342   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109343   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109344   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109344   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109344   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   109344   AAB   5G NR (DFT-s-OFDM, 500% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±		_			5.52	
10931   AAD   5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10932   AAB   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10933   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10934   AAA   5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10935   AAA   5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.51   ± 9.6 %   10935   AAA   5G NR (DFT-s-OFDM, 50% RB, 5M Hz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10937   AAB   5G NR (DFT-s-OFDM, 50% RB, 5M Hz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10938   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.80   ± 9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.80   ± 9.6 %   10941   AAB   5G NR (DFT-s-OFDM, 50% RB, 26 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10942   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10943   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10946   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10946   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10946   AAB   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ± 9.6 %   10946   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ± 9.6 %   10946   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.86   ± 9.6		AAD				± 9.6 %
10932   AAB   SG NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10933   AAA   SG NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10935   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10936   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10936   AAA   SG NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.51   ± 9.6 %   10937   AAB   SG NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.77   ± 9.6 %   10938   AAB   SG NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.77   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.77   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.80   ± 9.6 %   10941   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.80   ± 9.6 %   10941   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.80   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.83   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 KHz)   SG NR FR1 FDD   S.85		AAD				
10933   AAA   SG NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ± 9.6 %   10934   AAA   SG NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ± 9.6 %   10935   AAA   SG NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ± 9.6 %   10937   AAB   SG NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ± 9.6 %   10938   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ± 9.6 %   10940   AAB   SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ± 9.6 %   10941   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10942   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10943   AAB   SG NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10946   AAC   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10948   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10948   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.		AAD				± 9.6 %
19934   AAA   G. NR. (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ±9.6 %   19935   AAA   SG NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ±9.6 %   19937   AAB   SG NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ±9.6 %   19937   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.77   ±9.6 %   19938   AAB   SG NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.77   ±9.6 %   19940   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ±9.6 %   19940   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ±9.6 %   19941   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ±9.6 %   19942   AAB   SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ±9.6 %   19943   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ±9.6 %   19944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ±9.6 %   19944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ±9.6 %   19944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.81   ±9.6 %   19944   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.81   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   19949   AAB   SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ±9.6 %   1		AAB			5.51	
10935   AAA   SG NR (OFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.51   ± 9.6 %   10936   AAC   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ± 9.6 %   10937   AAB   SG NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.70   ± 9.6 %   10938   AAB   SG NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ± 9.6 %   109340   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.82   ± 9.6 %   10941   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10942   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10943   AAB   SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10943   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.81   ± 9.6 %   10945   AAB   SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.81   ± 9.6 %   10945   AAB   SG NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.81   ± 9.6 %   10946   AAC   SG NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.83   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   SG NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   SG NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)   SG NR FR1		AAA		5G NR FR1 FDD	5.51	± 9.6 %
10936		AAA				± 9.6 %
10937   AAB   5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ±9.6 %   10938   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.82   ±9.6 %   10941   AAB   5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.89   ±9.6 %   10941   AAB   5G NR (DFT-s-OFDM, 50% RB, 26 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ±9.6 %   10942   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ±9.6 %   10942   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±9.6 %   10943   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ±9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±9.6 %   10947   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ±9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ±9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ±9.6 %   10940   AAB   5G NR DL (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ±9.		AAA		5G NR FR1 FDD	5.51	± 9.6 %
10938   AAB   5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.90   ± 9.6 %   10939   AAB   5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.82   ± 9.6 %   10940   AAB   5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10941   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10942   AAB   5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10943   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10946   AAC   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10947   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ± 9.6 %   10950   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.23   ± 9.6 %   10950   AAB   5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)   5G		AAC		5G NR FR1 FDD	5.90	± 9.6 %
10939		AAB	, , , , , , , , , , , , , , , , , , , ,	5G NR FR1 FDD	5.77	± 9.6 %
10940   AAB		AAB	, , , , , , , , , , , , , , , , , , ,	5G NR FR1 FDD	5.90	± 9.6 %
10941   AAB   5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10942   AAB   5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10943   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.85   ± 9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ± 9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ± 9.6 %   10946   AAC   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10946   AAC   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10948   AAC   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10948   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10951   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ± 9.6 %   10953   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ± 9.6 %   10953   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.25   ± 9.6 %   10954   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.25   ± 9.6 %   10955   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.24   ± 9.6 %   10959   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.14   ± 9.6 %   10959   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.14   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.14   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5		AAB			5.82	± 9.6 %
10942 AAB 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.85 ± 9.6 % 10943 AAB 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.95 ± 9.6 % 10944 AAB 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.81 ± 9.6 % 10945 AAB 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.85 ± 9.6 % 10946 AAC 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.83 ± 9.6 % 10947 AAB 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.83 ± 9.6 % 10948 AAB 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.87 ± 9.6 % 10948 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ± 9.6 % 10949 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ± 9.6 % 10950 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ± 9.6 % 10951 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ± 9.6 % 10952 AAB 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ± 9.6 % 10952 AAB 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.92 ± 9.6 % 10953 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ± 9.6 % 10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ± 9.6 % 10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.33 ± 9.6 % 10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.32 ± 9.6 % 10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 1		AAB		5G NR FR1 FDD	5.89	± 9.6 %
10943   AAB   5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.95   ± 9.6 %   10944   AAB   5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.81   ± 9.6 %   10945   AAB   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10946   AAC   5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10947   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.83   ± 9.6 %   10948   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10951   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10952   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10953   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.25   ± 9.6 %   10954   AAB   5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.15   ± 9.6 %   10955   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.12   ± 9.6 %   10955   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.42   ± 9.6 %   10955   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.42   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.41   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.31   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.31   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   9.30   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 k		AAB				± 9.6 %
10944         AAB         5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.81         ±9.6 %           10945         AAB         5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.85         ±9.6 %           10946         AAC         5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.83         ±9.6 %           10947         AAB         5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.87         ±9.6 %           10948         AAB         5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ±9.6 %           10949         AAB         5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ±9.6 %           10950         AAB         5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ±9.6 %           10951         AAB         5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.92         ±9.6 %           10952         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.25         ±9.6 %           10953         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         <		AAB			5.85	± 9.6 %
10945         AAB         \$G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.85         \$\pm\$ 9.6           10946         AAC         \$G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.83         \$\pm\$ 9.6           10947         AAB         \$5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.87         \$\pm\$ 9.6           10948         AAB         \$5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.97         \$\pm\$ 9.6           10949         AAB         \$5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.94         \$\pm\$ 9.6           10950         AAB         \$5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.97         \$\pm\$ 9.6           10951         AAB         \$5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)         \$5G NR FR1 FDD         \$5.92         \$\pm\$ 9.6           10951         AAB         \$5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         \$5G NR FR1 FDD         \$5.92         \$\pm\$ 9.6           10953         AAB         \$5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)         \$5G NR FR1 FDD         \$8.25         \$\pm\$ 9.6           10954         AAB         \$5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)		AAB			5.95	± 9.6 %
10948 AAC 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.83 ±9.6 % 10947 AAB 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.87 ±9.6 % 10948 AAB 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ±9.6 % 10949 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ±9.6 % 10949 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.87 ±9.6 % 10950 AAB 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.94 ±9.6 % 10951 AAB 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) 5G NR FR1 FDD 5.92 ±9.6 % 10952 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ±9.6 % 10953 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ±9.6 % 10954 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ±9.6 % 10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.24 ±9.6 % 10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.25 ±9.6 % 10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) 5G NR FR1 FDD 8.24 ±9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.42 ±9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.31 ±9.6 % 10959 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.31 ±9.6 % 10959 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 8.31 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 9.32 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 9.32 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 9.36 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 9.36 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 FDD 9.35 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.55 ±9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kH		AAB		5G NR FR1 FDD	5.81	± 9.6 %
10947         AAB         5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.87         ± 9.6 %           10948         AAB         5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10949         AAB         5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10950         AAB         5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10951         AAB         5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.92         ± 9.6 %           10951         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.25         ± 9.6 %           10952         AAB         5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.25         ± 9.6 %           10953         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         ± 9.6 %           10954         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.23         ± 9.6 %           10955         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.14 <td></td> <td>AAB</td> <td></td> <td></td> <td>5.85</td> <td>± 9.6 %</td>		AAB			5.85	± 9.6 %
10948         AAB         5G NR (DFT-s-OFDM, 100% RB, 25 MHz, OPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10949         AAB         5G NR (DFT-s-OFDM, 100% RB, 30 MHz, OPSK, 15 kHz)         5G NR FR1 FDD         5.87         ± 9.6 %           10950         AAB         5G NR (DFT-s-OFDM, 100% RB, 40 MHz, OPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10951         AAB         5G NR (DFT-s-OFDM, 100% RB, 50 MHz, OPSK, 15 kHz)         5G NR FR1 FDD         5.92         ± 9.6 %           10952         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.25         ± 9.6 %           10953         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         ± 9.6 %           10954         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         ± 9.6 %           10955         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.42         ± 9.6 %           10956         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.31         ± 9.6 %           10957         AAC         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.61 <td></td> <td>AAC</td> <td></td> <td></td> <td></td> <td>± 9.6 %</td>		AAC				± 9.6 %
10949   AAB   5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.87   ± 9.6 %   10950   AAB   5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.94   ± 9.6 %   10951   AAB   5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   5G NR FR1 FDD   5.92   ± 9.6 %   10952   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.25   ± 9.6 %   10953   AAB   5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.15   ± 9.6 %   10954   AAB   5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.23   ± 9.6 %   10955   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)   5G NR FR1 FDD   8.42   ± 9.6 %   10956   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.42   ± 9.6 %   10957   AAC   5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.14   ± 9.6 %   10958   AAB   5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.31   ± 9.6 %   10959   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.31   ± 9.6 %   10959   AAB   5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.33   ± 9.6 %   10960   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 FDD   8.33   ± 9.6 %   10961   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 TDD   9.32   ± 9.6 %   10963   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 TDD   9.36   ± 9.6 %   10963   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 TDD   9.55   ± 9.6 %   10964   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   5G NR FR1 TDD   9.55   ± 9.6 %   10965   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 TDD   9.55   ± 9.6 %   10966   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 TDD   9.55   ± 9.6 %   10968   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   5G NR FR1 TDD   9.55   ± 9.6 %   10968   AAB   5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 3		AAB		5G NR FR1 FDD	5.87	± 9.6 %
10950         AAB         5G NR (DFT-s-OFDM, 100% RB, 40 MHz, OPSK, 15 kHz)         5G NR FR1 FDD         5.94         ± 9.6 %           10951         AAB         5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)         5G NR FR1 FDD         5.92         ± 9.6 %           10952         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.25         ± 9.6 %           10953         AAB         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         ± 9.6 %           10954         AAB         5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.23         ± 9.6 %           10955         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.42         ± 9.6 %           10956         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.14         ± 9.6 %           10957         AAC         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.31         ± 9.6 %           10958         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.61         ± 9.6 %           10959         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.33		AAB_		5G NR FR1 FDD	5.94	± 9.6 %
10951       AAB       5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)       5G NR FR1 FDD       5.92       ±9.6 %         10952       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.25       ±9.6 %         10953       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.15       ±9.6 %         10954       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.23       ±9.6 %         10955       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.42       ±9.6 %         10956       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.14       ±9.6 %         10957       AAC       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ±9.6 %         10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ±9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ±9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ±9.6 %         10961       AAB       5G NR DL (CP-OFDM, T		AAB				± 9.6 %
10952       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.25       ± 9.6 %         10953       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.15       ± 9.6 %         10954       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.23       ± 9.6 %         10955       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.42       ± 9.6 %         10956       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.14       ± 9.6 %         10957       AAC       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ± 9.6 %         10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ± 9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL		AAB		5G NR FR1 FDD	5.94	± 9.6 %
10953         AAB         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.15         ± 9.6 %           10954         AAB         5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.23         ± 9.6 %           10955         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)         5G NR FR1 FDD         8.42         ± 9.6 %           10956         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.14         ± 9.6 %           10957         AAC         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.31         ± 9.6 %           10958         AAB         5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.61         ± 9.6 %           10959         AAB         5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)         5G NR FR1 FDD         8.33         ± 9.6 %           10960         AAB         5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)         5G NR FR1 TDD         9.32         ± 9.6 %           10961         AAB         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)         5G NR FR1 TDD         9.36         ± 9.6 %           10962         AAB         5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)         5G NR FR1 TDD         9		AAB		5G NR FR1 FDD	5.92	± 9.6 %
10954       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.23       ± 9.6 %         10955       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 FDD       8.42       ± 9.6 %         10956       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.14       ± 9.6 %         10957       AAC       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ± 9.6 %         10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ± 9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL		AAB		5G NR FR1 FDD	8.25	± 9.6 %
10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 KHz) 5G NR FR1 FDD 8.42 ± 9.6 % 10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 KHz) 5G NR FR1 FDD 8.14 ± 9.6 % 10957 AAC 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 KHz) 5G NR FR1 FDD 8.31 ± 9.6 % 10958 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 KHz) 5G NR FR1 FDD 8.61 ± 9.6 % 10959 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) 5G NR FR1 FDD 8.33 ± 9.6 % 10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 KHz) 5G NR FR1 FDD 9.32 ± 9.6 % 10961 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 KHz) 5G NR FR1 TDD 9.36 ± 9.6 % 10962 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 KHz) 5G NR FR1 TDD 9.40 ± 9.6 % 10963 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 KHz) 5G NR FR1 TDD 9.55 ± 9.6 % 10964 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.29 ± 9.6 % 10965 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.37 ± 9.6 % 10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.55 ± 9.6 % 10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.55 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.55 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.42 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.42 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) 5G NR FR1 TDD 9.49 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 KHz) 5G NR FR1 TDD 9.49 ± 9.6 % 10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 KHz) 5G NR FR1 TDD 9.49 ± 9.6 % 10972 AAB 5G NR (CP-OFDM, TM 3.1, 100 MHz, QPSK, 15 KHz) 5G NR FR1 TDD 9.06 ± 9.6 % 10973 AAB 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 KHz) 5G NR FR1 TDD 9.06 ± 9.6 % 10973 AAB 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 KHz) 5G NR FR1 TDD 9.06 ± 9.6 % 10973 AAB 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 KHz) 5G NR FR1 TDD 9.06 ± 9.6 % 10973 AAB 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30	10953	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	± 9.6 %
10956       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.14       ± 9.6 %         10957       AAC       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ± 9.6 %         10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ± 9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR D		AAB		5G NR FR1 FDD		± 9.6 %
10957       AAC       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.31       ± 9.6 %         10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ± 9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10967       AAB       5G NR D	10955	AAB			8.42	± 9.6 %
10958       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.61       ± 9.6 %         10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10972       AAB       5G NR O		AAB		5G NR FR1 FDD	8.14	± 9.6 %
10959       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 FDD       8.33       ± 9.6 %         10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10972       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10973       AAB       5G NR		AAC				
10960       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.32       ± 9.6 %         10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10972       AAB       5G NR CCP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB				
10961       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.36       ± 9.6 %         10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %	10959	AAB			8.33	± 9.6 %
10962       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.40       ± 9.6 %         10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB				
10963       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB				
10964       AAB       5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.29       ± 9.6 %         10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB			9.40	± 9.6 %
10965       AAB       5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.37       ± 9.6 %         10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB				± 9.6 %
10966       AAB       5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.55       ± 9.6 %         10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB		5G NR FR1 TDD	9,29	± 9.6 %
10967       AAB       5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.42       ± 9.6 %         10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB		5G NR FR1 TDD	9.37	±9.6 %
10968       AAB       5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)       5G NR FR1 TDD       9.49       ± 9.6 %         10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB		5G NR FR1 TDD	9.55	± 9.6 %
10972       AAB       5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)       5G NR FR1 TDD       11.59       ± 9.6 %         10973       AAB       5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)       5G NR FR1 TDD       9.06       ± 9.6 %		AAB		5G NR FR1 TDD	9.42	± 9.6 %
10973 AAB 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) 5G NR FR1 TDD 9.06 ± 9.6 %	10968	AAB	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 84-QAM, 30 kHz)	5G NR FR1 TDD	9.49	± 9.6 %
Total Total Control of Smile ( Control of Co	10972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59	± 9.6 %
10974 AAB 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz) 5G NR FR1 TDD 10.28 ± 9.6 %	10973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)		9.06	± 9.6 %
	10974	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	10.28	± 9.6 %

