DIPOLE CALIBRATION EXTENSION

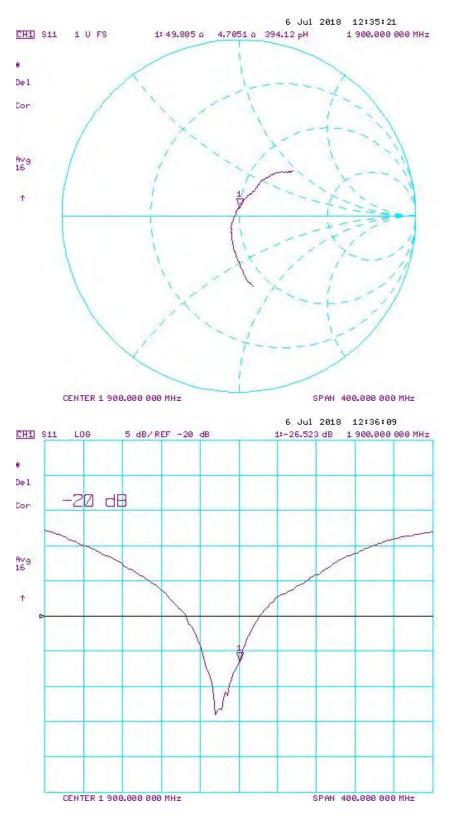
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

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

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

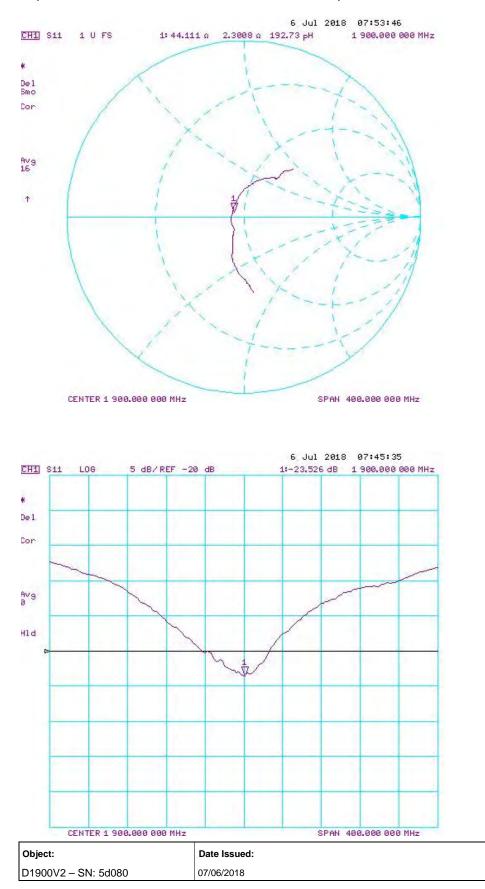
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	W/kg @ 20.0 dBm	Measured Head SAR (1g) W/kg @ 20.0 dBm	(%)	W/кg @ 20.0 dBm	(10g) W/kg @ 20.0 dBm		Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Head (dB)	Deviation (%)	
7/8/2016	7/6/2018	1.192	3.93	4.090	4.07%	2.05	2.12	3.41%	52.1	49.8	2.3	5.3	4.7	0.6	-25.1	-26.5	-5.60%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Body (1g) W/kg @ 20.0 dBm	Measured Body SAR (1g) W/kg @ 20.0 dBm	(9()	Certificate SAR Target Body (10g) W/kg @ 20.0 dBm	(10a) W/ka @	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
7/8/2017	7/6/2018	1.192	3.91	4.110	5.12%	2.07	2.09	0.97%	47.4	44.1	3.3	6.8	2.3	4.5	-22.6	-23.5	-4.00%	PASS

Object:	Date Issued:	Daga 2 of 4
D1900V2 – SN: 5d080	07/06/2018	Page 2 of 4



Impedance & Return-Loss Measurement Plot for Head TSL

Object:	Date Issued:	Page 3 of 4
D1900V2 – SN: 5d080	07/06/2018	Page 3 of 4



Impedance & Return-Loss Measurement Plot for Body TSL

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



Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura

S Swiss Calibration Service

S

С

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

PC Test Cilent

Certificate No: D2600V2-1064_Jun17

CALIBRATION CERTIFICATE

Object

D2600V2 - SN:1064

Calibration procedure(s)

QA CAL-05.v9 Calibration procedure for dipole validation kits above 700 MHz

Calibration date:

June 07, 2017

815/2017 Extended BN 07/18/201 This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02522)	Apr-18
Reference 20 dB Attenuator	SN: 5058 (20k)	07-Apr-17 (No. 217-02528)	Apr-18
Type-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18
Reference Probe EX3DV4	SN: 7349	31-Dec-16 (No. EX3-7349_Dec16)	Dec-17
DAE4	SN: 601	28-Mar-17 (No. DAE4-601_Mar17)	Mar-18
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17
	Name	Function	Signature
Calibrated by:	Johannes Kurikka	Laboratory Technician	yua un
Approved by:	Katja Pokovic	Technical Manager	Cl 14

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

Certificate No: D2600V2-1064_Jun17

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 Calibration Service

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

Glossary:

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

Calibration is Performed According to the Following Standards:

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

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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

Accreditation No.: SCS 0108

Measurement Conditions

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

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	-
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	$d\mathbf{x}$, $d\mathbf{y}$, $d\mathbf{z} = 5 \text{ mm}$	
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	37.3 ± 6 %	2.02 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.6 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.0 W/kg ± 17.0 % (k=2)
CAD successed over 10 cm ³ (10 s) of Vood TCI	aandilian	

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.5 W/kg ± 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.7 ± 6 %	2.22 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.9 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	54.7 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.15 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.4 W/kg ± 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.4 Ω - 6.3 jΩ			
Return Loss	- 23.9 dB			

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.4 Ω - 4.1 jΩ			
Return Loss	- 25.0 dB			

General Antenna Parameters and Design

Electrical Delay (one direction)	1.151 ns
----------------------------------	----------

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

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

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

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	August 14, 2012

DASY5 Validation Report for Head TSL

Date: 07.06.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1064

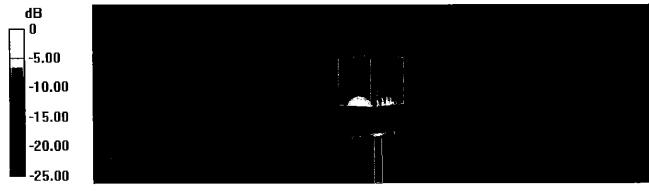
Communication System: UID 0 - CW; Frequency: 2600 MHz Medium parameters used: f = 2600 MHz; σ = 2.02 S/m; ϵ_r = 37.3; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

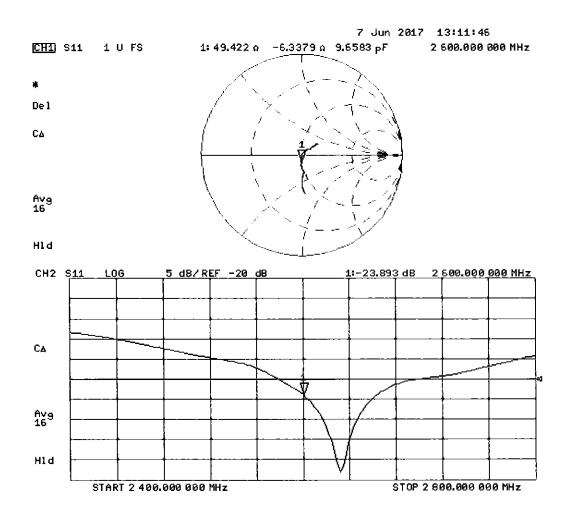
- Probe: EX3DV4 SN7349; ConvF(7.96, 7.96, 7.96); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 115.9 V/m; Power Drift = -0.07 dB Peak SAR (extrapolated) = 32.1 W/kg SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.46 W/kg Maximum value of SAR (measured) = 24.5 W/kg



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



DASY5 Validation Report for Body TSL

Date: 07.06.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1064

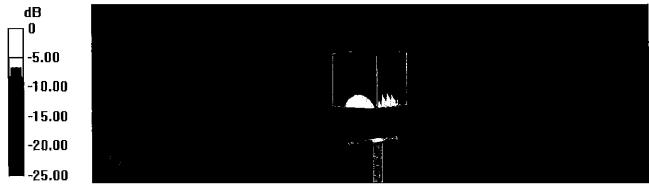
Communication System: UID 0 - CW; Frequency: 2600 MHz Medium parameters used: f = 2600 MHz; $\sigma = 2.22$ S/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

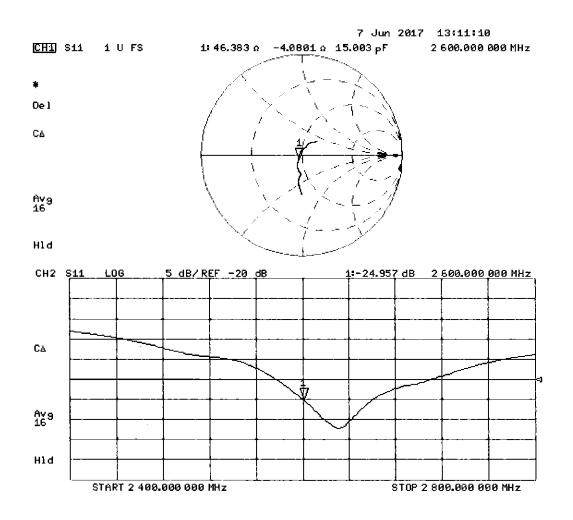
- Probe: EX3DV4 SN7349; ConvF(7.94, 7.94, 7.94); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mmReference Value = 101.9 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 29.8 W/kg SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.15 W/kg Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg





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

http://www.pctest.com



Certification of Calibration

Object

D2600V2 - SN: 1064

Calibration procedure(s) Procedure for Calibration Extension for SAR Dipoles.

06/04/2018

Extended Calibration date:

Description:

SAR Validation Dipole at 2600 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4438C	ESG Vector Signal Generator		Biennial	3/24/2019	MY42082385
Agilent	8753ES	S-Parameter Network Analyzer	9/14/2017	Annual	9/14/2018	US39170118
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Anritsu	ML2495A	Power Meter	11/28/2017	Annual	11/28/2018	1039008
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1207364
Anritsu	MA2411B	Pulse Power Sensor	11/15/2017	Annual	11/15/2018	1339007
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/4/2018	Annual	6/4/2019	MY53401181
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE5011-1	Torque Wrench	7/19/2017	Biennial	7/19/2019	N/A
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/21/2017	Annual	6/21/2018	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/7/2018	Annual	3/7/2019	1368
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	7/11/2017	Annual	7/11/2018	1039
SPEAG	ES3DV3	SAR Probe	8/14/2017	Annual	8/14/2018	3332
SPEAG	ES3DV3	SAR Probe	3/13/2018	Annual	3/13/2019	3319

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

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

Object:	Date Issued:	Dogo 1 of 4
D2600V2 – SN: 1064	06/04/2018	Page 1 of 4

DIPOLE CALIBRATION EXTENSION

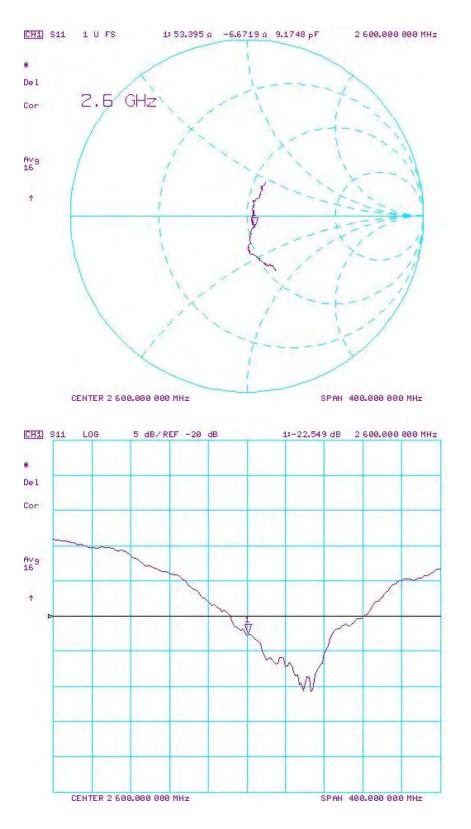
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

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

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

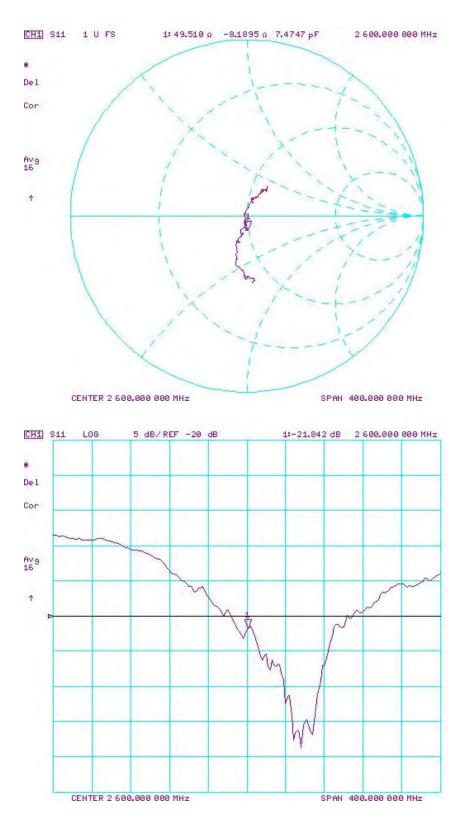
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Head (1g) W/kg @ 20.0 dBm	Measured Head SAR (1g) W/kg @ 20.0 dBm	(%)	w/кg @ 20.0 dBm	(10a) W/ka @		Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Measured Return Loss Head (dB)	Deviation (%)	
6/7/2017	6/4/2018	1.151	5.70	5.71	0.18%	2.55	2.51	-1.57%	49.4	53.4	4.0	-6.3	-6.7	0.4	-23.9	-22.5	5.90%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)		Measured Body SAR (1g) W/kg @ 20.0 dBm		Certificate SAR Target Body (10g) W/kg @ 20.0 dBm	(40-) 14/0 @	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
6/7/2017	6/4/2018	1.151	5.47	5.65	3.29%	2.44	2.48	1.64%	46.4	49.5	3.1	-4.1	-8.2	4.1	-25.0	-21.8	12.80%	PASS