<sup>&</sup>lt;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.

Certificate No: EX3-7472-Jun21 Page 23 of 23

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





S Schweizerischer Kallbrierdienst
C Service suisse d'étalonnage
Servizio svizzero di taratura
Swiss Callbration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

B.V.ADT (Auden)

Certificate No: EX3-7555\_Sep21/2

## CALIBRATION CERTIFICATE (Replacement of No: EX3-7555 Sep21)

Object EX3DV4 - SN:7555

Calibration procedure(s) QA CAL-01.v9, QA CAL-14.v6, QA CAL-23.v5, QA CAL-25.v7

Calibration procedure for dosimetric E-field probes

Calibration date: September 27, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
Power sensor NRP-291	SN: 103244	09-Apr-21 (No. 217-03291)	Apr-22
Power sensor NRP-Z91	SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
Reference 20 dB Attenuator	SN; CC2552 (20x)	09-Apr-21 (No. 217-03343)	Apr-22
DAE4	SN: 660	23-Dec-20 (No. DAE4-660_Dec20)	Dec-21
Reference Probe ES3DV2	SN: 3013	30-Dac-20 (No. ES3-3013_Dec20)	Dec-21
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
RF generalor HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-20)	In house check: Jun-22
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	ix. M.West
Approved by:	Katja Pokovic	Technical Manager	BRS

Issued: October 14, 2021

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

Certificate No: EX3-7555\_Sep21/2 Page 1 of 23

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





S Schweizerischer Kallbrierdlenst
C Service sulsse d'étalonnage
Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: SCS 0108

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL tissue simulating liquid NORMx,y,z sensitivity in free space

ConvF sensitivity in TSL / NORMx,y,z DCP diode compression point

CF crest factor (1/duty\_cycle) of the RF signal modulation dependent linearization parameters

Polarization  $\varphi$   $\varphi$  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) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices -Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.

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

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart). This linearization is
  implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included
  in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset. The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: EX3-7555\_Sep21/2 Page 2 of 23

EX3DV4 - SN:7555 September 27, 2021

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7555

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) <sup>2</sup> ) <sup>A</sup>	0.49	0.53	0.66	± 10.1 %
DCP (mV)B	93.8	99.6	98.8	

Calibration Results for Modulation Response

DID	Communication System Name		Α	В	С	ם	VR	Max	Max
			dB	₫В√μ∨		dΒ	mV	dev.	Unc€
									(k=2)
0	CW	X	0.00	0.00	1.00	0.00	153.0	± 2.7 %	± 4.7 %
		Y	0.00	0.00	1.00		149.6		
		2	0.00	0.00	1.00		140.0	_	
10352-	Pulse Waveform (200Hz, 10%)	X	20.00	95.72	22.86	10.00	60.0	± 4.0 %	± 9.6 %
AAA		Υ	2.03	63.89	8.67		60.0		
		Z	20.00	93.24	21.32		60.0		
10353-	Pulse Waveform (200Hz, 20%)	X	20.00	112.93	30.27	6.99	80.0	± 3.0 %	± 9.6 %
AAA		Y	1.14	62.30	7.05	. [	80.0		
		Z	20.00	102.62	24.87		80.0		
10354- AAA	Pulse Waveform (200Hz, 40%)	X	9.10	160.00	55.37	3.98	95.0	± 2.4 %	± 9.6 %
		Υ	0.63	61.95	6.19		95.0		
		Z	20.00	160.00	50.18		95.0		
10355- AAA	Pulse Waveform (200Hz, 60%)	X	0.48	160.00	90.50	2.22	120.0	± 2.4 %	± 9.6 %
		Y	20.00	84.11	12.50	]	120.0		
		Z	0.37	160.00	96.52		120.0		
10387- Q	QPSK Waveform, 1 MHz	X	2.76	75.57	20.96	1.00	150.0	± 3.1 %	± 9.6 %
AAA		Y	2.20	72.89	18.42		150.0		
		Z	4.63	86.88	24.78		150.0		
10388- C	QPSK Waveform, 10 MHz	X	4.24	79.89	22.06	0.00	150.0	± 3.1 %	± 9.6 %
AAA		Y	2.66	72.15	18.30		150.0		
		Z	4,47	82.15	23.04	]	150.0		
10396-	64-QAM Waveform, 100 kHz	X	3.19	75.03	23.07	3.01	150.0	±2.4%	± 9.6 %
AAA			2.70	71.86	20.43		150.0	1	
		Z	5.12	86.48	27,66	]	150.0		
10399- 64-0 AAA	64-QAM Waveform, 40 MHz	X	4.22	70.61	18.31	0.00	150.0	± 3.2 %	± 9.6 %
		Y	3.61	68.17	16.70	]	150.0		
		Z	4.08	70.67	18.35	1	150.0		
10414- WL	WLAN CCDF, 64-QAM, 40MHz	X	5.26	66.83	16.79	0.00	150.0	± 3.1 %	± 9.6 %
AAA		Y	4.78	65.98	15.99	]	150.0		
		Z	5.09	67,05	16.90	1	150.0	1	

Note: For details on UID parameters see Appendix

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%.