Object:	Date Issued:	Page 2 of 4
D2600V2 – SN: 1064	06/04/2018	Fage 2 01 4



Impedance & Return-Loss Measurement Plot for Head TSL

Object:	Date Issued:	Daga 2 of 4
D2600V2 – SN: 1064	06/04/2018	Page 3 of 4



Impedance & Return-Loss Measurement Plot for Body TSL

Object:	Date Issued:	Page 4 of 4
D2600V2 – SN: 1064	06/04/2018	Fage 4 01 4

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



Schweizerischer Kalibrierdienst

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

Accreditation No.: SCS 0108

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

PC Test Client

Certificate No: D5GHzV2-1237_Aug17

CALIBRATION CERTIFICATE

Obje c t	D5GHzV2 - SN:1	237		
Calibration procedure(s)	QA CAL-22.v2 Calibration proce	dure for dipole validation kits bet	ween 3-6 GHz	PMV 8/27/1
Calibration date:	August 15, 2017			
The measurements and the unce	rtaintles with confidence p	ional standards, which realize the physical un robability are given on the following pages ar ry facility: environment temperature (22 \pm 3)°	ed are part of the certificate.	
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration	n
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18	
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18	
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02522)	Apr-18	
Reference 20 dB Attenuator	SN: 5058 (20k)	07-Apr-17 (No. 217-02528)	Apr-18	
Type-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18	
Reference Probe EX3DV4	SN: 3503	31-Dec-16 (No. EX3-3503_Dec16)	Dec-17	
DAE4	SN: 601	28-Mar-17 (No. DAE4-601_Mar17)	Mar-18	1
Secondary Standards	1D #	Check Date (in house)	Scheduled Check	
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-	18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-	18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-	18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-	18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-	17
Collibrated but	Name	Function	Signature	
Calibrated by:	Johannes Kurikka	Laboratory Technician	Ja la	-
Approved by:	Katja Pokovic	Technical Manager	El 165	-
This calibration certificate shall no	ot be reproduced except in	n full without written approval of the laboratory	Issued: August 16, 20	17

Calibration Laboratory of

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





S Schweizerischer Kalibrierdienst

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

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

Glossary:

TSL	tissue simulating liquid
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%.

Accreditation No.: SCS 0108

Measurement Conditions

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

DASY Version	DASY5	V 52.10.0
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 %	4.49 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.14 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.7 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.33 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 %	4.84 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	82.5 W / kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.38 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.5 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	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 %	4.99 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.10 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.2 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.31 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.8 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.36 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.0 ± 6 %	5.46 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.75 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.9 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	<u></u>
SAR measured	100 mW input power	2.17 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.5 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5600 MHz The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 ℃	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.4 ± 6 %	5.93 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.91 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	78.5 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.23 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	22.1 W/kg ± 19.5 % (k=2)

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

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.3	5.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.2 ± 6 %	6.13 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL at 5750 MHz

SAR for nominal Body TSL parameters

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.77 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	77.1 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.16 W/kg

normalized to 1W

21.4 W/kg ± 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	49.9 Ω - 5.3 jΩ
Return Loss	- 25.5 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	51.9 Ω + 2.3 jΩ
Return Loss	- 30.7 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	55.6 Ω - 0.5 jΩ
Return Loss	- 25.5 dB

Antenna Parameters with Body TSL at 5250 MHz

Impedance, transformed to feed point	46.9 Ω - 4.2 jΩ
Return Loss	- 25.4 dB

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	50.2 Ω + 3.0 jΩ
Return Loss	- 30.4 dB

Antenna Parameters with Body TSL at 5750 MHz

Impedance, transformed to feed point	53.4 Ω + 0.2 jΩ
Return Loss	- 29.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1 194 ns
Electrical Delay (one unection)	1.134 115

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

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

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

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	May 04, 2015

DASY5 Validation Report for Head TSL

Date: 15.08.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1237

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz Medium parameters used: f = 5250 MHz; σ = 4.49 S/m; ϵ_r = 34.7; ρ = 1000 kg/m³, Medium parameters used: f = 5600 MHz; σ = 4.84 S/m; ϵ_r = 34.2; ρ = 1000 kg/m³, Medium parameters used: f = 5750 MHz; σ = 4.99 S/m; ϵ_r = 34; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

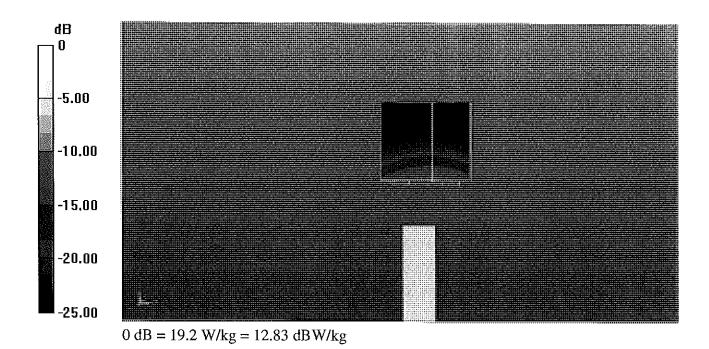
DASY52 Configuration:

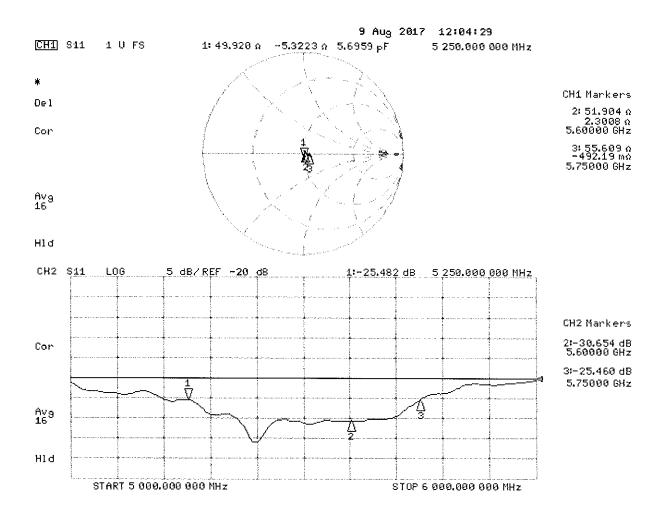
- Probe: EX3DV4 SN3503; ConvF(5.58, 5.58, 5.58); Calibrated: 31.12.2016, ConvF(5.09, 5.09, 5.09); Calibrated: 31.12.2016, ConvF(5.02, 5.02, 5.02); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=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 = 70.08 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 30.6 W/kg SAR(1 g) = 8.14 W/kg; SAR(10 g) = 2.33 W/kg Maximum value of SAR (measured) = 19.2 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 70.04 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 32.7 W/kg SAR(1 g) = 8.33 W/kg; SAR(10 g) = 2.38 W/kg Maximum value of SAR (measured) = 19.8 W/kg

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 = 69.11 V/m; Power Drift = -0.09 dB Peak SAR (extrapolated) = 32.4 W/kg SAR(1 g) = 8.1 W/kg; SAR(10 g) = 2.31 W/kg Maximum value of SAR (measured) = 19.6 W/kg





Date: 08.08.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1237

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz Medium parameters used: f = 5250 MHz; σ = 5.46 S/m; ϵ_r = 47; ρ = 1000 kg/m³, Medium parameters used: f = 5600 MHz; σ = 5.93 S/m; ϵ_r = 46.4; ρ = 1000 kg/m³, Medium parameters used: f = 5750 MHz; σ = 6.13 S/m; ϵ_r = 46.2; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

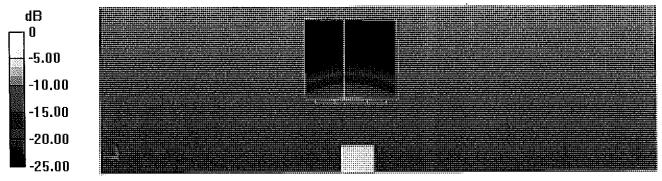
DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.14, 5.14, 5.14); Calibrated: 31.12.2016, ConvF(4.57, 4.57, 4.57); Calibrated: 31.12.2016, ConvF(4.51, 4.51, 4.51); Calibrated: 31.12.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

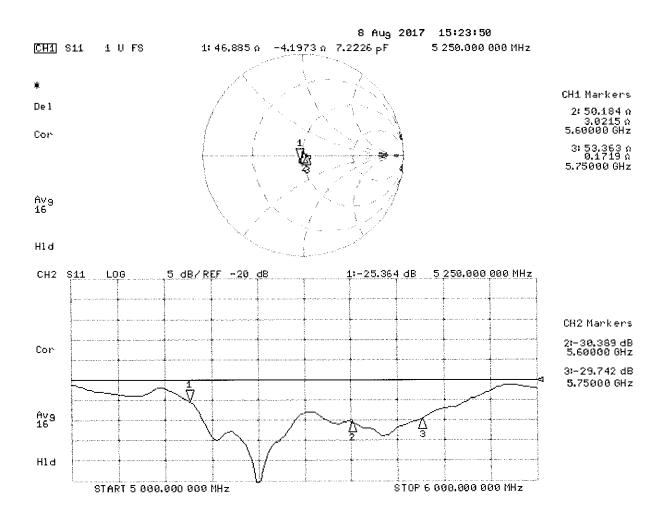
Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5250MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 65.87 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 29.9 W/kg SAR(1 g) = 7.75 W/kg; SAR(10 g) = 2.17 W/kg Maximum value of SAR (measured) = 18.4 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 65.11 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 33.0 W/kg SAR(1 g) = 7.91 W/kg; SAR(10 g) = 2.23 W/kg Maximum value of SAR (measured) = 19.3 W/kg

Dipole Calibration for Body 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 = 63.64 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 33.8 W/kg SAR(1 g) = 7.77 W/kg; SAR(10 g) = 2.16 W/kg Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 18.4 W/kg = 12.65 dBW/kg



Calibration Laboratory of

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

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

PC Test Client

Certificate No: ES3-3213_Feb18

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3213

Calibration procedure(s)

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

Calibration date:

February 13, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration	
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18	
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18	
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18	
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18	
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18	
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18	
Secondary Standards	ID	Check Date (in house)	Scheduled Check	
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18	
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18	
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18	
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18	
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18	

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	
			MICE
Approved by:	Katja Pokovic	Technical Manager	PILL
			10000
			Issued: February 13, 2018
This calibration certificate	shall not be reproduced except in full	without written approval of the laboratory	4.



Schweizerischer Kalibrierdienst

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

Accreditation No.: SCS 0108

Bru 2018

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



S Schweizerischer Kalibrierdienst

C Service suisse d'étalonnage

Accreditation No.: SCS 0108

- Servizio svizzero di taratura
- Swiss Calibration Service

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

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

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

Calibration is Performed According to the Following Standards:

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

Methods Applied and Interpretation of Parameters:

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

Probe ES3DV3

SN:3213

Calibrated:

Manufactured: October 14, 2008 February 13, 2018

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.43	1.32	1.29	± 10.1 %
DCP (mV) ^B	100.3	104.3	100.0	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	С	D	VR	Unc [⊢]
			dB	dB√μV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	219.3	±2.7 %
		Y	0.0	0.0	1.0		219.1	
		Z	0.0	0.0	1.0		213.7	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ^{-₂}	T2 ms.V⁻¹	T3 ms	T4 V⁻²	T5 V⁻1	Т6
Х	55.43	404.4	36.34	28.23	1.967	5.10	0.398	0.555	1.011
Y	56.36	406.4	35.71	28.34	2.153	5.10	1.040	0.438	1.013
Z	52.80	385.3	36.34	28.19	1.829	5.10	0.000	0.541	1.011

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

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

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.75	6.75	6.75	0.64	1.30	± 12.0 %
835	41.5	0.90	6.42	6.42	6.42	0.48	1.50	± 12.0 %
1750	40.1	1.37	5.45	5.45	5.45	0.52	1.41	± 12.0 %
1900	40.0	1.40	5.30	5.30	5.30	0.79	1.17	± 12.0 %
2300	39.5	1.67	4.94	4.94	4.94	0.59	1.37	± 12.0 %
2450	39.2	1.80	4.72	4.72	4.72	0.80	1.21	± 12.0 %
2600	39.0	1.96	4.53	4.53	4.53	0.72	1.33	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

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

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

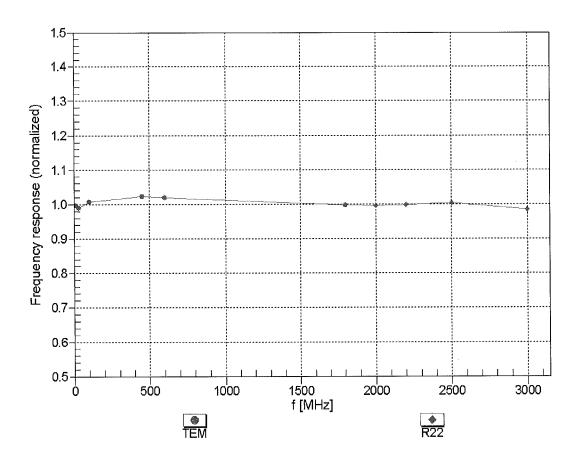
			-		-			
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.30	6.30	6.30	0.80	1.13	± 12.0 %
835	55.2	0.97	6.20	6.20	6.20	0.41	1.66	± 12.0 %
1750	53.4	1.49	5.10	5.10	5.10	0.37	1.82	± 12.0 %
1900	53.3	1.52	4.88	4.88	4.88	0.59	1.51	± 12.0 %
2300	52.9	1.81	4.62	4.62	4.62	0.80	1.30	± 12.0 %
2450	52.7	1.95	4.53	4.53	4.53	0.80	1.25	± 12.0 %
2600	52.5	2.16	4.33	4.33	4.33	0.80	1.25	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