Certificate No: EX3-7555\_Sep21/2

<sup>&</sup>lt;sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

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

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

EX3DV4- SN:7555 September 27, 2021

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7555

### Sensor Model Parameters

	C1	C2	α	T1	T2	T3	T4	T5	T6
	fF	fF	V-1	ms.V⁻²	ms.V~¹	ms	V-2	V-1	
Х	55.2	430.20	38.97	8.60	0.00	5.10	0.00	0.29	1.02
Y	35.4	265.00	36.06	7.07	0.00	4.96	1.08	0.06	1.01
Z	40.3	309.93	38.15	9.25	0.00	5.10	1.90	0.00	1.02

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	150
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

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

Certificate No: EX3-7555\_Sep21/2 Page 4 of 23

EX3DV4- SN:7555 September 27, 2021

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7555

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

f (MHz) <sup>c</sup>	Relative Permittivity <sup>s</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>a</sup> (mm)	Unc (k=2)
2450	39.2	1.80	7.90	7.90	7.90	0.25	0.90	± 12.0 %
5250	35.9	4.71	5.45	5.45	5.45	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.80	4.80	4.80	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.00	5.00	5.00	0.40	1.80	± 13.1 %

 $<sup>^{\</sup>circ}$  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. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

Certificate No: EX3-7555\_Sep21/2 Page 5 of 23

F At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if fliquid 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.

G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>&</sup>lt;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.

EX3DV4- SN:7555 September 27, 2021

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7555

## Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) <sup>c</sup>	Relative Permittivity <sup>e</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
6500	34.5	6.07	5.55	5.55	5.55	0.20	2.00	± 18.6 %

Frequency validity above 6GHz is ± 700 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

Page 6 of 23 Certificate No: EX3-7555\_Sep21/2

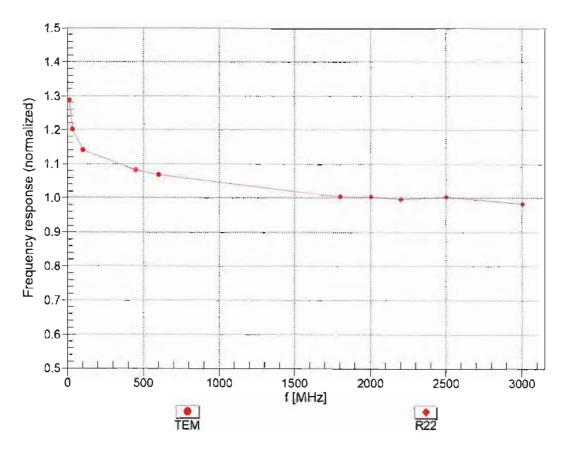
F At frequencies 6-10 GHz, the validity of tissue parameters (s and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured

SAR values. The uncertainty is the RSS of the ConvF uncertainty for Indicated target tissue parameters.

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; below ± 2% for frequencies between 3-6 GHz; and below ± 4% for frequencies between 6-10 GHz at any distance larger than half the probe tip diameter from the boundary.

EX3DV4-SN:7555 September 27, 2021

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



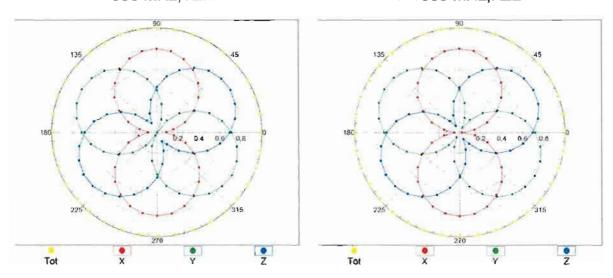
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

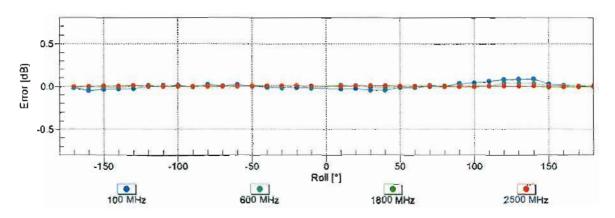
EX3DV4- SN:7555 September 27, 2021

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

f=600 MHz,TEM

f=1800 MHz,R22



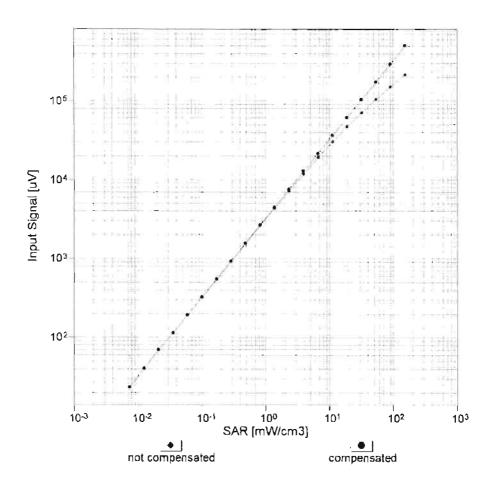


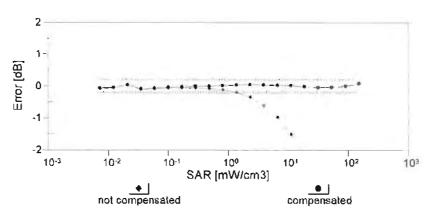
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

EX3DV4-SN:7555

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

(TEM cell, feval= 1900 MHz)

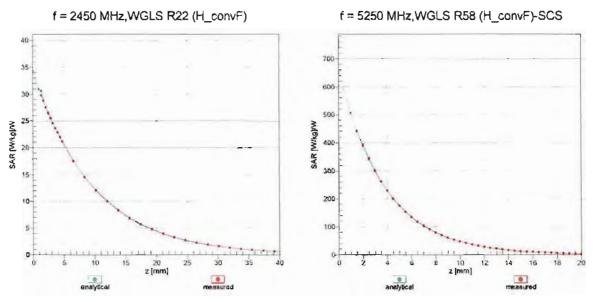




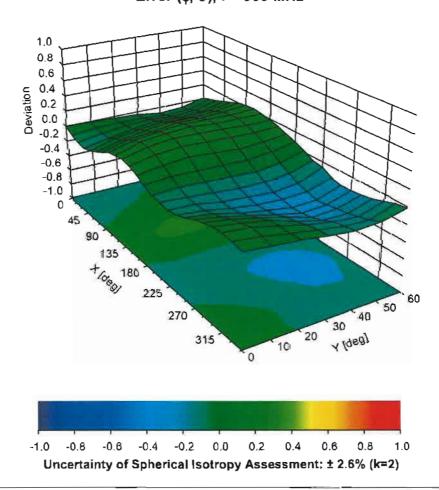
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

EX3DV4-SN:7555

## **Conversion Factor Assessment**



Deviation from Isotropy in Liquid Error (φ, θ), f = 900 MHz



**Appendix: Modulation Calibration Parameters** 

סונ	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>±</sup> (k=2)
0	-	cw	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9,39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802,15,1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (Pt/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.116 WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065		IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAD	IEEE 802.11a/h Wifi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.12	± 9.6 %
10069	CAD	IEEE 802.11a/h Wifi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10,30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.77	± 9.6 %
10075	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 48 Mbps)		_	_
10078	CAB	IEEE 802.11g Wirt 2.4 GHz (DSSS/OFDM, 46 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	CDMA2000 (1xRTT, RC3)	WLAN COMAZOOO	11.00	± 9.6 %
			CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)  UMTS-FDD (HSUPA, Subtest 2)	WCDMA WCDMA	3.98	± 9.6 %
10098	CAB				

Certificate No: EX3-7555\_Sep21/2

Report No.: SFBFLF-WTW-P21123600A

10100	045	LTE EDD (OC EDMA ACCO) DE 20 MHz ODC(/)	LTC COD	5.03	1069
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FOD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz. 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TOO	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAD	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAD	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAD	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAD	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6 %
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6,49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (\$C-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6%
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
	1	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6%
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FOD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TOD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TOD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 R8, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 R8, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 R8, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.73	<u>± 9.6 %</u>

Report No.: SFBFLF-WTW-P21123600A

10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FD0	6.50	± 9.6 %
10184	ÇAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAD	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAD	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAD	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAD	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAD	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAD	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %
10220	CAD	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAD	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAD	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAB	LTE-TDD (\$C-FDMA, 1 RB, 1,4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TOD	9.48	± 9.6 %
10230	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TOD	10.25	± 9.6 %
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TOD	9.48	± 9.6 %
10233	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TOD	10.25	± 9.6 %
10234	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TOD	9.48	± 9.6 %
10236	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAG	LTE-TDD (SC-FDMA, 1 R8, 10 MHz, QPSK)	LTE-TOD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TOD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10,09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TOD	10.17	± 9.6 %
10252	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	<b>±</b> 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TOD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TOD	9.98	± 9.6 %
10260	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TOD	9.97	± 9.6 %

Certificate No: EX3-7555\_Sep21/2 Page 13 of 23

10261	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AA8	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %
10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6 %
10301	AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WIMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6%
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	IDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	IDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10317	AAD	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAE	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.37	± 9.6 %
10401	AAE	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)	WLAN	8.60	± 9.6 %
10402	AAE	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AA8	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AA8	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3.4,7,8,9)	LTE-TDD	7.82	± 9.6 %

Certificate No: EX3-7555\_Sep21/2 Page 14 of 23

			·		
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WIFI 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10417	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM. 6 Mbps, 99pc, Long)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	± 9.6 %
10422	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAC	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAC	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAC	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAC	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10453	AAD	Validation (Square, 10ms, 1ms)	Test	10.00	± 9.6 %
10456	AAC	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc dc)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10462	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TOD	8.30	± 9.6 %
10463	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	± 9.6 %
10464	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TOD	7.82	± 9.6 %
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TOD	8.57	± 9.6 %
10467	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10469	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TOD	8.56	± 9.6 %
10470	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10471	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)	LTE-TOD	8.32	± 9.6 %
10472	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TOD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10479	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10480	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	± 9.6 %
10481	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	± 9.6 %
10482	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	± 9.6 %
10483	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub)	LTE-TDD	8.39	± 9.6 %
10484	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	± 9.6 %
10485	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.59	± 9.6 %
10486	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TOD	8.38	± 9.6 %
10487	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.60	± 9.6 %
10488	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TOD	7.70	± 9.6 %
		(		1 0	1 = 10

Certificate No: EX3-7555\_Sep21/2 Page 15 of 23

10100	4	1. TC TOD (00 FD)(1 F0)( DD (01)( ) (0 O)( ) (1 O () )		0.04	T. 0.00
10489	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TOD	8.31	± 9.6 %
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TOD	8.54	± 9.6 %
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TOD	7.74	± 9.6 %
10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TOD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TOD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% R8, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz. 16-QAM, UL Sub)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10497	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	± 9.6 %
10498	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	± 9.6 %
10499	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	± 9.6 %
10500	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TOD	7.67	± 9.6 %
10501	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	± 9.6 %
10502	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	± 9.6 %
10503	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.72	± 9.6 %
10504	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TOD	8.31	± 9.6 %
10505	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TOD	8.54	± 9.6 %
10506	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10507	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.36	± 9.6 %
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.116 WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.116 WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10518	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10519	AAC	IEEE 802.11a/h WiFl 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	± 9.6 %
10520	AAC	IEEE 802.11a/h WIFi 5 GHz (OFDM, 18 Mbps, 99pc dc)	WLAN	8.12	± 9.6 %
10521	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	7.97	± 9.6 %
10522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)	WLAN	8.08	± 9.6 %
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)	WLAN	8.27	± 9.6 %
10525	AAC	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)	WLAN	8.36	± 9.6 %
10526	AAC	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc)	WLAN	8.42	± 9.6 %
10527	AAC	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)	WLAN	8.21	± 9.6 %
10528		IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)	WLAN	8.36	± 9.6 %
10529	AAC	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)	WLAN	8.36	± 9.6 %
10531	AAC	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)	WLAN	8.43	± 9.6 %
10532	AAC	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10533	AAC	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc)	WLAN	8.38	± 9.6 %
10534	AAC	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)	WLAN	8.45	± 9.6 %
10535		IEEE 802.11ac WIFi (40MHz, MCS1, 99pc dc)	WLAN	8.45	± 9.6 %
10536	-	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc)	WLAN	8.32	± 9.6 %
10537	_	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)	WLAN	8.44	± 9.6 %
10538		IEEE 802.11ac WIFi (40MHz, MCS4, 99pc dc)	WLAN	8.54	± 9.6 %
10540	AAC	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc)	WLAN	8.39	± 9.6 %
10541	AAC	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc dc)	WLAN	8.46	± 9.6 %
10542	AAC	IEEE 802.11ac WIFI (40MHz, MCS8, 99pc dc)	WLAN	8.65	± 9.6 %
10543	AAC	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)	WLAN	8.65	± 9.6 %
10544		IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)	WLAN	8.47	± 9.6 %
10545		IEEE 802.11ac WiFi (80MHz, MCS1, 99pc dc)	WLAN	8.55	± 9.6 %
10546	_	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc dc)	WLAN	8.35	± 9.6 %
10340	1	in a contract the contract to	.,	0.00	1 2 0.0 70

10547	AAC	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc dc)	WLAN	8.49	± 9.6 %
10548	AAC	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc dc)	WLAN	8.37	± 9.6 %
10550	AAC	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc dc)	WLAN	8.39	± 9.6 %
10551	AAC	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc dc)	WLAN	8.50	± 9.6 %
10552	AAC	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc dc)	WLAN	8.42	± 9.6 %
10553	AAC	IEEE 802,11ac WiFi (80MHz, MCS9, 99pc dc)	WLAN	8.45	± 9.6 %
10554	AAD	IEEE 802.11ac WIFi (160MHz, MCS0, 99pc dc)	WLAN	8.48	± 9.6 %
10555	AAD	IEEE 802.11ac WIFI (160MHz, MCS1, 99pc dc)	WLAN	8.47	± 9.6 %
10556	AAD	IEEE 802.11ac WIFI (160MHz, MCS2, 99pc dc)	WLAN	8.50	± 9.6 %
10557	AAD	IEEE 802.11ac WIFI (160MHz, MCS3, 99pc dc)	WLAN	8.52	± 9.6 %
10558	AAD	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc dc)	WLAN	8.61	± 9.6 %
10560	AAD	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc dc)	WLAN	8.73	± 9.6 %
10561	AAD	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc dc)	WLAN	8.56	± 9.6 %
10562	AAD	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc dc)	WLAN	8.69	± 9.6 %
10563	AAD	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc dc)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)	WLAN	8.25	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)	WLAN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10583	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10584	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10585	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10587	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10589	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10590	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10591	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc dc)	WLAN	8.63	± 9.6 %
10592	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10593	AAC	IEEE 802.11n (HT Mixed, 20MHz, MC\$2, 90pc dc)	WLAN	8.64	± 9.6 %
10594	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc dc)	WLAN	8.74	± 9.6 %
10595	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc dc)	WILAN	8.74	± 9.6 %
10596	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc dc)	WLAN	8.71	± 9.6 %
10597	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc dc)	WLAN	8.72	± 9.6 %
10598	AAC	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc dc)	WLAN	8.50	± 9.6 %
10599	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc dc)	WLAN	8.79	± 9.6 %
10600	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10601	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc dc)	WLAN	8.82	± 9.6 %
10602	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc dc)	WLAN	8.94	± 9.6 %
10603	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc dc)	WLAN	9.03	± 9.6 %
10604	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)	WLAN	8.76	± 9.6 %
		1		1	1 = 0.0

Page 17 of 23

		[ - <del></del>			
10605	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)	WLAN	8.97	± 9.6 %
10606	AAC	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10607	AAC	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)	WLAN	8.64	± 9.6 %
10608	AAC	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc)	WLAN	8.77	± 9.6 %
10609	AAC	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)	WLAN	8.57	± 9.6 %
10610	AAC	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)	WLAN	8.78	± 9.6 %
10611	AAC	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc dc)	WLAN	8.70	± 9.6 %
10612	AAC	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10613	AAC	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)	WLAN	8.94	± 9.6 %
10614	AAC	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)	WLAN	8.59	± 9.6 %
10615	AAC	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10616	AAC	IEEE 802.11ac WIFI (40MHz, MCS0, 90pc dc)	WLAN	8.82	± 9.6 %
10617	AAC	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)	WLAN	8.81	± 9.6 %
10618	AAC	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)	WLAN	8.58	± 9.6 %
10619	AAC	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)	WLAN	8.86	± 9.6 %
10620	AAC	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)	WLAN	8.87	± 9.6 %
10621	AAC	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10622	AAC	IEEE 802.11ac WIFi (40MHz, MCS6, 90pc dc)	WLAN	8.68	± 9.6 %
10623	AAC	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10624	AAC	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)	WLAN	8.96	± 9.6 %
10625	AAC	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)	WLAN	8.96	± 9.6 %
10626	AAC	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %
10627	AAC	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10628	AAC	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)	WLAN	8.71	± 9.6 %
10629	AAC	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %
10630	AAC	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)	WLAN	8.72	± 9.6 %
10631	AAC	IEEE 802.11ac WiFi (80MHz, MC\$5, 90pc dc)	WLAN	8.81	± 9.6 %
10632	AAC	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %
10633	AAC	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc dc)	WLAN	8.83	± 9.6 %
10634	AAC	IEEE 802.11ac WiFI (80MHz, MCS8, 90pc dc)	WLAN	8.80	± 9.6 %
10635	AAC	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10636	AAD	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.5 %
10637	AAD	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10638	AAD	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)	WLAN	8.86	± 9.6 %
10639	AAD	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %
10640	AAD	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)	WLAN	8.98	± 9.6 %
10641	AAD	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)	WLAN	9.06	± 9.6 %
10642	AAD	IEEE 802,11ac WiFi (160MHz, MCS6, 90pc dc)	WLAN	9.06	± 9.6 %
10643	AAD	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)	WLAN	8.89	± 9.6 %
10644	AAD	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)	WLAN	9.05	± 9.6 %
10645	AAD	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)	WLAN	9.11	± 9.6 %
10646	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TOO	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAE	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAE	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.42	± 9.6 %
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	6.96	± 9.6 %
10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)		0.97	±9.6 %
10670	AAA	Bluetooth Low Energy	Test Bluetooth	2.19	± 9.6 %
10670	AAC	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	9.09	± 9.6 %
10671	AAC	IEEE 802.11ax (20MHz, MCS1, 90pc dc)	WLAN	8.57	± 9.6 %
10072	1 ~~~	100 1 100 (2011112, WOO 1, SOPE OU)	AAFWIA	0.07	2 3.0 %