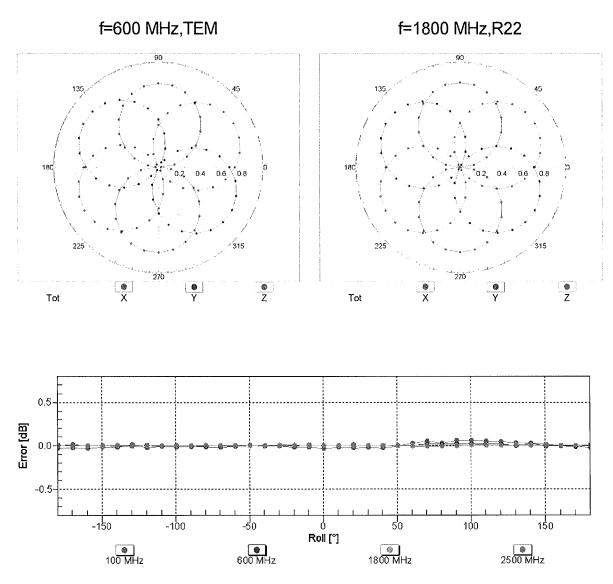
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF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

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



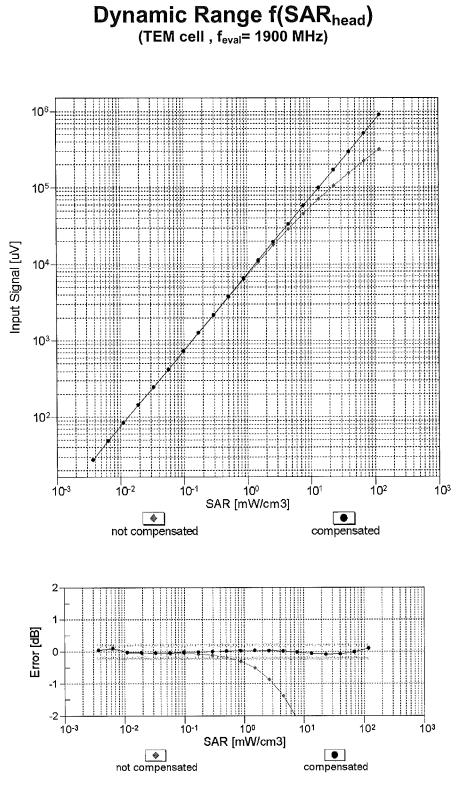
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

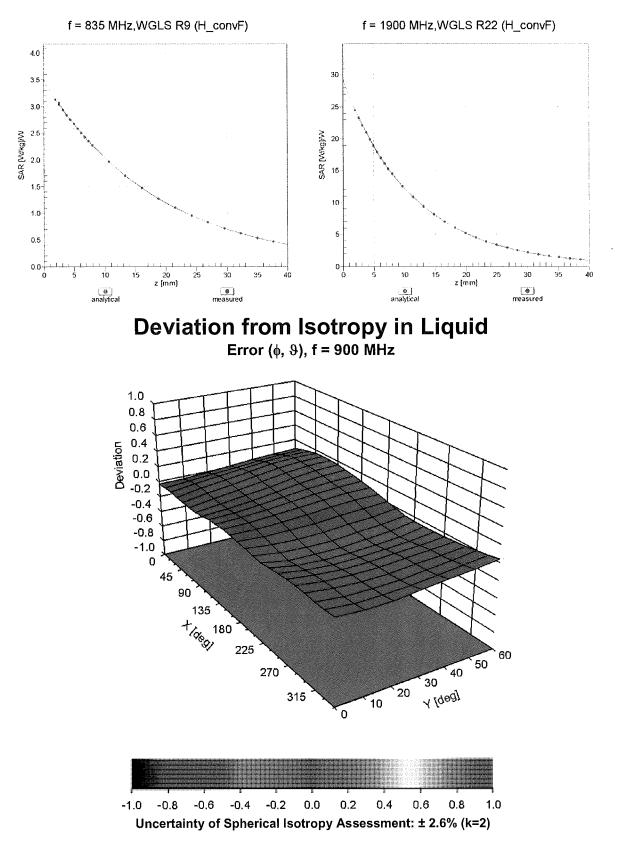


Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



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



Conversion Factor Assessment

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	100.6
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	219.3	± 2.7 %
		Y	0.00	0.00	1.00		219.1	
10010		Z	0.00	0.00	1.00	10.00	213.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	7.64	78.36	17.77	10.00	25.0	± 9.6 %
		Y	8.93	80.69	18.99		25.0	
10011-	UMTS-FDD (WCDMA)	Z X	7.43 0.94	77.97 65.73	17.46 13.94	0.00	25.0	± 9.6 %
CAB						0.00	150.0	± 9.6 %
		Y	1.08	67.98	15.48		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	0.93	65.52 64.18	13.77 15.06	0.44	150.0	
CAB	Mbps)					0.41	150.0	± 9.6 %
		Y	1.29	65.11	15.84		150.0	
40040		Z	1.22	64.10	14.97	A 4-	150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.06	67.01	17.27	1.46	150.0	± 9.6 %
		Y	5.11	67.24	17.46		150.0	
		Z	5.03	67.01	17.25		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	58.23	111.57	29.90	9.39	50.0	± 9.6 %
		Y	38.28	105.54	28.67		50.0	
		Ζ	83.35	116.76	31.01		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	×	42.41	106.55	28.63	9.57	50.0	± 9.6 %
		Y	31.06	102.12	27.76		50.0	
		Ζ	55.17	110.35	29.43		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	116.42	29.15	6.56	60.0	±9.6 %
		Y	100.00	117.64	29.89		60.0	
		Z	100.00	115.95	28.84		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	22.66	114.16	43.61	12.57	50.0	± 9.6 %
		Y	32.36	125.54	47.77		50.0	
		Z	20.92	112.18	42.96		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	×	22.06	107.62	37.21	9.56	60.0	± 9.6 %
		Y	29.09	114.84	39.79		60.0	
		Z	22.32	108.24	37.43		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	114.90	27.59	4.80	80.0	± 9.6 %
		Y	100.00	116.49	28.47		80.0	
		Z	100.00	114.42	27.29		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	114.37	26.58	3.55	100.0	± 9.6 %
		Y	100.00	116.53	27.70		100.0	
		Z	100.00	113.85	26.28		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	×	13.21	95.56	31.98	7.80	80.0	± 9.6 %
		Y	16.23	100.64	33.98		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.05 100.00	95.55 114.59	31.99 27.76	5.30	80.0 70.0	± 9.6 %
CAA		<u>,</u> ,	400.00	110.05	00.00			
		Y	100.00	116.05	28.60		70.0	
10024	IEEE 902 15 1 Plusteeth (OEOK, DU2)	Z	100.00	114.06	27.44	1 0 0	70.0	+060/
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	112.38	24.24	1.88	100.0	± 9.6 %
		Y	100.00	116.66	26.24		100.0	
		Z	100.00	111.54	23.82		100.0	

Certificate No: ES3-3213_Feb18

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	112.51	23.27	1.17	100.0	± 9.6 %
UMA		Y	100.00	119.82	26.49		100.0	
		Z	100.00	119.82	20.49		100.0 100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	19.77	98.57	26.87	5.30	70.0	± 9.6 %
		Y	22.51	101.06	27.89		70.0	
		Z	20.62	99.03	26.84		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	5.26	81.87	19.91	1.88	100.0	± 9.6 %
		Y	7.30	87.04	22.01		100.0	
40005		Z	5.17	81.44	19.55		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	2.97	75.56	17.30	1.17	100.0	± 9.6 %
		Y	4.02	80.17	19.40		100.0	
10036-		Z	2.90	75.11	16.93		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	25.61	102.92	28.18	5.30	70.0	± 9.6 %
		Y	28.89	105.33	29.15		70.0	
10037-		Z	27.23	103.63	28.21	4.00	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.03	81.31	19.68	1.88	100.0	± 9.6 %
		Y	7.01	86.52	21.80		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	4.92	80.81	19.30		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.05	76.11	17.60	1.17	100.0	± 9.6 %
		Y	4.14	80.86	19.74		100.0	
10020		Z	2.97	75.64	17.22		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.52	68.64	14.11	0.00	150.0	± 9.6 %
		Y	1.86	71.69	15.85		150.0	
10040		Z	1.44	68.18	13.70		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	115.25	28.83	7.78	50.0	± 9.6 %
		Y	100.00	116.43	29.57		50.0	
10044-	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Z	100.00	114.73	28.50	0.00	50.0	
CAA		X	0.00	111.44	0.10	0.00	150.0	± 9.6 %
		Y	0.00	116.05	0.75		150.0	
10049	DECT (TDD TDMA/CDM OFOK Full	Z	0.00	113.36	0.21	10.00	150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	15.69	90.02	25.55	13.80	25.0	± 9.6 %
		Y	13.84	87.79	25.13		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	17.52 19.88	91.95 94.41	25.99 25.54	10.79	25.0 40.0	± 9.6 %
		Y	17.39	92.41	25.24		40.0	
		z	22.32	96.16	25.89		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	15.96	91.92	25.75	9.03	50.0	± 9.6 %
		Y	16.02	92.06	26.04		50.0	
		Z	16.84	92.83	25.91		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	9.21	88.16	28.55	6.55	100.0	± 9.6 %
		Y	10.78	91.87	30.15		100.0	
40055		Ζ	9.04	87.96	28.49		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Х	1.36	66.07	16.00	0.61	110.0	± 9.6 %
		Y	1.46	67.28	16.91		110.0	
10055		_ Z_	1.35	65.96	15.91		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	52.62	119.34	30.14	1.30	110.0	± 9.6 %
		Y	100.00	130.86	33.40		110.0	
		Ζ	47.54	117.73	29.68		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	7.64	91.52	25.20	2.04	110.0	± 9.6 %
		Y	11.51	98.81	27.78		110.0	
		z	7.56	91.41	25.11		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.79	66.76	16.54	0.49	100.0	± 9.6 %
		Y	4.84	66.99	16.73		100.0	
		Z	4.76	66.76	16.52		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.82	66.91	16.68	0.72	100.0	± 9.6 %
		Y	4.87	67.15	16.87		100.0	
		Z	4.79	66.91	16.65		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.14	67.25	16.96	0.86	100.0	± 9.6 %
		Y	5.20	67.49	17.14		100.0	
		Z	5.10	67.24	16.93		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.04	67.27	17.12	1.21	100.0	± 9.6 %
		Y	5.10	67.51	17.31		100.0	
10000		Z	5.00	67.25	17.09		100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.09	67.39	17.35	1.46	100.0	± 9.6 %
		Y	5.15	67.65	17.54		100.0	
400		Z	5.06	67.37	17.32		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.41	67.60	17.83	2.04	100.0	± 9.6 %
		Y	5.47	67.85	18.03		100.0	
		Z	5.38	67.60	17.82		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.53	67.90	18.19	2.55	100.0	± 9.6 %
		Y	5.60	68.19	18.41		100.0	
		Z	5.49	67.88	18.16		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.62	67.88	18.39	2.67	100.0	± 9.6 %
		Y	5.69	68.17	18.62		100.0	
		Z	5.57	67.88	18.36		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.20	67.23	17.66	1.99	100.0	± 9.6 %
		Y	5.25	67.48	17.85		100.0	
		Z	5.17	67.24	17.64		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.24	67.75	17.96	2.30	100.0	± 9.6 %
		Y	5.31	68.03	18.18		100.0	
		Z	5.21	67.74	17.94		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.36	68.08	18.38	2.83	100.0	± 9.6 %
		Y	5.44	68.38	18.61		100.0	
		Z	5.33	68.07	18.36		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.39	68.13	18.62	3.30	100.0	± 9.6 %
		Y	5.47	68.45	18.87		100.0	
		Z	5.36	68.12	18.60		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.52	68.55	19.10	3.82	90.0	± 9.6 %
		Y	5.61	68.93	19.38		90.0	
		Z	5.48	68.52	19.07		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.53	68.37	19.24	4.15	90.0	± 9.6 %
		Y	5.62	68.75	19.52		90.0	
		Z	5.50	68.36	19.22		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.57	68.46	19.34	4.30	90.0	± 9.6 %
· · · · · ·		Y	5.66	68.84	19.63		90.0	
		Z	5.54	68.44	19.32		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	0.76	64.13	11.38	0.00	150.0	± 9.6 %
		Y	0.90	66.35	12.99	-	150.0	<u> </u>
		Z	0.73	63.81	11.00		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	1.73	62.47	7.53	4.77	80.0	± 9.6 %
		Y	1.91	63.29	8.22		80.0	
		Z	1.67	62.23	7.30		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	116.51	29.21	6.56	60.0	± 9.6 %
		Y	100.00	117.72	29.95		60.0	
40007		Z	100.00	116.03	28.90		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X Y	1.73	66.45	14.86	0.00	150.0	± 9.6 %
		Y Z		67.58	15.67		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	X	1.71	66.38	14.75	0.00	150.0	
CAB	UMTS-FDD (HSOFA, Sublest 2)	Y	1.70	66.40	14.82	0.00	150.0	± 9.6 %
		-		67.56	15.65		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.68 22.00	66.33 107.50	14.71 37.17	0.50	150.0	1000
DAC						9.56	60.0	± 9.6 %
		Y	28.88	114.61	39.71		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	Z X	22.27 3.03	108.13	37.40	0.00	60.0	
CAD	MHz, QPSK)	Y	3.03	69.43	16.03	0.00	150.0	± 9.6 %
		Z	2.99	70.56	16.70		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.23	69.29 67.20	15.96 15.61	0.00	150.0 150.0	± 9.6 %
0/10		Y	3.33	67.78	16.01		150.0	
	and the second s	Z	3.20	67.12	15.56		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.34	67.12	15.71	0.00	150.0 150.0	± 9.6 %
		Y	3.42	67.69	16.08		150.0	
		Z	3.31	67.10	15.66		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.49	78.45	21.33	3.98	65.0	± 9.6 %
		Y	8.79	79.00	21.62		65.0	
		Z	8.39	78.42	21.32		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	Х	8.27	76.76	21.53	3.98	65.0	± 9.6 %
		Y	8.57	77.41	21.89		65.0	
		Z	8.21	76.79	21.53		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.13	76.44	21.71	3.98	65.0	± 9.6 %
		Y	7.83	75.63	21.42		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Z X	7.93 2.67	76.10 68.71	21.55 15.86	0.00	65.0 150.0	± 9.6 %
		Y	2.83	60.00	10 55		450.0	
		Z	2.63	69.80 68.57	16.55 15.78		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.89	66.95	15.47	0.00	150.0 150.0	± 9.6 %
		Y	2.98	67.57	15.91		150.0	
		Z	2.86	66.87	15.40		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.17	67.76	15.45	0.00	150.0	± 9.6 %
		Y	2.32	68.94	16.22		150.0	
		Z	2.13	67.62	15.34		150,0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.56	67.34	15.57	0.00	150.0	±9.6 %
		Y	2.66	68.04	16.08		150.0	
		Z	2.53	67.28	15.48		150.0	

February 13, 2018

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.02	66.95	15.54	0.00	150.0	± 9.6 %
		Y	3.10	67.51	15.95		150.0	
		Z	2.98	66.88	15.48		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.72	67,49	15.72	0.00	150.0	± 9.6 %
		Y	2.81	68.13	16.19		150.0	
		Z	2.68	67.45	15.64		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	Х	5.17	67.15	16.34	0.00	150.0	± 9.6 %
		Y	5.21	67.35	16.50		150.0	
		Z	5.15	67.16	16.34		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.53	67.49	16.54	0.00	150.0	± 9.6 %
		Y	5.58	67.70	16.70		150.0	
		Ζ	5.48	67.42	16.49		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.30	67.42	16.41	0.00	150.0	± 9.6 %
		Y	5.34	67.62	16.57		150.0	
		Z	5.27	67.41	16.40		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.15	67.08	16.33	0.00	150.0	±9.6 %
		Y	5.20	67.30	16.50		150.0	
		Ζ	5.12	67.04	16.30		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	Х	5.63	67.73	16.67	0.00	150.0	± 9.6 %
		Y	5.66	67.91	16.81		150.0	
		Z	5.59	67.70	16.64		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	Х	5.27	67.36	16.39	0.00	150.0	± 9.6 %
		Y	5.31	67.56	16.55		150.0	
		Z	5.24	67.35	16.38		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	3.38	67.18	15.64	0.00	150.0	± 9.6 %
		Y	3.47	67.70	16.01		150.0	
		Z	3,35	67.11	15.59		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.50	67.27	15.81	0.00	150.0	± 9.6 %
		Y	3.59	67.74	16.15		150.0	
		Ζ	3.47	67.21	15.77		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.93	67.51	15.04	0.00	150.0	± 9.6 %
		Y	2.09	68.84	15.93		150.0	
		Ζ	1.89	67.35	14.89		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	2.38	67.70	15.18	0.00	150.0	± 9.6 %
		Y	2.51	68.61	15.82		150.0	
		Z	2.34	67.60	15.02		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.24	66.02	13.89	0.00	150.0	± 9.6 %
		Y	2.36	66.87	14.53		150.0	
		Z	2.19	65.88	13.71		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.22	64.47	11.59	0.00	150.0	± 9.6 %
		Y	1.37	66.07	12.76		150.0	
		Z	1.15	64.01	11.10		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.40	68.51	13.38	0.00	150.0	± 9.6 %
		Y	3.25	72.57	15.44		150.0	
		Ζ	2.13	67.36	12.68		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	2.86	70.85	14.59	0.00	150.0	± 9.6 %
	i interesting inte	Y	4.17	75.98	16.98		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	2.50	69.50	13.83		150.0	

Certificate No: ES3-3213_Feb18

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.90	67.00	15.51	0.00	150.0	± 9.6 %
		Y	2.99	67.62	15.95		150.0	
		Z	2.86	66.92	15.44		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.02	66.99	15.58	0.00	150.0	± 9.6 %
		Y	3.11	67.55	15.98		150.0	
		Z	2.99	66.93	15.52		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	8.96	80.66	22.26	3.98	65.0	± 9.6 %
		Y	9.32	81.32	22.60		65.0	
		Z	9.00	80.93	22.35		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.88	76.96	21.35	3.98	65.0	± 9.6 %
		Y	8.23	77.73	21.78		65.0	
		Z	7.82	76.98	21.33		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.28	77.78	22.03	3.98	65.0	± 9.6 %
		Y	8.58	78.42	22.39		65.0	
		Z	8.24	77.86	22.04		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.21	68.11	15.68	0.00	150.0	± 9.6 %
		Y	2.36	69.30	16.45		150.0	
		Z	2.17	67.96	15.57		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.56	67.35	15.58	0.00	150.0	± 9.6 %
		Y	2.66	68.05	16.10		150.0	
		Z	2.53	67.29	15.50		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.77	67.43	14.78	0.00	150.0	± 9.6 %
		Y	1.94	68.94	15.78		150.0	
		Z	1.72	67.23	14.58		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.05	66.34	13.82	0.00	150.0	± 9.6 %
		Y	2.19	67.38	14.58		150.0	
		Z	2.00	66.16	13.59		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.72	67.54	15.76	0.00	150.0	± 9.6 %
		Y	2.82	68.17	16.23		150.0	
		Z	2.68	67.50	15.68		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.14	66.71	14.07	0.00	150.0	± 9.6 %
		Y	2.28	67.74	14.81		150.0	
		Z	2.09	66.52	13.84		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.72	68.07	15.82	0.00	150.0	± 9.6 %
		Y	2.84	68.89	16.38		150.0	
		Z	2.69	68.00	15.76		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.91	66.88	15.50	0.00	150.0	± 9.6 %
		Y	3.00	67.45	15.91		150.0	
		Z	2.88	66.82	15.43		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.02	67.01	15.60	0.00	150.0	± 9.6 %
		Y	3.11	67.54	16.00		150.0	
		Z	2.99	66.96	15.54		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.77	69.87	19.29	3.01	150.0	± 9.6 %
		Y	3.99	71.07	20.04		150.0	
		Z	3.62	69.43	19.11		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.72	72.88	19.79	3.01	150.0	± 9.6 %
		Y	5.23	74.95	20.86		150.0	
		Z	4.39	72.04	19.48		150.0	

February 13, 2018

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.18	74.86	20.97	3.01	150.0	± 9.6 %
		Y	5.75	76.97	22.01		150.0	
		Z	4.80	74.00	20.67		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.27	70.16	19.42	3.01	150.0	± 9.6 %
		Y	3.60	72.33	20.65		150.0	
		Z	3.01	68.98	18.94		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.60	76.17	21.67	3.01	150.0	± 9.6 %
		Y	5.62	80.32	23.51		150.0	
		Z	3.98	74.14	20.96		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.81	72.17	19.05	3.01	150.0	± 9.6 %
		Y	4.54	75.67	20.74		150.0	
		Z	3.36	70.59	18.47		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	30.28	111.82	34.48	6.02	65.0	± 9.6 %
		Y	76.86	130.98	39.85		65.0	
		Z	23.60	107.83	33.49		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	34.72	108.92	31.80	6.02	65.0	± 9.6 %
		Y	74.54	122.99	35.68		65.0	
		Z	31.06	107.91	31.67		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	26.76	102.85	29.55	6.02	65.0	± 9.6 %
		Y	50.48	114.18	32.83		65.0	
		Z	23.63	101.61	29.31		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.23	69.86	19.18	3.01	150.0	± 9.6 %
		Y	3.55	72.01	20.41		150.0	
		Z	2.98	68.71	18.72		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	4.60	76.19	21.68	3.01	150.0	± 9.6 %
		Y	5.63	80.35	23.53		150.0	
		Z	3.98	74.16	20.97		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.26	70.01	19.27	3.01	150.0	± 9.6 %
		Y	3.58	72.16	20.50		150.0	
		Z	3.00	68.84	18.80		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	4.55	75.95	21.56	3.01	150.0	±9.6 %
		Y	5.56	80.06	23.39		150.0	
		Z	3.95	73.96	20.86		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.17	74.04	20.23	3.01	150.0	±9.6 %
		Y	5.04	77.87	21.99		150.0	
		Z	3.65	72.28	19.60		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.80	72.10	19.00	3.01	150.0	± 9.6 %
		Y	4.52	75.59	20.69		150.0	
		Z	3.36	70.53	18.43		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	×	3.25	69.99	19.27	3.01	150.0	± 9.6 %
		Y	3.58	72.15	20.49		150.0	
		Z	3.00	68.83	18.80		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	4.54	75.93	21.54	3.01	150.0	±9.6 %
		Y	5.55	80.04	23.38		150.0	
		Z	3.94	73.93	20.85		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.79	72.07	18.99	3.01	150.0	± 9.6 %
		Y	4.51	75.56	20.68		150.0	
		Z	3.35	70.51	18.42		150.0	

Certificate No: ES3-3213_Feb18

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.26	70.03	19.29	3.01	150.0	± 9.6 %
		Y	3.59	72,19	20.51		150.0	
		Z	3.01	68.87	18.82		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	4.56	76.00	21.58	3.01	150.0	± 9.6 %
		Y	5.57	80.12	23.42	1	150.0	
		Ζ	3.96	74.00	20.89		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	3.81	72.14	19.03	3.01	150.0	± 9.6 %
		Y	4.54	75.64	20.72		150.0	
		Z	3.37	70.57	18.45		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.27	70.08	19.34	3.01	150.0	± 9.6 %
		Y	3.60	72.24	20.57		150.0	
		Z	3.02	68.91	18.87		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	4.71	76.65	21.94	3.01	150.0	± 9.6 %
		Υ	5.78	80.88	23.80		150.0	
		Z	4.07	74.57	21.23		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.89	72.56	19.29	3.01	150.0	± 9.6 %
		Υ	4.65	76.13	21.00		150.0	
		Z	3.43	70.95	18.70		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.57	66.50	16.04	0.00	150.0	± 9.6 %
		Y	4.61	66.73	16.23		150.0	
		Z	4.54	66.49	16.01		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.75	66.84	16.16	0.00	150.0	± 9.6 %
		Y	4.80	67.09	16.35		150.0	
		Z	4.71	66.82	16.14		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.79	66.87	16.18	0.00	150.0	± 9.6 %
		Y	4.84	67.11	16.37		150.0	
		Z	4.76	66.85	16.15		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.58	16.07	0.00	150.0	±9.6 %
		Y	4.63	66.82	16.26		150.0	
		Ζ	4.54	66.56	16.03		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.77	66.86	16.18	0.00	150.0	± 9.6 %
		Y	4.82	67.11	16.37		150.0	
		Z	4.73	66.84	16.15		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.80	66.89	16.19	0.00	150.0	± 9.6 %
		Y	4.85	67.13	16.38		150.0	
		Z	4.76	66.87	16.17		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.52	66.58	16.02	0.00	150.0	± 9.6 %
		Y	4.58	66.83	16.22		150.0	
		Z	4.49	66.56	15.99		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	Х	4.76	66.85	16.17	0.00	150.0	±9.6 %
		Y	4.81	67.09	16.36		150.0	
		Z	4.72	66.82	16.14		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	Х	4.80	66.82	16.18	0.00	150.0	± 9.6 %
		Y	4.86	67.06	16.37		150.0	
		Ζ	4.77	66.80	16.16		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.13	67.08	16.32	0.00	150.0	±9.6 %
		Y	5.18	67.32	16.50		150.0	
		Z	5.10	67.04	16.29		150.0	

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.46	67.35	16.49	0.00	150.0	± 9.6 %
0.00		Y	5.51	07.50	10.00		450.0	
		Z		67.58	16.66		150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-		5.42	67.30	16.45	0.00	150.0	
CAC	QAM)	X	5.17	67.18	16.29	0.00	150.0	± 9.6 %
		Y	5.22	67.40	16.46		150.0	
40005		Z	5.14	67.14	16.27		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.80	65.74	15.07	0.00	150.0	± 9.6 %
		Y	2.87	66.19	15.45		150.0	
		Z	2.77	65.70	14.98		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	37.38	110.41	32.30	6.02	65.0	± 9.6 %
		Y	81.50	124.82	36.22		65.0	
		Z	33.47	109.42	32.18		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	29.60	104.69	30.14	6.02	65.0	± 9.6 %
		Y	53.65	115.37	33.21		65.0	
		Z	27.65	104.42	30.19		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	32.41	113.60	35.07	6.02	65.0	± 9.6 %
		Y	69.82	129.54	39.59		65.0	
		Z	28.33	111.82	34.72		65.0	
10229-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	34.78	108.94	31.81	6.02	65.0	± 9.6 %
CAB	QAM)	Y	74.32	122.93	35.67		65.0	2 0.0 %
		Z	31.14	107.94	31.68		65.0	
10230-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	27.87			6.00		1000
CAB	QAM)			103.54	29.74	6.02	65.0	± 9.6 %
		Y	50.12	114.03	32.79		65.0	
40004		Z	25.97	103.21	29.78		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	30.34	112.17	34.60	6.02	65.0	± 9.6 %
		Y	64.44	127.76	39.06		65.0	
10000		Z	26.54	110.39	34.24		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	34.78	108.95	31.81	6.02	65.0	± 9.6 %
		Y	74.45	122.97	35.68		65.0	
		Z	31.13	107.95	31.68		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	27.88	103.55	29.75	6.02	65.0	± 9.6 %
		Y	50.22	114.08	32.80		65.0	
		Z	25.97	103.22	29.78		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	28.47	110.69	34.07	6.02	65.0	± 9.6 %
		Y	59.28	125.81	38.45		65.0	
		Z	24.97	108.97	33.72		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	34.92	109.04	31.84	6.02	65.0	± 9.6 %
		Y	75.02	123.12	35.72		65.0	
		Z	31.25	108.03	31.71		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	28.18	103.71	29.79	6.02	65.0	± 9.6 %
		Y	50.93	114.30	32.85		65.0	
10237-		Z	26.26	103.39	29.82	6.00	65.0	+0.0.04
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	30.66	112.40	34.66	6.02	65.0	± 9.6 %
		Y	65.75	128.19	39.17		65.0	
		Z	26.79	110.61	34.30		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	34.79	108.97	31.82	6.02	65.0	± 9.6 %
		Y	74.62	123.02	35.69		65.0	
		Z	31.13	107.96	31.69		65.0	