Certificate No: EX3-7555\_Sep21/2 Page 18 of 23

10673   AAC   IEEE 802.11sx (20MHz, MCS2, 90pc dc)   WILAN   8,78   ±9.6 %   10675   AAC   IEEE 802.11sx (20MHz, MCS4, 90pc dc)   WILAN   8,90   ±9.6 %   10676   AAC   IEEE 802.11sx (20MHz, MCS4, 90pc dc)   WILAN   8,90   ±9.6 %   10677   AAC   IEEE 802.11sx (20MHz, MCS4, 90pc dc)   WILAN   8,73   ±9.6 %   10677   AAC   IEEE 802.11sx (20MHz, MCS6, 90pc dc)   WILAN   8,73   ±9.6 %   10678   AAC   IEEE 802.11sx (20MHz, MCS6, 90pc dc)   WILAN   8,73   ±9.6 %   10679   AAC   IEEE 802.11sx (20MHz, MCS6, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS6, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS61, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS61, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS61, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS61, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS61, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS1, 90pc dc)   WILAN   8,80   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS1, 90pc dc)   WILAN   8,20   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS1, 90pc dc)   WILAN   8,20   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS2, 90pc dc)   WILAN   8,20   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,20   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,20   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (20MHz, MCS3, 90pc dc)   WILAN   8,25   ±9.6 %   10680   AAC   IEEE 802.11sx (40MHz, MCS3, 90pc dc)   WILAN   8,26   ±9.6 %   10680   AAC   IEEE 802.11sx (40MHz, M						
19675   AAC   IEEE 802.11ax (20MHz, MCS5, 90pc dc)	10673	AAC	IEEE 802.11ax (20MHz, MCS2, 90pc dc)	WLAN	8.78	± 9.6 %
10676   AAC   IEEE 802.11ax (20MHz, MCSS, 90pc dc)	10674	AAC	IEEE 802.11ax (20MHz, MCS3, 90pc dc)		8.74	
19677   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.78   4.9.6 %   10679   AAC   IEEE 802.11ax (20MHz, MCS7, 90pc dc)   WLAN   8.89   4.9.6 %   10680   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.80   4.9.6 %   10680   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.80   4.9.6 %   10681   AAC   IEEE 802.11ax (20MHz, MCS9, 90pc dc)   WLAN   8.80   4.9.6 %   10682   AAC   IEEE 802.11ax (20MHz, MCS11, 90pc dc)   WLAN   8.83   4.9.6 %   10682   AAC   IEEE 802.11ax (20MHz, MCS11, 90pc dc)   WLAN   8.43   4.9.6 %   10683   AAC   IEEE 802.11ax (20MHz, MCS11, 90pc dc)   WLAN   8.42   4.9.6 %   10684   AAC   IEEE 802.11ax (20MHz, MCS1, 90pc dc)   WLAN   8.43   4.9.6 %   10685   AAC   IEEE 802.11ax (20MHz, MCS1, 90pc dc)   WLAN   8.28   4.9.6 %   10685   AAC   IEEE 802.11ax (20MHz, MCS1, 90pc dc)   WLAN   8.28   4.9.6 %   10686   AAC   IEEE 802.11ax (20MHz, MCS1, 90pc dc)   WLAN   8.28   4.9.6 %   10687   AAC   IEEE 802.11ax (20MHz, MCS3, 90pc dc)   WLAN   8.28   4.9.6 %   10688   AAC   IEEE 802.11ax (20MHz, MCS3, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS4, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS4, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS6, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS6, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.29   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.25   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.25   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.25   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.25   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.25   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.27   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)   WLAN   8.27   4.9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS	10675	AAC	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.90	± 9.6 %
19678   AAC   IEEE 802.11ax (20MHz, MCSR, 90pc dc)	10676	AAC	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10679   AAC   IEEE 802.11ax (20MHz, MCS8, 90pc dc)	10677	AAC	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.73	± 9.6 %
10580   AAC   IEEE 802.11ax (20MHz, MCS10, 90pc dc)	10678	AAC	IEEE 802.11ax (20MHz, MCS7, 90pc dc)	WLAN	8.78	± 9.6 %
10681   AAC	10679	AAC	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.89	± 9.6 %
10882   AAC   IEEE 802.11ax (20MHz, MCS1, 190p.dc)   WLAN   8.42 ± 9.8 %   10883   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.26 ± 9.8 %   10885   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.32 ± 9.6 %   10885   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.33 ± 9.6 %   10887   AAC   IEEE 802.11ax (20MHz, MCS3, 99p.dc)   WLAN   8.48 ± 9.6 %   10887   AAC   IEEE 802.11ax (20MHz, MCS3, 99p.dc)   WLAN   8.48 ± 9.6 %   10887   AAC   IEEE 802.11ax (20MHz, MCS4, 99p.dc)   WLAN   8.49 ± 9.6 %   10887   AAC   IEEE 802.11ax (20MHz, MCS4, 99p.dc)   WLAN   8.49 ± 9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS5, 99p.dc)   WLAN   8.29 ± 9.6 %   10690   AAC   IEEE 802.11ax (20MHz, MCS7, 99p.dc)   WLAN   8.29 ± 9.6 %   10690   AAC   IEEE 802.11ax (20MHz, MCS8, 99p.dc)   WLAN   8.29 ± 9.6 %   10691   AAC   IEEE 802.11ax (20MHz, MCS8, 99p.dc)   WLAN   8.29 ± 9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS8, 99p.dc)   WLAN   8.29 ± 9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS8, 99p.dc)   WLAN   8.29 ± 9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.25 ± 9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.25 ± 9.6 %   10695   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.25 ± 9.6 %   10695   AAC   IEEE 802.11ax (20MHz, MCS1, 99p.dc)   WLAN   8.75 ± 9.6 %   10696   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.75 ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.79 ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.87 ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.81 ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.81 ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.81 ± 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.81 ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.82 ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS1, 99p.dc)   WLAN   8.82 ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS1, 99p	10680	AAC	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.80	± 9.6 %
10683   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.42   ±9.8 %   10685   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.28   ±9.8 %   10686   AAC   IEEE 802.11ax (20MHz, MCS2, 99pc dc)   WLAN   8.28   ±9.8 %   10686   AAC   IEEE 802.11ax (20MHz, MCS3, 99pc dc)   WLAN   8.28   ±9.6 %   10687   AAC   IEEE 802.11ax (20MHz, MCS4, 99pc dc)   WLAN   8.28   ±9.6 %   10688   AAC   IEEE 802.11ax (20MHz, MCS4, 99pc dc)   WLAN   8.29   ±9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS5, 99pc dc)   WLAN   8.29   ±9.6 %   10689   AAC   IEEE 802.11ax (20MHz, MCS5, 99pc dc)   WLAN   8.29   ±9.6 %   10699   AAC   IEEE 802.11ax (20MHz, MCS7, 99pc dc)   WLAN   8.29   ±9.6 %   10699   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.29   ±9.6 %   10699   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.29   ±9.6 %   10699   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   ±9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS9, 99pc dc)   WLAN   8.25   ±9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS9, 99pc dc)   WLAN   8.25   ±9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS10, 99pc dc)   WLAN   8.25   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.25   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.76   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.76   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.91   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.91   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.91   ±9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80   ±9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80   ±9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80   ±9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80   ±9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80   ±9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.80	10681	AAC	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.62	± 9.6 %
10684   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.28   ± 9.6 %     10685   AAC   IEEE 802.11ax (20MHz, MCS3, 99pc dc)   WLAN   8.33   ± 9.6 %     10687   AAC   IEEE 802.11ax (20MHz, MCS3, 99pc dc)   WLAN   8.28   ± 9.6 %     10687   AAC   IEEE 802.11ax (20MHz, MCS4, 99pc dc)   WLAN   8.45   ± 9.6 %     10689   AAC   IEEE 802.11ax (20MHz, MCS6, 99pc dc)   WLAN   8.45   ± 9.6 %     10689   AAC   IEEE 802.11ax (20MHz, MCS6, 99pc dc)   WLAN   8.29   ± 9.6 %     10689   AAC   IEEE 802.11ax (20MHz, MCS7, 99pc dc)   WLAN   8.25   ± 9.6 %     10690   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   ± 9.6 %     10691   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   ± 9.6 %     10692   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   ± 9.6 %     10693   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   ± 9.6 %     10694   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.25   ± 9.6 %     10695   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.25   ± 9.6 %     10696   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.25   ± 9.6 %     10697   AAC   IEEE 802.11ax (20MHz, MCS1, 99pc dc)   WLAN   8.70   ± 9.6 %     10698   AAC   IEEE 802.11ax (20MHz, MCS1, 90pc dc)   WLAN   8.70   ± 9.6 %     10699   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.70   ± 9.6 %     10699   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.71   ± 9.6 %     10699   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.81   ± 9.6 %     10699   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.81   ± 9.6 %     10700   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.81   ± 9.6 %     10701   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.73   ± 9.6 %     10702   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %     10703   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.82   ± 9.6 %     10704   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.86   ± 9.6 %     10705   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.86   ±	10682	AAC	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.83	± 9.6 %
10685   AAC	10683	AAC	IEEE 802.11ax (20MHz, MCS0, 99pc dc)	WLAN	8.42	± 9.6 %
10686   AAC	10684	AAC	IEEE 802.11ax (20MHz, MCS1, 99pc dc)	WLAN	8.26	±9.6 %
10687   AAC	10685	AAC	IEEE 802.11ax (20MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10688	10686	AAC	IEEE 802.11ax (20MHz, MCS3, 99pc dc)	WLAN	8.28	± 9.6 %
10689	10687	AAC	IEEE 802.11ax (20MHz, MCS4, 99pc dc)	WLAN	8.45	± 9.6 %
10690	10688	AAC	IEEE 802.11ax (20MHz, MCS5, 99pc dc)	WLAN	8.29	± 9.6 %
10691   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   £ 9.6 %   10692   AAC   IEEE 802.11ax (20MHz, MCS8, 99pc dc)   WLAN   8.25   £ 9.6 %   10693   AAC   IEEE 802.11ax (20MHz, MCS10, 99pc dc)   WLAN   8.25   £ 9.6 %   10694   AAC   IEEE 802.11ax (20MHz, MCS11, 99pc dc)   WLAN   8.57   £ 9.6 %   10695   AAC   IEEE 802.11ax (40MHz, MCS0, 90pc dc)   WLAN   8.78   £ 9.6 %   10696   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.91   £ 9.6 %   10697   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61   £ 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61   £ 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.82   £ 9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.82   £ 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.82   £ 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.73   £ 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.73   £ 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.70   £ 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.70   £ 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   £ 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   £ 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   £ 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.69   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.69   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.67   £ 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS3	10689	AAC	IEEE 802,11ax (20MHz, MCS6, 99pc dc)	WLAN	8.55	± 9.6 %