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	27.87	103.57	29.75	6.02	65.0	± 9.6 %
CAD	64-QAM)		50.20	11/ 10	22.00		65.0	
		Y Z	50.30	114.13	32.82		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	25.95 30.53	103.23 112.33	29.78 34.64	6.02	65.0 65.0	± 9.6 %
		Y	65.39	128.09	39.15		65.0	
		Z	26.68	110.54	34.28		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	11.82	86.67	27.53	6.98	65.0	± 9.6 %
		Y	13.66	90.07	29.00		65.0	
		Z	11.24	86.07	27.33		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	11.41	85.92	27.17	6.98	65.0	± 9.6 %
		Y	13.45	89.74	28.82		65.0	
40040		Z	10.57	84.73	26.73		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.24	83.16	27.04	6.98	65.0	± 9.6 %
		Y	10.64	86.64	28.68		65.0	
10044		Z	8.64	81.99	26.56	0.00	65.0	1000
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	9.03	80.20	20.72	3.98	65.0	± 9.6 %
		Y	9.95	81.82	21.52		65.0	
10245-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z X	8.70 8.84	79.77 79.62	20.42	2.00	65.0	+0.0.0/
CAB	64-QAM)	Y			20.45	3.98	65.0	± 9.6 %
		T Z	9.72 8.49	81.20 79.13	21.24 20.13		65.0	
10246-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	8.49	82.28	20.13	3.98	65.0	+06%
CAB	QPSK)	^ Y				3.90	65.0	± 9.6 %
		Y Z	9.40	83.61	22.04		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.57 7.23	82.11 77.21	21.15 20.08	3.98	65.0 65.0	± 9.6 %
0/10		Y	7.59	77.99	20.54		65.0	
		Z	7.13	77.07	19.88		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.20	76.70	19.86	3.98	65.0	± 9.6 %
		Y	7.57	77.51	20,35		65,0	
		Z	7.09	76.52	19.65		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	9.92	84.79	23.00	3.98	65.0	± 9.6 %
		Y	10.62	85.95	23.57		65.0	
		Z	10.01	85.03	22.98	1	65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.21	79.48	22.35	3.98	65.0	± 9.6 %
		Y	8.54	80.13	22.71		65.0	
		Z	8.20	79.60	22.34		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.75	77.32	21.20	3.98	65.0	± 9.6 %
		Y	8.11	78.10	21.64		65.0	
100		Z	7.70	77.35	21.14		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	9.77	84.02	23.49	3.98	65.0	± 9.6 %
		Y	10.31	84.92	23.94		65.0	
40050		Z	9.89	84.42	23.60		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.68	76.36	21.13	3.98	65.0	± 9.6 %
		Y	8.00	77.10	21.55		65.0	
10051		Z	7.63	76.40	21.10		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.06	77.17	21.76	3.98	65.0	± 9.6 %
		Y	8.36	77.82	22.13		65.0	
		Z	8.03	77.25	21.75		65.0	

February 13, 2018

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.65	80.28	22.35	3.98	65.0	± 9.6 %
		Y	9.02	80.99	22.72		65.0	1
		Z	8.68	80.54	22.43		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	7.67	77.22	18.70	3.98	65.0	± 9.6 %
		Y	8.58	78.99	19.61		65.0	
		Z	7.24	76.45	18.22		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	7.44	76.40	18.29	3.98	65.0	± 9.6 %
		Y	8.29	78.12	19.18		65.0	
		Z	6.99	75.59	17.78		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.04	78.52	19.29	3.98	65.0	± 9.6 %
		Y	7.71	79.96	20.05		65.0	
		Z	6.74	77.86	18.83		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.62	78.03	20.88	3.98	65.0	± 9.6 %
		Y	7.97	78.76	21.31		65.0	
		Z	7.55	78.00	20.76		65.0	<u> </u>
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.62	77.74	20.79	3.98	65.0	± 9.6 %
		Y	7.97	78.46	21.21		65.0	
		Z	7.55	77.69	20.65		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.43	83.76	22.98	3.98	65.0	± 9.6 %
		Y	10.04	84.84	23.52		65.0	
		Z	9.50	84.03	22.99		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.20	79.43	22.31	3.98	65.0	± 9.6 %
		Y	8.53	80.09	22.68		65.0	
		Z	8.18	79.55	22.30		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.75	77.31	21.19	3.98	65.0	± 9.6 %
		Y	8.10	78.09	21.64		65.0	
		Z	7.69	77.34	21.14		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	9.70	83.85	23.41	3.98	65.0	± 9.6 %
		Y	10.24	84.77	23.87		65.0	
		Z	9.81	84.24	23.51		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.88	76.96	21.35	3.98	65.0	± 9.6 %
		Y	8.22	77.73	21.78		65.0	
		Z	7.82	76.99	21.33		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.27	77.77	22.03	3.98	65.0	± 9.6 %
		Y	8.58	78.42	22.39		65.0	!
		Z	8.23	77.85	22.03		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	8.94	80.62	22.25	3.98	65.0	± 9.6 %
		Y	9.31	81.28	22.59		65.0	
		Z	8.98	80.89	22.34		65.0	· · · · ·
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.36	76.49	21.55	3.98	65.0	± 9.6 %
		Y	8.63	77.08	21.88		65.0	
		Z	8.31	76.53	21.55		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.29	76.07	21.45	3.98	65.0	± 9.6 %
		Y	8.55	76.65	21.78		65.0	
		Z	8.24	76.11	21.45		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.43	77.83	21.33	3.98	65.0	± 9.6 %
		Y	8.69	78.31	21.60		65.0	
		Z	8.42	77.98	21.39		65.0	

Certificate No: ES3-3213_Feb18

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.55	65.90	14.85	0.00	150.0	± 9.6 %
		Y	2.63	66.48	15.31		150.0	
		Z	2.53	65.88	14.78		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.52	66.64	14.62	0.00	150.0	± 9.6 %
		Y	1.66	68.17	15.66		150.0	
		Z	1.50	66.49	14.49		150.0	
10277- CAA	PHS (QPSK)	X	4.62	67.49	12.27	9.03	50.0	± 9.6 %
		Y	5.00	68.49	13.05		50.0	
		Z	4.42	66.98	11.81		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	8.56	79.12	19.84	9.03	50.0	± 9.6 %
		Y	9.04	80.04	20.47		50.0	
		Ζ	8.20	78.37	19.32		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.72	79.33	19.94	9.03	50.0	± 9.6 %
		Y	9.22	80.28	20.58		50.0	
		Z	8.35	78.58	19.43		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.31	66.62	12.89	0.00	150.0	± 9.6 %
		Y	1.55	69.01	14.40		150.0	
		Z	1.25	66.21	12.49		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	0.75	63.97	11.28	0.00	150.0	± 9.6 %
		Y	0.88	66.12	12.85		150.0	
		Z	0.72	63.66	10.91		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.85	66.24	12.81	0.00	150.0	± 9.6 %
		Y	1.08	69.81	15.02		150.0	
		Z	0.81	65.82	12.39		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	1.07	69.43	14.80	0.00	150.0	± 9.6 %
		Y	1.49	74.49	17.52		150.0	
		Z	1.02	68.94	14.36		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.66	86.40	24.85	9.03	50.0	± 9.6 %
		Y	11.94	86.89	25.26		50.0	
		Z	12.14	87.13	24.94		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.68	68.79	15.92	0.00	150.0	± 9.6 %
		Y	2.84	69.89	16.60		150.0	
		Z	2.64	68.65	15.84		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.50	66.36	13.40	0.00	150.0	± 9.6 %
		Y	1.68	68.07	14.56		150.0	
		Z	1.44	66.01	13.05		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.99	70.93	15.34	0.00	150.0	± 9.6 %
		Y	3.88	74.74	17.20		150.0	
		Ζ	2.71	70.03	14.84		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.29	66.50	12.57	0.00	150.0	± 9.6 %
		Y	2.73	68.87	13.94		150.0	
	·	Z	2.09	65.76	12.08		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.48	67.66	18.50	4.17	80.0	± 9.6 %
		Y	5.78	68.84	19.23		80.0	
		Z	5.37	67.36	18.28		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.94	68.12	19.14	4.96	80.0	± 9.6 %
	,	Y	6.22	69.31	19.91		80.0	
	NAL NAVA	Z						

February 13, 2018

10303-	IEEE 802.16e WiMAX (31:15, 5ms,	X	5.76	68.09	19.15	4.96	80.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC)		0.07		10.00			
		Y Z	6.07 5.69	69.41	19.99		80.0	
10304-	IEEE 802.16e WiMAX (29:18, 5ms,	X	5.43	67.97 67.45	19.02 18.35	4.17	80.0	
AAA	10MHz, 64QAM, PUSC)					4.17	80.0	± 9.6 %
		Y	5.68	68.54	19.05		80.0	
10305-		Z	5.37	67.37	18.26		80.0	
AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.18	77.42	24.28	6.02	50.0	± 9.6 %
		Y	9.01	83.08	27.04		50.0	
10306-	IEEE 802.16e WiMAX (29:18, 10ms,	Z	7.00	76.95	23.93		50.0	
AAA	10MHz, 64QAM, PUSC, 18 symbols)	X	5.96	70.23	20.82	6.02	50.0	± 9.6 %
		Y	6.58	72.76	22.30		50.0	
10307-	IEEE 802.16e WiMAX (29:18, 10ms,	Z	5.86	69.99	20.61	0.00	50.0	
AAA	10MHz, QPSK, PUSC, 18 symbols)	X	6.41	73.34	22.47	6.02	50.0	± 9.6 %
		Y	6.70	73.58	22.50		50.0	
10000		Z	6.29	73.03	22.22		50.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.49	73.92	22.75	6.02	50.0	± 9.6 %
		Y	6.78	74.12	22.76		50.0	
40000		Z	6.37	73.60	22.50		50.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.06	70.55	21.00	6.02	50.0	± 9.6 %
		Y	6.71	73.17	22.53		50.0	
10010		Z	5.95	70.29	20.78		50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.95	70.41	20.82	6.02	50.0	±9.6 %
		Y	6.61	73.05	22.35		50.0	
		Z	6.20	72.46	22.04		50.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.02	68.11	15.62	0.00	150.0	± 9.6 %
		Y	3.19	69.13	16.23		150.0	
		Z	2.98	67.98	15.55		150.0	
10313- AAA	iDEN 1:3	X	6.80	77.50	18.05	6.99	70.0	±9.6 %
		Y	7.71	79.38	18.97		70.0	
		Z	6.80	77.56	18.00		70.0	
10314- AAA	iDEN 1:6	X	9.17	84.53	23.10	10.00	30.0	± 9.6 %
		Y	10.17	86.19	23.87		30.0	
		Z	9.47	85.21	23.28		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.09	63.63	14.71	0.17	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.15	64.55	15.51		150.0	
		Z	1.08	63.56	14.63		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	66.69	16.26	0.17	150.0	± 9.6 %
		Y	4.72	66.94	16.46		150.0	
		Z	4.64	66.69	16.24		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	66.69	16.26	0.17	150.0	± 9.6 %
		Y	4.72	66.94	16.46		150.0	
		Z	4.64	66.69	16.24		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.75	66.92	16.17	0.00	150.0	± 9.6 %
		Y	4.81	67.18	16.37		150.0	
		Z	4.72	66.89	16.14		150.0	
		X	5.45	67.19	16.39	0.00	150.0	± 9.6 %
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	^	0.40	07.10				
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	Y	5.49	67.37	16.55		150.0	

Certificate No: ES3-3213_Feb18

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.72	67.54	16.41	0.00	150.0	± 9.6 %
		Y	5.76	67.75	16.56		150.0	
		Z	5.68	67.48	16.38		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	×X	1.31	66.62	12.89	0.00	115.0	± 9.6 %
		Y	1.55	69.01	14.40		115.0	
		Z	1.25	66.21	12.49		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.31	66.62	12.89	0.00	115.0	±9.6 %
		Y	1.55	69.01	14.40		115.0	
		Z	1.25	66.21	12.49		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	25.28	103.83	26.72	0.00	100.0	± 9.6 %
		Y	100.00	122.83	31.28		100.0	
		Z	15.62	98.87	25.67		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	100.00	120.77	30.63	3.23	80.0	± 9.6 %
		Y	100.00	121.50	31.09		80.0	
		Z	100.00	121.84	30.99		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.97	62.31	13.89	0.00	150.0	± 9.6 %
		Y	1.01	63.10	14.65		150.0	
		Z	0.96	62.25	13.81		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.57	66.54	16.10	0.00	150.0	± 9.6 %
		Y	4.62	66.78	16.29		150.0	
		Z	4.54	66.53	16.07		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.57	66.54	16.10	0.00	150.0	± 9.6 %
		Y	4.62	66.78	16.29		150.0	
		Z	4.54	66.53	16.07		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.55	66.67	16.10	0.00	150.0	± 9.6 %
		Y	4.61	66.92	16.30		150.0	
		Z	4.53	66.67	16.08		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.58	66.63	16.11	0.00	150.0	± 9.6 %
		Y	4.63	66.88	16.30		150.0	
		Z	4.55	66.63	16.09		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.70	66.66	16.14	0.00	150.0	± 9.6 %
		Y	4.75	66.89	16.33		150.0	
		Z	4.67	66.65	16.12		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.89	67.00	16.27	0.00	150.0	± 9.6 %
		Y	4.94	67.25	16.46		150.0	
		Z	4.85	66.98	16.24		150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.80	66.94	16.23	0.00	150.0	± 9.6 %
		Y	4.85	67.19	16.42		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	Z X	<u>4.76</u> 5.43	66.92 67.40	16.20 16.49	0.00	150.0 150.0	± 9.6 %
			E 40	67.50	10.01		450.0	
		Y	5.46	67.59	16.64		150.0	
10406		Z	5.40	67.39	16.48	0.0	150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.43	67.42	16.49	0.00	150.0	± 9.6 %
		Y	5.47	67.60	16.64		150.0	
		Z	5.40	67.41	16.48		150.0	

10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.43	67.37	16.46	0.00	150.0	± 9.6 %
		Y	5.47	67.57	16.62		150.0	
		Z	5.41	67.36	16.45	-	150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.15	69.76	17.63	0.00	150.0	± 9.6 %
		Y	4.19	69.88	17.76		150.0	
		Z	4.12	69.84	17.60		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.26	67.02	16.07	0.00	150.0	± 9.6 %
		Y	4.33	67.32	16.31		150.0	
		Z	4.22	67.00	16.02		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.56	66.95	16.16	0.00	150.0	± 9.6 %
		Y	4.62	67.22	16.37		150.0	
		Z	4.52	66.93	16.13		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.81	66.98	16.25	0.00	150.0	± 9.6 %
		Y	4.87	67.22	16.44		150.0	
10/07		Z	4.78	66.96	16.22		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.20	70.38	17.52	0.00	150.0	± 9.6 %
		Y	4.25	70.53	17.68	ļ	150.0	
10425		Z	4.16	70.46	17.47	0.00	150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.59	30.55	3.23	80.0	± 9.6 %
		Y	100.00	121.33	31.01		80.0	
10117		Z	100.00	121.65	30.91		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	×	3.54	66.87	15.35	0.00	150.0	± 9.6 %
		Y	3.62	67.29	15.69		150.0	
		Z	3.49	66.83	15.25		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	×	4.09	66.78	15.91	0.00	150.0	± 9.6 %
		Y	4.15	67.09	16.16		150.0	
		Z	4.05	66.76	15.87		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	×	4.36	66.75	16.04	0.00	150.0	±9.6 %
		Y	4.42	67.03	16.26		150.0	
		Z	4.33	66.74	16.01		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	×	4.56	66.71	16.09	0.00	150.0	± 9.6 %
		Y	4.61	66.97	16.29		150.0	
		Z	4.53	66.69	16.06		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.43	67.01	14.98	0.00	150.0	± 9.6 %
		Y	3.53	67.50	15.37		150.0	
10/75		Z	3.37	66.93	14.84		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.29	67.98	16.66	0.00	150.0	± 9.6 %
		Y	6.32	68.16	16.79		150.0	
40/57		Z	6.26	67.96	16.65		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.79	65.17	15.80	0.00	150.0	± 9.6 %
		Y	3.83	65.41	16.01		150.0	
10/50		Z	3.78	65.16	15.77		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.84	69.59	16.93	0.00	150.0	± 9.6 %
		Y	3.91	69.84	17.18		150.0	
10/70		Z	3.81	69.69	16.86		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.05	67.70	17.82	0.00	150.0	± 9.6 %
		Y	5.09	67.77	17.90		150.0	
	1	Z	5.00	67.75	17.77		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	0.79	65.91	14.37	0.00	150.0	± 9.6 %
AAA								
		Y	0.92	68.57	16.19		150.0	
10461-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X	0.78	65,69	14.19	2.00	150.0	1000
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		100.00	124.09	32.24	3.29	80.0	± 9.6 %
		Y	100.00	125.81	33.13		80.0	
10460		Z	100.00	125.28	32.66		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	82.18	106.66	24.50	3.23	80.0	± 9.6 %
		Y	100.00	110.22	25.68		80.0	
10463-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X	90.90	108.32	24.86	0.00	80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)		13.11	84.75	18.36	3.23	80.0	± 9.6 %
		Y	100.00	107.13	24.20		80.0	
10464-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz,	Z	11.64	83.97	18.10	0.00	80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.05	31.13	3.23	80.0	± 9.6 %
		Y	100.00	123.91	32.10		80.0	
10465		Z	100.00	123.17	31.52	0.00	80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	34.70	96.83	22.08	3,23	80.0	± 9.6 %
		Y	100.00	109.74	25.45		80.0	
10466-		Z	33.97	97.14	22.15	0.55	80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	8.66	80.23	16.95	3.23	80.0	± 9.6 %
		Y	88.88	105.43	23.71		80.0	
10.107		Z	7.53	79.24	16.62		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	122.26	31.23	3.23	80.0	± 9.6 %
		Y	100.00	124.12	32.19		80.0	
		Z	100.00	123.40	31.62		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	42.56	99.17	22.68	3.23	80.0	± 9.6 %
		Y	100.00	109.90	25.52		80.0	
		Z	42.79	99.79	22.82		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	8.79	80.40	17.00	3.23	80.0	± 9.6 %
		Y	94.78	106.12	23.86		80.0	
		Z	7.65	79.43	16.67		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.29	31.23	3.23	80.0	± 9.6 %
		Y	100.00	124.15	32.20		80.0	
		Z	100.00	123.43	31.63		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	42.39	99.09	22.65	3.23	80.0	± 9.6 %
		Y	100.00	109.85	25.49		80.0	
		Z	42.62	99.70	22.79		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	8.75	80.33	16.97	3.23	80.0	± 9.6 %
		Y	95.63	106.16	23.85		80.0	
		Z	7.61	79.36	16.63		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.26	31.22	3.23	80.0	± 9.6 %
		Y	100.00	124.13	32.18		80.0	
		Z	100.00	123.40	31.61		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	41.57	98.89	22.60	3.23	80.0	±9.6 %
		Y	100.00	109.86	25.49		80.0	
		Ζ	41.71	99.48	22.73		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	8.66	80.23	16.94	3.23	80.0	±9.6 %
		Y	92.76	105.86	23.79		80.0	
		Z	7.52	79.25	16.60		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	36.02	97.20	22.15	3.23	80.0	± 9.6 %
		Y	100.00	109.70	25.42		80.0	· · · · · · · · · · · · · · · · · · ·
		Z	35.46	97.58	23.42		80.0	
10478-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-	X	8.55	80.07	16.88	3.23	80.0	± 9.6 %
AAC	QAM, UL Subframe=2,3,4,7,8,9)		0.00	00.01	10.00	0.20	00.0	1 0.0 70
		Y	89.69	105.45	23.69		80.0	
		Ζ	7.42	79.08	16.54		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	12.76	92.36	25.32	3.23	80.0	± 9.6 %
		Y	18.65	98.88	27.57		80.0	· · · · · · · · · · · · · · · · · · ·
		Ζ	13.95	94.12	25.81		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.57	87.00	22.01	3.23	80.0	± 9.6 %
		Y	19.95	93.91	24.32		80.0	
		Z	12.93	87.73	22.15		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	10.42	83.70	20.62	3.23	80.0	± 9.6 %
		Y	16.05	89.97	22.81		80.0	
1015-		Ζ	10.45	84.04	20.63		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.39	75.05	18.02	2.23	80,0	± 9.6 %
		Y	5.40	78.13	19.40		80.0	
10.100		Z	4.23	74.62	17.69		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	7.31	79.21	19.52	2.23	80.0	± 9.6 %
		Υ	9.15	82.68	20.99		80.0	
		Z	7.17	79.05	19.31		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	77.88	19.05	2.23	80.0	± 9.6 %
		Y	8.31	81.08	20.44		80.0	
		Z	6.55	77.60	18,79		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.80	76.47	19.36	2.23	80.0	± 9.6 %
		Y	5.70	79.15	20.55		80.0	
		Z	4.72	76.35	19.21		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.16	71.40	17.03	2.23	80.0	± 9.6 %
		Y	4.57	72.84	17.80		80.0	
		Z	4.07	71.21	16.82		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.14	70.99	16.86	2.23	80.0	± 9.6 %
		Y	4.52	72.34	17.60		80.0	
40400		Z	4.04	70.79	16.64		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.95	75.43	19.57	2.23	80.0	± 9.6 %
		Y	5.59	77.40	20.48		80.0	
10.100		Ζ	4.87	75.36	19.51		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.39	71.05	17.97	2.23	80.0	± 9.6 %
		Y	4.67	72.07	18.53		80.0	
40400		Z	4.33	71.01	17.90	0.00	80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.47	70.81	17.90	2.23	80.0	± 9.6 %
		Y	4.74	71.76	18.43		80.0	
10404		Z	4.41	70.77	17.83		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.94	73.38	18.92	2.23	80.0	± 9.6 %
		Y	5.38	74.76	19.60		80.0	
10400		Z	4.87	73.32	18.89		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.67	70.17	17.91	2.23	80.0	± 9.6 %
		Y	4.91	70.97	18.36		80.0	
		Z	4.62	70.13	17.86		80.0	

10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.74	70.00	17.86	2.23	80.0	± 9.6 %
		Y	4.96	70.77	18.30		80.0	
		Z	4.68	69.97	17.81		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.42	74.96	19.36	2.23	80.0	± 9.6 %
		Y	5.98	76.57	20.11		80.0	
		Z	5.33	74.86	19.31		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.74	70.64	18.10	2.23	80.0	± 9.6 %
		Y	4.99	71.49	18.58		80.0	
		Z	4.68	70.58	18.06		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.80	70.29	18.01	2.23	80.0	± 9.6 %
		Y	5.03	71.08	18.45		80.0	
		Z	4.74	70.24	17.97		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.26	70.91	15,58	2.23	80.0	± 9.6 %
		Y	4.08	73.99	17.07		80.0	
		Z	3.04	70.05	15.01		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.52	65.21	12.20	2.23	80.0	± 9.6 %
		Y	2.96	67.17	13.35		80.0	
		Ζ	2.32	64.31	11.53		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.46	64.66	11.82	2.23	80.0	± 9.6 %
		Y	2.87	66.51	12.93		80.0	
		Z	2,25	63.75	11.14		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.75	75.65	19.32	2.23	80.0	± 9.6 %
		Y	5.48	77.92	20.36		80.0	
		Z	4.68	75.58	19.22		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.26	71.24	17.39	2.23	80.0	± 9.6 %
		Y	4.61	72.46	18.05		80.0	
		Z	4.19	71.15	17.24		, 80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.30	71.03	17.26	2.23	80.0	± 9.6 %
		Y	4.65	72.20	17.90		80.0	
		Z	4.23	70.93	17.11		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.89	75.24	19.48	2.23	80.0	± 9.6 %
		Y	5.52	77.21	20.39		80.0	
		Z	4.81	75.16	19.42		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.37	70.96	17.92	2.23	80.0	± 9.6 %
		Y	4.66	71.99	18.49		80.0	
		Z	4.31	70.92	17.85		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.44	70.72	17.85	2.23	80.0	± 9.6 %
		Y	4.72	71.68	18.38		80.0	
		Z	4.39	70.68	17.78		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.37	74.82	19.29	2.23	80.0	± 9.6 %
		Y	5.93	76.44	20.05		80.0	
		Ζ	5.29	74.72	19.25		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	X	4.72	70.58	18.07	2.23	80.0	± 9.6 %
AAC								
	Subframe=2,3,4,7,8,9)	Y	4.98	71.44	18.54		80.0	

AAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.10 10.00 12.0 00.0 13.8 /s Interval Z 6.41 72.94 18.60 80.0 10.0	10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.78	70.23	17.97	2.23	80.0	± 9.6 %
10509- ICS-FDMA, 100% RB, 15 Z 4.72 70.18 17.93 60.0 AAC MHz, QPSK, UL SUbframe=2,3,4,7,8,9) Y 5.87 74,15 18.60 2.23 60.0 ±9.6 % IDS10- AAC LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QM, UL Subframe=2,3,4,7,8,9) Y 5.81 70.13 17.99 2.23 60.0 ±9.6 % AAC MHz, 16-QM, UL Subframe=2,3,4,7,8,9) Y 5.40 70.44 18.59 80.0 10511- LTE-TDD (SC-FDMA, 100% RB, 15 AAC X 5.12 70.07 17.96 80.0 ±9.6 % Subframe=2,3,4,7,8,9) Y 5.40 70.44 18.29 80.0 ±9.6 % Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ±9.6 % AAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 5.45 74.74 19.13 2.23 80.0 ±9.6 % AAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 5.39 76.43 19.09 80.0			Y	5.02	71.02	18.41		80.0	
16509- LTE-TDD (SC-FDMA, 100% RB, 15 X 5.48 73.02 18.63 2.23 60.0 ± 9.6 % MHz, OPSK, UL SUbframe-2.3,4,7,8,9 Y 5.87 74.15 19.19 60.0 ± 9.6 % AC HTz, 10-QM, UL Z 5.41 72.34 18.60 60.0 ± 9.8 % AC HTz, 10-QM, UL X 5.18 70.13 17.99 2.23 80.0 ± 9.8 % Subframe2.3,4,7,8,9 Y 5.40 70.64 18.29 80.0 ± 9.6 % Subframe2.3,4,7,8,9 Y 5.42 70.47 17.92 80.0 ± 9.6 % MHz, CPGK, UL, Subframe2.3,4,7,8,9 Y 5.42 70.49 18.29 80.0 ± 9.6 % MHz, CPSK, UL, Subframe2.3,4,7,8,9 Y 5.42 70.49 18.29 80.0 ± 9.6 % Subframe2.3,4,7,8,9 Y 5.35 74.74 19.13 2.23 80.0 ± 9.6 % 10514 LTE-TDD (SC-FDMA, 100% RB, 20 X 5.10 70.52 18.1			Z						
Z 5.41 72.94 18.60 80.0 AAC MHz, 16-QAM, UL Subframe=2,3.4,7.8.9) Y 5.18 70.13 17.99 2.23 80.0 2.9.6 % Subframe=2,3.4,7.8.9) Y 5.40 70.84 18.39 80.0 2.9.6 % 10511. LTE-TDD (SC-FDMA, 100% RB, 15 X 5.12 70.70 17.96 80.0 19.6 % AAC MHz, 64-OAM, UL X 5.15 69.76 17.89 60.0 19.6 % 10512. LTE-TDD (SC-FDMA, 100% RB, 20 X 5.15 69.76 17.89 60.0 19.6 % MHz, QPSK, UL Subframe=2,3.4,7,8.9) Y 6.38 76.18 19.80 80.0 19.6 % MAC MHz, 16-QAM, UL Z 5.76 74.42 19.09 80.0 19.6 % Subframe=2,3.4,7.8,9) Y 5.34 71.31 18.56 80.0 19.6 % MHz, 16-QAM, UL Subframe=2,3.4,7.8,9) Y 5.29 70.75 18.40 80.0	10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)					2.23		± 9.6 %
Coston LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.18 70.13 17.99 2.23 80.0 ± 9.6 % ACC MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.12 70.07 17.96 80.0 ± 9.6 % 10510- LTE-TDD (SC-FDMA, 100% RB, 15 X 5.12 70.07 17.96 80.0 ± 9.6 % 30bframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % ACC MHz, 64-CAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % AAC MHz, 64-CAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % AAC MHz, 10-GAM, UL Z 5.16 74.42 19.09 80.0 ± 9.6 % AAC MHz, 19-QAM, UL Z 5.03 70.43 18.08 80.0 ± 9.6 % AAC MHz, 40-QAM, UL Z 5.03 70.33 18.00 2.23 80.0 ± 9.6 %			Y	5.87	74.15	19.19		80.0	
10510- AAC LTE-TDD (SC-FDMA, 100% RB, 15 SUbframe=2,3,4,7,8,9) X 5.18 70.13 17.99 2.23 80.0 ± 9.6 % AAC MEz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.40 70.84 18.29 80.0 ± 9.6 % MIEz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % MIEz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % MIEz, 64-QAM, UL MEz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % MAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.39 76.18 19.60 80.0 ± 9.6 % MAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 5.30 70.43 18.00 80.0 ± 9.6 % Subframe=2,3,4,7,8,9) Y 5.38 70.03 18.00 2.23 80.0 ± 9.6 % MAC LTE-TDD (SC-FDMA, 100% RB, 20 X 5.08 70.03 18.00 2.23 80.0 ± 9.6 %			Z	5.41	72.94				
Z 5.12 70.07 17.96 60.0 AAC LTE-TDD (SC-FDMA, 100% RB, 15 X 5.21 69.83 17.92 2.23 80.0 ± 9.6 % MHz, 64-OAM, UL Y 5.42 70.49 18.29 80.0 ± 9.6 % 10512- LTE-TDD (SC-FDMA, 100% RB, 20 X 5.85 74.74 19.13 2.23 80.0 ± 9.6 % AAC MHz, 04-OAM, UL Subframe=2,3.4,7,8,9) Y 6.39 76.18 19.80 80.0 ± 9.6 % AAC Subframe=2,3.4,7,8,9) Y 6.39 76.18 19.80 80.0 ± 9.6 % MLz, 16-CAM, UL Subframe=2,3.4,7,8,9) Y 5.34 71.31 18.56 80.0 ± 9.6 % Mutz, 64-AAM, UL Subframe=2,3.4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % MAC Subframe=2,3.4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % MAC Subframe=2,3.4,7,8,9) Y 5.29	10510- AAC	MHz, 16-QAM, UL				17.99	2.23		± 9.6 %
10611- LTE-TDD (SC-FDMA, 100% RB, 15 AAC X 5.21 60.83 F.2 17.92 2.23 80.0 ± 9.6 % MAC MLz, 64-CAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 ± 9.6 % MAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 5.45 74.74 19.13 2.23 80.0 ± 9.6 % AAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.39 76.18 19.80 80.0 ± 9.6 % MAC MHz, 16-CAM, UL Z 5.76 74.62 19.09 80.0 ± 9.6 % MHz, 16-CAM, UL Z 5.03 70.43 18.08 80.0 ± 9.6 % MHz, 16-CAM, UL Z 5.03 70.43 18.08 80.0 ± 9.6 % MHz, 64-CAM, UL Z 5.08 70.03 18.00 2.23 80.0 ± 9.6 % ML2, 64-CAM, UL Z 5.02 69.96 17.96 80.0 ± 9.6 % MD514- ITE-TDD (SC-FDMA, 100% RB, 20 X 5								80.0	
AAC MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.42 70.49 18.29 80.0 10512- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.39 76.18 19.30 2.23 80.0 ± 9.6 % 10513- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 6.39 76.18 19.09 80.0 ± 9.6 % 10513- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.34 71.31 18.56 80.0 ± 9.6 % 10514- MAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.34 71.31 18.56 80.0 ± 9.6 % 10515- MAC LTE-TDD (SC-FDMA, 100% RB, 20 MAC X 5.08 70.03 18.00 2.23 80.0 ± 9.6 % AAC Mbps, 99pc duty cycle) Y 0.92 63.29 17.96 80.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle)	10511							80.0	
Construction Z 5.15 69.78 17.89 80.0 AAC ITE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 5.85 74.74 19.13 2.23 80.0 ± 9.6 % 10513- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.10 70.52 18.13 2.23 80.0 ± 9.6 % AAC MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.34 71.31 18.56 80.0 ± 9.6 % AAC LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.08 70.43 18.00 2.23 80.0 ± 9.6 % MAC LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.08 70.31 18.00 2.23 80.0 ± 9.6 % MAC LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.08 70.75 18.40 80.0 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.92	10511- AAC	MHz, 64-QAM, UL			69.83	17.92	2.23	80.0	± 9.6 %
10512- LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 5.85 74.74 19.13 2.23 80.0 ± 9.6 % 10513- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 6.39 76.18 19.80 80.0 ± 9.6 % 10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.34 71.31 18.66 80.0 ± 9.6 % 10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % 10514- Subframe=2,3,4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % 10515- AAA IEEE 802.11b WiF12.4 GHz (DSSS, 2 X 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 16.40 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.70 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>80.0</td><td></td></t<>								80.0	
AAC MHz, QPSK, UL Subframe=2,3,4,7,8,9) MHz MLX MUZ MZ S.10 70.52 18.13 2.23 80.0 ± 9.6 % AAC MHz, 64-QAM, UL Z 5.03 70.43 18.00 2.03 80.0 150.0 ± 9.6 % MAA Mbps, 99.0 (duty cycle) Y 5.29 70.75 18.40 80.0 150.0 ± 9.6 % MAA Mbps, 99.0 (duty cycle) 2 0.92 62.37 13.81 150.0 150.0 150.0	10515							80.0	
ZE 5.76 74.62 19.09 80.0 AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.10 70.52 18.13 2.23 80.0 ±9.6 % AAC LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.03 70.43 18.08 80.0 . LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.08 70.03 18.00 2.23 80.0 ±9.6 % AAC LTE-TDD (SC-FDMA, 100% RB, 20 AAC X 5.08 70.03 18.00 2.23 80.0 ±9.6 % AAC MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.29 70.75 18.40 80.0 . Color Z 5.02 69.96 17.96 80.0 . . AAA Mbps, 99pc duty cycle) Y 0.92 62.37 13.81 150.0 . . 10516- IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 X 0.48 66.52 14.26 0.00 150.0 ±9.6 % AAA Mbps, 99pc						19.13	2.23	80.0	± 9.6 %
10513- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-GMA, UL Subframe=2,3,4,7,8,9) X 5.10 70.52 18.13 2.23 80.0 ± 9.6 % 10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-GMA, UL Subframe=2,3,4,7,8,9) Y 5.34 77.131 18.06 80.0 ± 9.6 % 10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MAz, 64-GMA, UL Subframe=2,3,4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % 10515- AAA Mbs, 99pc duty cycle) Y 5.29 70.75 18.40 80.0 ± 9.6 % 10515- MAA Mbs, 99pc duty cycle) Y 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 13.81 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.66 71.79 14.08 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y									
AAC MHz, 16-GAM, UL Subframe=2,3,4,7,8,9) No. A.R. B.R.	10540								
Z 5.03 70.43 18.08 80.0 10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 5.08 70.03 18.00 2.23 80.0 ± 9.6 % AAC Subframe=2,3,4,7,8,9) Y 5.29 70.75 18.40 80.0 ± 9.6 % 10515- IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 X 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 14.26 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 14.01 150.0 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 150.0 ± 9.6 % AAA <	10513- AAC	MHz, 16-QAM, UL					2.23		± 9.6 %
10514- AAC LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 5.08 70.03 18.00 2.23 80.0 ± 9.6 % 0 Y 5.29 70.75 18.40 80.0 105.0 ± 9.6 % 10515- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 X 0.93 62.43 13.89 0.00 150.0 ± 9.6 % 10516- AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 105.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 10517- IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 X 4.56 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
AAC MHz, 64-QAM, UL Market Ma	10511								
Z 5.02 69.96 17.96 80.0 10515- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) X 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.92 62.37 13.81 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) X 0.76 63.81 14.08 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) X 0.75 63.68 15.37 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.66 66.61 16.07 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y	10514- AAC	MHz, 64-QAM, UL			70.03	18.00	2.23	80.0	± 9.6 %
10515- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) X 0.93 62.43 13.89 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 ± 9.6 % 10516- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 X 0.48 66.52 14.26 0.00 150.0 ± 9.6 % 10517- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 X 0.48 66.52 14.26 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ± 9.6 % AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 X 4.56 66.61 16.05 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y					70.75	18.40		80.0	
AAA Mbps, 99pc duty cycle) Y 0.97 63.29 14.71 150.0 2 0.92 62.37 13.81 150.0 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) Y 0.68 66.52 14.26 0.00 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) Y 0.66 71.79 17.60 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) Y 0.65 71.79 17.60 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ±9.6 % AAA Mbps, 99pc duty cycle) X 4.56 66.61 16.07 0.00 150.0 ±9.6 % AAB Mbps, 99pc duty cycle) Y 4.61 66.85 16.27 150.0 10519- IEEE 802.11a/h WiF1 5 GHz (OFDM, 12 X 4.76 66.88 <t< td=""><td></td><td>-</td><td>Z</td><td></td><td></td><td></td><td></td><td>80.0</td><td></td></t<>		-	Z					80.0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10515- AAA						0.00		± 9.6 %
10516- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) X 0.48 66.52 14.26 0.00 150.0 ± 9.6 % Y 0.65 71.79 17.60 150.0 150.0 150.0 10517- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 X 0.76 63.81 14.08 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 ± 9.6 % AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 X 4.56 66.61 16.07 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.61 66.85 16.27 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.41 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.12									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	40540								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	AAA	Mbps, 99pc duty cycle)					0.00		± 9.6 %
10517- AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) X 0.76 63.81 14.08 0.00 150.0 ± 9.6 % AAA Mbps, 99pc duty cycle) Z 0.75 63.68 13.95 150.0 10518- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 AAB X 4.56 66.61 16.07 0.00 150.0 ± 9.6 % 10519- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB Y 4.61 66.85 16.27 150.0 10519- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB X 4.76 66.88 16.21 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.41 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.41 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.61 66.83 16.12 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.67 67.09 16.32 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.									
AAA Mbps, 99pc duty cycle) Y 0.83 65.38 15.37 150.0 10518- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) X 4.56 66.61 16.07 0.00 150.0 ± 9.6 % 10518- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) X 4.56 66.61 16.07 0.00 150.0 ± 9.6 % 10519- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB X 4.76 66.88 16.21 0.00 150.0 ± 9.6 % 10519- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB X 4.76 66.88 16.21 0.00 150.0 ± 9.6 % 10520- AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.41 150.0 10520- AAB Mbps, 99pc duty cycle) Y 4.61 66.83 16.12 0.00 150.0 ± 9.6 % 10521- AAB Mbps, 99pc duty cycle) Y 4.67 67.09 16.32 150.0 10521- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB X 4.54	10517	1555 802 115 W/i5i 2 4 CHz (DSSS_11					0.00		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	AAA						0.00		± 9.6 %
10518- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) X 4.56 66.61 16.07 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.61 66.85 16.27 150.0 150.0 IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB X 4.76 66.88 16.21 0.00 150.0 ± 9.6 % IO519- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 AAB X 4.76 66.88 16.21 0.00 150.0 ± 9.6 % IO520- AAB Mbps, 99pc duty cycle) Y 4.82 67.13 16.41 150.0 ± 9.6 % IO520- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) X 4.61 66.83 16.12 0.00 150.0 ± 9.6 % IO520- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB X 4.61 66.83 16.12 0.00 150.0 ± 9.6 % IO521- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB X 4.54 66.82 16.10 0.00 150.0 ± 9.6 % IO522- AAB Mbps, 99pc duty cycle) Y 4.60 67.09 16.31									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10518- AAB						0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.61	66.85	16.27		150.0	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Z						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10519- AAB		X	4.76	66.88		0.00		± 9.6 %
10520- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) X 4.61 66.83 16.12 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.67 67.09 16.32 150.0 IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB Y 4.67 66.81 16.09 150.0 IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB X 4.54 66.82 16.10 0.00 150.0 ± 9.6 % IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB Y 4.60 67.09 16.31 150.0 ± 9.6 % IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB Y 4.60 66.79 16.07 150.0 ± 9.6 % IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 ± 9.6 % IO522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) Y 4.65 67.13 16.37 150.0			Y						
AAB Mbps, 99pc duty cycle) Y 4.67 67.09 16.32 150.0 10521- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 AAB X 4.57 66.81 16.09 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) Y 4.60 67.09 16.31 150.0 10522- AAB Y 4.60 67.09 16.31 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB Y 4.65 67.13 16.37 150.0						16.18		150.0	
Z 4.57 66.81 16.09 150.0 10521- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) X 4.54 66.82 16.10 0.00 150.0 ± 9.6 % Y 4.60 67.09 16.31 150.0 ± 16.00 150.0 ± 9.6 % IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 ± 9.6 % 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) X 4.60 66.88 16.17 0.00 150.0 ± 9.6 % AAB Mbps, 99pc duty cycle) Y 4.65 67.13 16.37 150.0	10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)					0.00		±9.6 %
10521- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) X 4.54 66.82 16.10 0.00 150.0 ± 9.6 % Y 4.60 67.09 16.31 150.0 ± 9.6 % Z 4.51 66.79 16.07 150.0 IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 AAB X 4.60 66.88 16.17 0.00 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) X 4.60 66.88 16.17 0.00 150.0 ± 9.6 %									
AAB Mbps, 99pc duty cycle) Y 4.60 67.09 16.31 150.0 Image: Constraint of the state of the s	10524						0.00		
Z 4.51 66.79 16.07 150.0 10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) X 4.60 66.88 16.17 0.00 150.0 ± 9.6 % Y 4.65 67.13 16.37 150.0 ± 150.0	10521- AAB						0.00		± 9.6 %
10522- AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) X 4.60 66.88 16.17 0.00 150.0 ± 9.6 % Y 4.65 67.13 16.37 150.0 ± 9.6 %									
AAB Mbps, 99pc duty cycle) Y 4.65 67.13 16.37 150.0	10522						0.00		
	10522- AAB						0.00		± 9.6 %
			Z	4.65	67.13	16.37 16.15		150.0	