10692	10690	AAC	IEEE 802.11ax (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10693	10691	AAC	IEEE 802.11ax (20MHz, MCS8, 99pc dc)	WLAN	8.25	± 9.6 %
10694   AAC   IEEE 802.11ax (20MHz, MCS11, 99pc dc)   WLAN   8.57   ± 9.6 %   10696   AAC   IEEE 802.11ax (40MHz, MCS0, 90pc dc)   WLAN   8.91   ± 9.6 %   10696   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.91   ± 9.6 %   10697   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61   ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.89   ± 9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.82   ± 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.73   ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.86   ± 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.86   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.86   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS7, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.82   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.56   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.65   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.65   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.65   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.65   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.31   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.31   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.30   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.45   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MC	10692	AAC	IEEE 302.11ax (20MHz, MCS9, 99pc dc)	WLAN	8.29	± 9.6 %
10695   AAC   IEEE 802.11ax (40MHz, MCS0, 90pc dc)   WLAN   8.78   ± 9.6 %   10696   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.91   ± 9.6 %   10697   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61   ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.89   ± 9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.82   ± 9.8 %   10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.82   ± 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.86   ± 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.86   ± 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.86   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.66   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.55   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.55   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.67   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.48   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.48   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS6	10693	AAC	IEEE 802.11ax (20MHz, MCS10, 99pc dc)	WLAN	8.25	± 9.6 %
10696   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.91   ± 9.6 %   10697   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61   ± 9.6 %   10698   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.89   ± 9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS4, 90pc dc)   WLAN   8.82   ± 9.6 %   10700   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.73   ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.73   ± 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.70   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.66   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.32   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.29   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.29   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.33   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.67   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.67   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.24   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.24   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.24   ± 9.6 %   10720   AAC   IEEE 802.11ax (40MHz, MCS	10694	AAC	IEEE 802.11ax (20MHz, MCS11, 99pc dc)	WLAN	8.57	± 9.6 %
10697   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.61	10695	AAC	IEEE 802.11ax (40MHz, MCS0, 90pc dc)	WLAN	8.78	± 9.6 %
10698   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.89   ± 9.6 %   10699   AAC   IEEE 802.11ax (40MHz, MCS4, 90pc dc)   WLAN   8.82   ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.73   ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.70   ± 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS7, 90pc dc)   WLAN   8.70   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.80   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.82   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.66   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.32   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.33   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.39   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.33   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.26   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.45   ± 9.6 %   10718   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.48   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.81   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.87   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS9,	10696	AAC	IEEE 802.11ax (40MHz, MCS1, 90pc dc)	WLAN	8.91	± 9.6 %
10699	10697	AAC	IEEE 802.11ax (40MHz, MCS2, 90pc dc)	WLAN	8.61	± 9.6 %
10700   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.73   ± 9.6 %   10701   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.86   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS7, 90pc dc)   WLAN   8.70   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.56   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.32   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.33   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 90pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS2, 90pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 90pc dc)   WLAN   8.29   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS4, 90pc dc)   WLAN   8.29   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS5, 90pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.67   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.26   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.26   ± 9.6 %   10718   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.24   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.24   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.27   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz, MCS6, 90pc dc)   WLAN   8.76   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz, MCS6, 90pc dc)   WLAN   8.70   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz,	10698	AAC	IEEE 802.11ax (40MHz, MCS3, 90pc dc)	WLAN	8.89	± 9.6 %
10701   AAC   IEEE 802.11ax (40MHz, MCS6, 90pc dc)   WLAN   8.86   ± 9.6 %   10702   AAC   IEEE 802.11ax (40MHz, MCS7, 90pc dc)   WLAN   8.70   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.56   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.56   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.33   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS2, 99pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.67   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.46   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.48   ± 9.6 %   10718   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.48   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.49   ± 9.6 %   10721   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.76   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MC	10699	AAC	IEEE 802.11ax (40MHz, MCS4, 90pc dc)	WLAN	8.82	± 9.6 %
10702   AAC   IEEE 802.11ax (40MHz, MCS7, 90pc dc)   WLAN   8.70   ± 9.6 %   10703   AAC   IEEE 802.11ax (40MHz, MCS8, 90pc dc)   WLAN   8.82   ± 9.6 %   10704   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.66   ± 9.6 %   10705   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.32   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.33   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.26   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.26   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10717   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.45   ± 9.6 %   10720   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.24   ± 9.6 %   10721   AAC   IEEE 802.11ax (80MHz, MCS1, 99pc dc)   WLAN   8.76   ± 9.6 %   10721   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.76   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.76   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS5, 90pc dc)   WLAN   8.76   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS5, 90pc dc)   WLAN   8.76   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, M	10700	AAC	IEEE 802.11ax (40MHz, MCS5, 90pc dc)	WLAN	8.73	± 9.6 %
10703   AAC	10701	AAC	IEEE 802.11ax (40MHz, MC\$6, 90pc dc)	WLAN	8.86	± 9.6 %
10704   AAC	10702	AAC	IEEE 802.11ax (40MHz, MC\$7, 90pc dc)	WLAN	8.70	± 9.6 %
10705   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.69   ± 9.6 %   10706   AAC   IEEE 802.11ax (40MHz, MCS11. 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS0, 99pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS0, 99pc dc)   WLAN   8.55   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS2, 99pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.33   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.26   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.45   ± 9.6 %   10717   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.30   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.48   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.48   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.48   ± 9.6 %   10720   AAC   IEEE 802.11ax (40MHz, MCS9, 90pc dc)   WLAN   8.87   ± 9.6 %   10721   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.87   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.76   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.76   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10725   AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS9	10703	AAC	JEEE 802.11ax (40MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10706   AAC   IEEE 802.11ax (40MHz, MCS11, 90pc dc)   WLAN   8.66   ± 9.6 %   10707   AAC   IEEE 802.11ax (40MHz, MCS0, 99pc dc)   WLAN   8.32   ± 9.6 %   10708   AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.55   ± 9.6 %   10709   AAC   IEEE 802.11ax (40MHz, MCS2, 99pc dc)   WLAN   8.33   ± 9.6 %   10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.29   ± 9.6 %   10711   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.39   ± 9.6 %   10712   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %   10713   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.33   ± 9.6 %   10714   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.33   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.26   ± 9.6 %   10715   AAC   IEEE 802.11ax (40MHz, MCS8, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS8, 99pc dc)   WLAN   8.45   ± 9.6 %   10716   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.30   ± 9.6 %   10718   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.24   ± 9.6 %   10719   AAC   IEEE 802.11ax (40MHz, MCS10, 90pc dc)   WLAN   8.24   ± 9.6 %   10720   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.87   ± 9.6 %   10721   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.87   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.76   ± 9.6 %   10722   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10724   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10725   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %   10726   AAC   IEEE 802.11ax (80MHz, MC	10704	AAC	IEEE 802.11ax (40MHz, MCS9, 90pc dc)	WLAN	8.56	± 9.6 %
10707   AAC   IEEE 802.11ax (40MHz, MCS0, 99pc dc)   WLAN   8.32	10705	AAC	IEEE 802.11ax (40MHz, MCS10, 90pc dc)	WLAN	8.69	± 9.6 %
10708 AAC   IEEE 802.11ax (40MHz, MCS1, 99pc dc)   WLAN   8.55	10706	AAC	IEEE 802.11ax (40MHz, MCS11, 90pc dc)	WLAN	8.66	± 9.6 %
10709   AAC   IEEE 802.11ax (40MHz, MCS2, 99pc dc)   WLAN   8.33   ± 9.6 %	10707	AAC	IEEE 802.11ax (40MHz, MCS0, 99pc dc)	WLAN	8.32	± 9.6 %
10710   AAC   IEEE 802.11ax (40MHz, MCS3, 99pc dc)   WLAN   8.29   ± 9.6 %     10711   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.39   ± 9.6 %     10712   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %     10713   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.33   ± 9.6 %     10714   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.26   ± 9.6 %     10715   AAC   IEEE 802.11ax (40MHz, MCS8, 99pc dc)   WLAN   8.45   ± 9.6 %     10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.30   ± 9.6 %     10717   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.48   ± 9.6 %     10718   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.24   ± 9.6 %     10719   AAC   IEEE 802.11ax (80MHz, MCS0, 90pc dc)   WLAN   8.81   ± 9.6 %     10720   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.87   ± 9.6 %     10721   AAC   IEEE 802.11ax (80MHz, MCS2, 90pc dc)   WLAN   8.76   ± 9.6 %     10722   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.76   ± 9.6 %     10723   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.70   ± 9.6 %     10724   AAC   IEEE 802.11ax (80MHz, MCS4, 90pc dc)   WLAN   8.70   ± 9.6 %     10725   AAC   IEEE 802.11ax (80MHz, MCS5, 90pc dc)   WLAN   8.74   ± 9.6 %     10726   AAC   IEEE 802.11ax (80MHz, MCS6, 90pc dc)   WLAN   8.74   ± 9.6 %     10726   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10726   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10728   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10729   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66	10708	AAC	(EEE 802.11ax (40MHz, MCS1, 99pc dc)	WLAN	8.55	± 9.6 %
10711   AAC   IEEE 802.11ax (40MHz, MCS4, 99pc dc)   WLAN   8.39   ± 9.6 %     10712   AAC   IEEE 802.11ax (40MHz, MCS5, 99pc dc)   WLAN   8.67   ± 9.6 %     10713   AAC   IEEE 802.11ax (40MHz, MCS6, 99pc dc)   WLAN   8.33   ± 9.6 %     10714   AAC   IEEE 802.11ax (40MHz, MCS7, 99pc dc)   WLAN   8.26   ± 9.6 %     10715   AAC   IEEE 802.11ax (40MHz, MCS8, 99pc dc)   WLAN   8.45   ± 9.6 %     10716   AAC   IEEE 802.11ax (40MHz, MCS9, 99pc dc)   WLAN   8.30   ± 9.6 %     10717   AAC   IEEE 802.11ax (40MHz, MCS10, 99pc dc)   WLAN   8.48   ± 9.6 %     10718   AAC   IEEE 802.11ax (40MHz, MCS11, 99pc dc)   WLAN   8.24   ± 9.6 %     10719   AAC   IEEE 802.11ax (80MHz, MCS11, 99pc dc)   WLAN   8.81   ± 9.6 %     10720   AAC   IEEE 802.11ax (80MHz, MCS1, 90pc dc)   WLAN   8.87   ± 9.6 %     10721   AAC   IEEE 802.11ax (80MHz, MCS2, 90pc dc)   WLAN   8.76   ± 9.6 %     10722   AAC   IEEE 802.11ax (80MHz, MCS3, 90pc dc)   WLAN   8.55   ± 9.6 %     10723   AAC   IEEE 802.11ax (80MHz, MCS4, 90pc dc)   WLAN   8.70   ± 9.6 %     10724   AAC   IEEE 802.11ax (80MHz, MCS5, 90pc dc)   WLAN   8.70   ± 9.6 %     10725   AAC   IEEE 802.11ax (80MHz, MCS5, 90pc dc)   WLAN   8.74   ± 9.6 %     10726   AAC   IEEE 802.11ax (80MHz, MCS6, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS7, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.72   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %     10727   AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc)   WLAN   8.66   ± 9.6 %	10709	AAC	IEEE 802.11ax (40MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10712 AAC IEEE 802.11ax (40MHz, MCS5, 99pc dc) WLAN 8.67 ± 9.6 % 10713 AAC IEEE 802.11ax (40MHz, MCS6, 99pc dc) WLAN 8.26 ± 9.6 % 10714 AAC IEEE 802.11ax (40MHz, MCS7, 99pc dc) WLAN 8.26 ± 9.6 % 10715 AAC IEEE 802.11ax (40MHz, MCS8, 99pc dc) WLAN 8.45 ± 9.6 % 10716 AAC IEEE 802.11ax (40MHz, MCS9, 99pc dc) WLAN 8.30 ± 9.6 % 10717 AAC IEEE 802.11ax (40MHz, MCS10, 99pc dc) WLAN 8.48 ± 9.6 % 10718 AAC IEEE 802.11ax (40MHz, MCS11, 99pc dc) WLAN 8.24 ± 9.6 % 10719 AAC IEEE 802.11ax (80MHz, MCS0, 90pc dc) WLAN 8.81 ± 9.6 % 10720 AAC IEEE 802.11ax (80MHz, MCS1, 90pc dc) WLAN 8.87 ± 9.6 % 10721 AAC IEEE 802.11ax (80MHz, MCS2, 90pc dc) WLAN 8.76 ± 9.6 % 10722 AAC IEEE 802.11ax (80MHz, MCS3, 90pc dc) WLAN 8.76 ± 9.6 % 10723 AAC IEEE 802.11ax (80MHz, MCS3, 90pc dc) WLAN 8.70 ± 9.6 % 10724 AAC IEEE 802.11ax (80MHz, MCS4, 90pc dc) WLAN 8.70 ± 9.6 % 10725 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc) WLAN 8.70 ± 9.6 % 10726 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc) WLAN 8.70 ± 9.6 % 10726 AAC IEEE 802.11ax (80MHz, MCS6, 90pc dc) WLAN 8.74 ± 9.6 % 10727 AAC IEEE 802.11ax (80MHz, MCS7, 90pc dc) WLAN 8.72 ± 9.6 % 10727 AAC IEEE 802.11ax (80MHz, MCS7, 90pc dc) WLAN 8.72 ± 9.6 %	10710	AAC		WLAN	8.29	± 9.6 %
10713       AAC       IEEE 802.11ax (40MHz, MCS6, 99pc dc)       WLAN       8.33       ± 9.6 %         10714       AAC       IEEE 802.11ax (40MHz, MCS7, 99pc dc)       WLAN       8.26       ± 9.6 %         10715       AAC       IEEE 802.11ax (40MHz, MCS8, 99pc dc)       WLAN       8.45       ± 9.6 %         10716       AAC       IEEE 802.11ax (40MHz, MCS10, 99pc dc)       WLAN       8.30       ± 9.6 %         10717       AAC       IEEE 802.11ax (40MHz, MCS10, 99pc dc)       WLAN       8.48       ± 9.6 %         10718       AAC       IEEE 802.11ax (40MHz, MCS11, 99pc dc)       WLAN       8.24       ± 9.6 %         10719       AAC       IEEE 802.11ax (80MHz, MCS0, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.76       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.74       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN </td <td>10711</td> <td>AAC</td> <td>IEEE 802.11ax (40MHz, MCS4, 99pc dc)</td> <td>WLAN</td> <td></td> <td></td>	10711	AAC	IEEE 802.11ax (40MHz, MCS4, 99pc dc)	WLAN		
10714 AAC IEEE 802.11ax (40MHz, MCS7, 99pc dc)  10715 AAC IEEE 802.11ax (40MHz, MCS8, 99pc dc)  10716 AAC IEEE 802.11ax (40MHz, MCS9, 99pc dc)  10717 AAC IEEE 802.11ax (40MHz, MCS10, 99pc dc)  10718 AAC IEEE 802.11ax (40MHz, MCS10, 99pc dc)  10719 AAC IEEE 802.11ax (40MHz, MCS11, 99pc dc)  10719 AAC IEEE 802.11ax (80MHz, MCS11, 99pc dc)  10720 AAC IEEE 802.11ax (80MHz, MCS0, 90pc dc)  10721 AAC IEEE 802.11ax (80MHz, MCS1, 90pc dc)  10722 AAC IEEE 802.11ax (80MHz, MCS2, 90pc dc)  10723 AAC IEEE 802.11ax (80MHz, MCS3, 90pc dc)  10724 AAC IEEE 802.11ax (80MHz, MCS4, 90pc dc)  10725 AAC IEEE 802.11ax (80MHz, MCS4, 90pc dc)  10726 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10727 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10728 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10729 AAC IEEE 802.11ax (80MHz, MCS6, 90pc dc)  10720 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10721 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10722 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10724 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10725 AAC IEEE 802.11ax (80MHz, MCS5, 90pc dc)  10726 AAC IEEE 802.11ax (80MHz, MCS6, 90pc dc)  10727 AAC IEEE 802.11ax (80MHz, MCS8, 90pc dc)  WLAN 8.70 ± 9.6 %  10727 AAC IEEE 802.11ax (80MHz, MCS8, 90pc dc)  WLAN 8.66 ± 9.6 %	10712	AAC		WLAN		
10715       AAC       IEEE 802.11ax (40MHz, MCS8, 99pc dc)       WLAN       8.45       ± 9.6 %         10716       AAC       IEEE 802.11ax (40MHz, MCS9, 99pc dc)       WLAN       8.30       ± 9.6 %         10717       AAC       IEEE 802.11ax (40MHz, MCS10, 99pc dc)       WLAN       8.48       ± 9.6 %         10718       AAC       IEEE 802.11ax (40MHz, MCS11, 99pc dc)       WLAN       8.24       ± 9.6 %         10719       AAC       IEEE 802.11ax (80MHz, MCS0, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.76       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.55       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN <td></td> <td>AAC</td> <td>IEEE 802.11ax (40MHz, MCS6, 99pc dc)</td> <td>WLAN</td> <td>_</td> <td></td>		AAC	IEEE 802.11ax (40MHz, MCS6, 99pc dc)	WLAN	_	
10716       AAC       IEEE 802.11ax (40MHz, MCS9, 99pc dc)       WLAN       8.30       ± 9.6 %         10717       AAC       IEEE 802.11ax (40MHz, MCS10, 99pc dc)       WLAN       8.48       ± 9.6 %         10718       AAC       IEEE 802.11ax (40MHz, MCS11, 99pc dc)       WLAN       8.24       ± 9.6 %         10719       AAC       IEEE 802.11ax (80MHz, MCS0, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.76       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	10714	_				
10717       AAC       IEEE 802.11ax (40MHz, MCS10, 99pc dc)       WLAN       8.48       ± 9.6 %         10718       AAC       IEEE 802.11ax (40MHz, MCS11, 99pc dc)       WLAN       8.24       ± 9.6 %         10719       AAC       IEEE 802.11ax (80MHz, MCS0, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.76       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS2, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.70       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.74       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	10715					
10718       AAC       IEEE 802.11ax (40MHz, MCS11, 99pc dc)       WLAN       8.24       ± 9.6 %         10719       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.76       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS2, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.70       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.74       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.72       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	10716	_				
10719       AAC       IEEE 802.11ax (80MHz, MCS0, 90pc dc)       WLAN       8.81       ± 9.6 %         10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.87       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS2, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.55       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	10717	_				
10720       AAC       IEEE 802.11ax (80MHz, MCS1, 90pc dc)       WLAN       8.87       ± 9.6 %         10721       AAC       IEEE 802.11ax (80MHz, MCS2, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.55       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	10718	_				
10721       AAC       IEEE 802.11ax (80MHz, MCS2, 90pc dc)       WLAN       8.76       ± 9.6 %         10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.55       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %		_				
10722       AAC       IEEE 802.11ax (80MHz, MCS3, 90pc dc)       WLAN       8.55       ± 9.6 %         10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEIE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %		_				
10723       AAC       IEEE 802.11ax (80MHz, MCS4, 90pc dc)       WLAN       8.70       ± 9.6 %         10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %		_				
10724       AAC       IEEE 802.11ax (80MHz, MCS5, 90pc dc)       WLAN       8.90       ± 9.6 %         10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %						
10725       AAC       IEEE 802.11ax (80MHz, MCS6, 90pc dc)       WLAN       8.74       ± 9.6 %         10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %	-	1				
10726       AAC       IEEE 802.11ax (80MHz, MCS7, 90pc dc)       WLAN       8.72       ± 9.6 %         10727       AAC       IEIEE 802.11ax (80MHz, MCS8, 90pc dc)       WLAN       8.66       ± 9.6 %						
10727 AAC   IEEE 802.11ax (80MHz, MCS8, 90pc dc) WLAN 8.66 ± 9.6 %						
		1000				
10728 AAC   IEEE 802.11ax (80MHz, MCS9, 90pc dc)   WLAN   8.65   ± 9.6 %	-	-	-			
	10728	AAC	IEEE 802.11ax (80MHz, MCS9, 90pc dc)	WLAN	8.65	± 9,6 %

Report No.: SFBFLF-WTW-P21123600A

10729	AAC	IEEE 802.11ax (80MHz, MCS10, 90pc dc)	WLAN	8.64	± 9.6 %
10730	AAC	IEEE 802.11ax (80MHz, MCS11, 90pc dc)	WLAN	8.67	± 9.6 %
10731	AAÇ	IEEE 802.11ax (80MHz, MCS0, 99pc dc)	WLAN	8.42	±9.6%
10732	AAC	IEEE 802.11ax (80MHz, MCS1, 99pc dc)	WLAN	8.46	± 9.6 %
10733	AAC	IEEE 802.11ax (80MHz, MCS2, 99pc dc)	WLAN	8.40	± 9.6 %
10734	AAC	IEEE 802.11ax (80MHz, MCS3, 99pc dc)	WLAN	8.25	± 9.6 %
10735	AAC	IEEE 802.11ax (80MHz, MCS4, 99pc dc)	WLAN	8.33	±9.6%
10736	AAC	IEEE 802.11ax (80MHz, MCS5, 99pc dc)	WLAN	8.27	± 9.6 %
10737	AAC	IEEE 802.11ax (80MHz, MCS6, 99pc dc)	WLAN	8.36	± 9.6 %
10738	AAC	IEEE 802.11ax (80MHz, MCS7, 99pc dc)	WLAN	8.42	± 9.6 %
10739	AAC	IEEE 802.11ax (80MHz, MCS8, 99pc dc)	WLAN	8.29	± 9.6 %
10740	AAC	IEEE 802.11ax (80MHz, MCS9, 99pc dc)	WLAN	8.48	± 9.6 %
10741	AAC	IEEE 802.11ax (80MHz, MCS10, 99pc dc)	WLAN	8.40	± 9.6 %
10742	AAC	IEEE 802.11ax (80MHz, MCS11, 99pc dc)	WLAN	8.43	± 9.6 %
10743	AAC	IEEE 802.11ax (160MHz, MCS0, 90pc dc)	WLAN	8.94	± 9.6 %
10744	AAC	IEEE 802.11ax (160MHz, MCS1, 90pc dc)	WLAN	9.16	± 9.6 %
10745	AAC	IEEE 802.11ax (160MHz, MCS2, 90pc dc)	WLAN	8.93	± 9.6 %
10746	AAC	IEEE 802.11ax (160MHz, MCS3, 90pc dc)	WLAN	9.11	± 9.6 %
10747	AAC	IEEE 802.11ax (160MHz, MCS4, 90pc dc)	WLAN	9.04	± 9.6 %
10748	AAC	IEEE 802.11ax (160MHz, MCS5, 90pc dc)	WLAN	8.93	±9.6 %
10749	AAC	IEEE 802.11ax (160MHz, MCS6, 90pc dc)	WLAN	8.90	± 9.6 %
10750	AAC	IEEE 802.11ax (160MHz, MCS7, 90pc dc)	WLAN	8.79	± 9.6 %
10751	AAC	IEEE 802.11ax (160MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10752	AAC	IEEE 802.11ax (160MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10753	AAC	IEEE 802.11ax (160MHz, MCS10, 90pc dc)	WLAN	9.00	± 9.6 %
10754	AAC	IEEE 802.11ax (160MHz, MCS11, 90pc dc)	WLAN	8.94	± 9.6 %
10755	AAC	IEEE 802.11ax (160MHz, MCS0, 99pc dc)	WLAN	8.64	± 9.6 %
10756	AAC	IEEE 802.11ax (160MHz, MCS1, 99pc dc)	WLAN	8.77	± 9.6 %
10757	AAC	IEEE 802.11ax (160MHz, MCS2, 99pc dc)	WLAN	8.77	± 9.6 %
10758	AAC	IEEE 802.11ax (160MHz, MCS3, 99pc dc)	WLAN	8.69	± 9.6 %
10759	AAC	IEEE 802.11ax (160MHz, MCS4, 99pc dc)	WLAN	8.58	± 9.6 %
10760	AAC	IEEE 802.11ax (160MHz, MCS5, 99pc dc)	WLAN	8.49	± 9.6 %
10761	AAC	IEEE 802.11ax (160MHz, MCS6, 99pc dc)	WLAN	8.58	± 9.6 %
10762	AAC	IEEE 802.11ax (160MHz, MCS7, 99pc dc)	WLAN	8.49	± 9.6 %
10763	AAC	IEEE 802.11ax (160MHz, MCS8, 99pc dc)	WLAN	8.53	± 9.6 %
10764	AAC	IEEE 802.11ax (160MHz, MCS9, 99pc dc)	WLAN	8.54	± 9.6 %
10765	AAC	IEEE 802.11ax (160MHz, MC\$10, 99pc dc)	WLAN	8.54	± 9.6 %
10766	AAC	IEEE 802.11ax (160MHz, MCS11, 99pc dc)	WLAN	8.51	± 9.6 %
10767	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	± 9.6 %
10768	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10769	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10770	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10771	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10771	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	± 9.6 %
10773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	± 9.6 %
10774	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)		_	± 9.6 %
10774	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 RHz)	5G NR FR1 TDD 5G NR FR1 TDD	8.02	
10775	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	_	8.31	± 9.6 %
10777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10777	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TOD	8.30	± 9.6 %
10778	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
		5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6%
10780	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10781	AAD		5G NR FR1 TDD	8.38	± 9.6 %
10782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6%
10783	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	± 9.6 %

10785	AAD	5G NR (CP-OFDM, 100% RB. 15 MHz. QPSK, 15 kHz)	5G NR FR1 TDD	8.40	<b>±</b> 9.6 %
10786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	± 9.6 %
10788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10791	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	± 9.6 %
10792	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	± 9.6 %
10793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	± 9.6 %
10794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	± 9.6 %
10796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7,82	± 9.6 %
10797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10802	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	± 9.6 %
10803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10817	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	8.33	± 9.6 %
10820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10821	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10823	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10825	AAD	5G NR (CP-OFDM, 100% R8, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10828	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10829	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10830	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	± 9.6 %
10831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	± 9.6 %
10832	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	± 9.6 %
10833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10834	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	± 9.6 %
10835	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10836	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	± 9.6 %
10837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	± 9.6 %
10839	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10840	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	± 9.6 %
10841	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	± 9.6 %
10843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	± 9.6 %
10844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10858	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10859	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1TDD	8.34	± 9.6 %
10860	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
		1		P = - 1 P	,,

	_				
10861	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10864	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10865	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	± 9.6 %
10869	AAD	5G NR (DFT-s-OFDM, 1 RB. 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10870	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	± 9.6 %
10871	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	± 9.6 %
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10875	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10876	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	± 9.6 %
10877	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	± 9.6 %
10878	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10879	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	± 9.6 %
10880	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	± 9.6 %
10881	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10882	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	± 9.6 %
10883	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	± 9.6 %
10884	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	± 9.6 %
10885	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10886	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10887	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10888	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	± 9.6 %
10889	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	± 9.6 %
10890	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	± 9.6 %
10891	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	± 9.6 %
10892	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10897	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	± 9.6 %
10898	AAB	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	± 9.6 %
10899	AAB	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	± 9.6 %
10900	AAB	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10901	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10902	AAB	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10904	AAB	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10905	AAB	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10906	AAB	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10907	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	± 9.6 %
10908	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	± 9.6 %
10909	AAB	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	± 9.6 %
10910	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	5.83	± 9.6 %
10911	AAB	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	± 9.6 %
10912	AAB	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10913	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10914	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	± 9.6 %
10915	AAB	5G NR (DFT-s-OFDM, 50% R8, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	± 9.6 %
10916	AAB	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	± 9.6 %
10917	AAB	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	± 9.6 %
10918	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	± 9.6 %
10919	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	± 9.6 %
10920	AAB	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	± 9.6 %
10921	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10922	AAB	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	± 9.6 %

Certificate No: EX3-7555\_Sep21/2 Page 22 of 23

10923	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 <u>%</u>
10924	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 <u>%</u>
10925	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	± 9.6 %
10926	AAB	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	± 9.6 %
10927	AAB	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	± 9.6 %
10928	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	± 9.6 %
10929	AAC	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	± 9.6 %
10930	AAC	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	± 9.6 %
10931	AAC	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	± 9.6 %
10932	AAC	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	± 9.6 %
10933	AAC	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	± 9.6 %
10934	AAC	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	± 9.6 %
10935	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	± 9.6 %
10936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	± 9.6 %
10937	AAC	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	± 9.6 %
10938	AAC	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	± 9.6 %
10939	AAC	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	± 9.6 %
10940	AAC	5G NR (DFT-s-OFDM, 50% RB. 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	± 9.6 %
10941	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	± 9.6 %
10942	AAC	5G NR (DFT-s-QFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	± 9.6 %
10943	AAD	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	± 9.6 %
10944	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	± 9.6 %
10945	AAC	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	± 9.6 %
10946	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	± 9.6 %
10947	AAC	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	± 9.6 %
10948	AAC	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	± 9.6 %
10949	AAC	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	± 9.6 %
10950	AAC	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	± 9.6 %
10951	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	± 9.6 %
10952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	± 9.6 %
10953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	± 9.6 %
10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	± 9.6 %
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	± 9.6 %
10956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	± 9.6 %
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	± 9.6 %
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	± 9.6 %
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	± 9.6 %
10960	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	± 9.6 %
10961	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	± 9.6 %
10962	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	± 9.6 %
10963	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	± 9.6 %
10964	AAC	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	± 9.6 %
10965	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	± 9.6 %
10966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	± 9.6 %
10967	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	± 9.6 %
10967	AAB	5G NR DE (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz)	5G NR FR1 TDD	9.49	± 9.6 %
10908	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59	± 9.6 %
10972		5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 13 KHz)	5G NR FR1 TDD	9.06	± 9.6 %
10973	AAB	5G NR (CP-0FDM, 100% RB, 100 MHz, QFSN, 30 kHz)	5G NR FR1 TDD	10.28	± 9.6 %
10974	AAA	ULLA BDR	ULLA	2.23	± 9.6 %
10978	AAA	ULLA HDR4	ULLA	7.02	± 9.6 %
10979	AAA	ULLA HDR8	ULLA	8.82	± 9.6 %
10980	AAA	ULLA HDRp4	ULLA	1.50	± 9.6 %
10981	AAA	ULLA HDRp8	ULLA	1,44	± 9.6 %
10902	- AAA	OFFY LIPIZA		1:44	1 5.0 /0

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

Certificate No: EX3-7555\_Sep21/2 Page 23 of 23