10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.47	66.73	16.00	0.00	150.0	± 9.6 %
		Y	4.52	66.99	16.21		150.0	
		Z	4.52	66.72	15.98		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.44	66.81	16.14	0.00	150.0	± 9.6 %
AAD		Y	4.60	67.07	16.35		450.0	
		Z	4.60				150.0	
10525-		$\frac{2}{X}$		66.79	16.12	0.00	150.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)		4.52	65.83	15.72	0.00	150.0	± 9.6 %
		Y	4.57	66.08	15.92		150.0	
		Z	4.49	65.82	15.70		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.70	66.21	15.87	0.00	150.0	± 9.6 %
		Y	4.76	66.48	16.07		150.0	
		Z	4.66	66.20	15.85		150.0	
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.61	66.17	15.81	0.00	150.0	± 9.6 %
		Y	4.67	66.44	16.02		150.0	
		Z	4.58	66.15	15.78		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.63	66.19	15.85	0.00	150.0	± 9.6 %
		Y	4.69	66.46	16.05		150.0	
		Z	4.60	66.17	15.82		150.0	····
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.63	66.19	15.85	0.00	150.0	± 9.6 %
		Y	4.69	66.46	16.05		150.0	
		Z	4.60	66.17	15.82		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.63	66.31	15.86	0.00	150.0	± 9.6 %
		Y	4.69	66.59	16.07		150.0	
		Z	4.59	66.28	15.83		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.48	66.15	15.79	0.00	150.0	± 9.6 %
		Y	4.55	66.44	16.01		150.0	
		Z	4.45	66.12	15.75		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.64	66.22	15.83	0.00	150.0	± 9.6 %
		Y	4.70	66.49	16.03		150.0	
		Z	4.60	66.20	15.80		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.17	66.38	15.95	0.00	150.0	± 9.6 %
		Y	5.22	66.61	16.12		150.0	
			5.14	66.36	15.93		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.55	16.02	0.00	150.0	± 9.6 %
		Y	5.29	66.77	16.19		150.0	
		z	5.21	66.54	16.01		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.49	15.97	0.00	150.0	± 9.6 %
		Y	5.16	66.73	16.15		150.0	
		Z	5.07	66.46	15.95		150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.17	66.48	15.97	0.00	150.0	± 9.6 %
		Y	5.22	66.71	16.14		150.0	
40500		Z	5.14	66.45	15.95		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.27	66.54	16.05	0.00	150.0	± 9.6 %
		Y	5.32	66.77	16.22		150.0	
		Z	5.23	66.49	16.02		150.0	
10540 . AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.52	16.05	0.00	150.0	± 9.6 %
		Y	5.24	66.75	16.22		150.0	
	I COMPANY CONTRACTOR C	Z	5.16					

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.16	66.38	15.97	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)							//
		Y	5.21	66.61	16.15		150.0	
		Z	5.13	66.35	15.95		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.32	66.47	16.04	0.00	150.0	± 9.6 %
		Y	5.37	66.69	16.20		150.0	
		Z	5.29	66.44	16.02		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.41	66.52	16.08	0.00	150.0	± 9.6 %
		Y	5.45	66.73	16.24		150.0	
		Z	5.38	66.51	16.07		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	Х	5.47	66.50	15.95	0.00	150.0	± 9.6 %
		Y	5.51	66.71	16.11		150.0	
		Z	5.45	66.47	15.93		150.0	
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.69	66.97	16.13	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.73	67.17	16.28		150.0	
		Z	5.66	66.95	16.12		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.56	66.76	16.04	0.00	150.0	± 9.6 %
		Y	5.60	66.98	16.21		150.0	
105/-		Z	5.52	66.71	16.02		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.64	66.85	16.08	0.00	150.0	± 9.6 %
		Y	5.69	67.07	16.24		150.0	
		Z	5.60	66.78	16.04		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.00	68.11	16.68	0.00	150.0	± 9.6 %
		Y	6.04	68.30	16.83		150.0	
		Z	5.95	68.00	16.63		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.74	16.04	0.00	150.0	± 9.6 %
		Y	5.62	66.95	16.20		150.0	
		Z	5.55	66.72	16.03		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.77	16.02	0.00	150.0	± 9.6 %
		Y	5.63	67.00	16.18		150.0	
		Z	5.55	66.74	16.00		150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.49	66.55	15.92	0.00	150.0	± 9.6 %
		Y	5.53	66.77	16.08		150.0	
		Z	5.46	66.52	15.90		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.61	15.98	0.00	150.0	± 9.6 %
		Y	5.63	66.83	16.14		150.0	
		Z	5.55	66.57	15.96		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.88	66.89	16.06	0.00	150.0	± 9.6 %
		Y	5.92	67.10	16.21		150.0	
		Z	5.86	66.86	16.04		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.03	67.23	16.21	0.00	150.0	± 9.6 %
		Y	6.07	67.43	16.35		150.0	
10.55		Z	6.00	67.20	16.19		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.04	67.26	16.21	0.00	150.0	± 9.6 %
		Y	6.08	67.46	16.36		150.0	
1		Z	6.02	67.23	16.20		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.01	67.18	16.19	0.00	150.0	± 9.6 %
C		Y	6.06	67.39	16.35		150.0	
		Z	5.98	67.14	16.17		150.0	

10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.07	67.37	16.30	0.00	150.0	± 9.6 %
		Y	6.12	67.58	16.46		150.0	
		Z	6.04	67.31	16.27		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.06	67.18	16.25	0.00	150.0	± 9.6 %
		Y	6.10	67.40	16.41		150.0	
		Z	6.03	67.14	16.23		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.98	67.16	16.28	0.00	150.0	± 9.6 %
		Y	6.02	67.38	16.43		150.0	
		Z	5.95	67.13	16.26		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.14	67.65	16.52	0.00	150.0	± 9.6 %
		Y	6.18	67.88	16.69		150.0	
		Z	6.10	67.57	16.48		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.53	68.40	16.85	0.00	150.0	± 9.6 %
		Y	6.57	68.59	17.00		150.0	
		Z	6.44	68.19	16.75		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.91	66.77	16.29	0.46	150.0	± 9.6 %
	····	Y	4.96	67.01	16.49		150.0	
		Z	4.88	66.76	16.26		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	Х	5.15	67.23	16.61	0.46	150.0	± 9.6 %
		Y	5.20	67.46	16.79		150.0	
		Z	5.11	67.20	16.58		150.0	····
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.98	67.08	16.43	0.46	150.0	± 9.6 %
		Y	5.04	67.33	16.62		150.0	
		Z	4.94	67.05	16.40		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.00	67.42	16.74	0.46	150.0	± 9.6 %
		Y	5.05	67.64	16.92		150.0	
		Z	4.96	67.39	16.72		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.90	66.88	16.22	0.46	150.0	± 9.6 %
		Y	4.96	67.15	16.44		150.0	
		Z	4.87	66.87	16.19		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.95	67.46	16.77	0.46	150.0	± 9.6 %
		Y	5.00	67.68	16.94		150.0	
		Z	4.91	67.46	16.76		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.99	67.34	16.73	0.46	150.0	±9.6 %
		Y	5.04	67.57	16.91		150.0	
		Z	4.95	67.33	16.71		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.25	64.93	15.40	0.46	130.0	± 9.6 %
		Y	1.32	65.99	16.25		130.0	
		Z	1.24	64.84	15.31		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.27	65.48	15.72	0.46	130.0	± 9.6 %
		Y	1.35	66.62	16.60		130.0	
		Z	1.26	65.38	15.63		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.10	81.92	20.57	0.46	130.0	± 9.6 %
		Y	6.18	99.59	26.88		130.0	
		Z	1.98	81.02	20.18		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.40	70.72	18.14	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.59	73.16	19.61		130.0	
		Z	1.38	70.53	18.01			

10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.72	66.64	16.39	0.46	130.0	± 9.6 %
AAA	OFDM, 6 Mbps, 90pc duty cycle)				10.00	0.40	100.0	1 0.0 78
		Y	4.77	66.88	16.58		130.0	
		Z	4.69	66.63	16.36		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.74	66.78	16.44	0.46	130.0	± 9.6 %
		Y	4.79	67.02	16.63		130.0	
		Z	4.71	66.78	16.41		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.96	67.10	16.62	0.46	130.0	± 9.6 %
		Y	5.01	67.33	16.80		130.0	
		Z	4.92	67.08	16.59		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.85	67.23	16.70	0.46	130.0	± 9.6 %
		Y	4.90	67.46	16.88		130.0	
40570		Z	4.81	67.21	16.67		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.63	66.62	16.07	0.46	130.0	± 9.6 %
	•	Y	4.70	66.91	16.30		130.0	
10590		Z	4.60	66.59	16.04	0.15	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.68	66.64	16.09	0.46	130.0	± 9.6 %
		Y	4.74	66.93	16.33		130.0	
10501		Z	4.64	66.62	16.06		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	67.28	16.64	0.46	130.0	± 9.6 %
		Y	4.81	67.52	16.83		130.0	
10500		Z	4.71	67.26	16.61		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.59	66.41	15.89	0.46	130.0	± 9.6 %
		Y	4.65	66.72	16.14		130.0	
		Z	4.55	66.37	15.85		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.72	66.64	16.39	0.46	130.0	±9.6 %
		Y	4.77	66.88	16.58		130.0	
		Z	4.69	66.63	16.36		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.74	66.78	16.44	0.46	130.0	±9.6 %
		Y	4.79	67.02	16.63		130.0	
		Z	4.71	66.78	16.41		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.96	67.10	16.62	0.46	130.0	± 9.6 %
		Y	5.01	67.33	16.80		130.0	
		Z	4.92	67.08	16.59		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.85	67.23	16.70	0.46	130.0	±9.6 %
		Y	4.90	67.46	16.88		130.0	
10505		Z	4.81	67.21	16.67		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.63	66.62	16.07	0.46	130.0	± 9.6 %
		Y	4.70	66.91	16.30		130.0	
1		Z	4.60	66.59	16.04		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.68	66.64	16.09	0.46	130.0	± 9.6 %
		Y	4.74	66.93	16.33		130.0	
10555		Z	4.64	66.62	16.06		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	67.28	16.64	0.46	130.0	±9.6 %
		Y	4.81	67.52	16.83		130.0	
		Z	4.71	67.26	16.61		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.59	66.41	15.89	0.46	130.0	± 9.6 %
		Y	4.65	66.72	16.14		130.0	
		Z	4.55	66.37	15.85		130.0	

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.87	66.69	16.48	0.46	130.0	± 9.6 %
=		Y	4.92	66.92	16.67		130.0	
		Z	4.84	66.69	16.46		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.03	67.03	16.61	0.46	130.0	± 9.6 %
		Y	5.08	67.26	16,79		130.0	
		Z	5.00	67.02	16.59		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.96	66.97	16.51	0.46	130.0	± 9.6 %
AAB	MCS2, 90pc duty cycle)	Y	5.01	67.21	16.70	0.40	130.0	10.0 %
		Z	4.92	66.95	16.48		130.0	
	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.01	67.11	16.65	0.46	130.0	± 9.6 %
		Y	5.06	67.34	16.83		130.0	
		Z	4.97	67.10	16.62		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.98	67.08	16.55	0.46	130.0	± 9.6 %
		Y	5.04	67.32	16.74		130.0	
		Z	4.94	67.06	16.53		130.0	
	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.92	67.08	16.55	0.46	130.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	4.98	67.33	16.75		130.0	
		Z	4.88	67.06	16.53		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.87	67.00	16.45	0.46	130.0	± 9.6 %
		Y	4.93	67.26	16.65		130.0	
		Z	4.83	66.97	16.42		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.85	67.21	16.69	0.46	130.0	±9.6 %
		Y	4.90	67.45	16.87		130.0	
		Z	4.81	67.18	16.66		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.55	67.30	16.72	0.46	130.0	± 9.6 %
		Y	5.59	67.50	16.88		130.0	
		Z	5.52	67.28	16.71		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.76	67.97	17.04	0.46	130.0	± 9.6 %
		Y	5.80	68.15	17.19		130.0	
		Z	5.71	67.90	16.99		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.61	67.58	16.85	0.46	130.0	±9.6 %
		Y	5.65	67.77	17.00		130.0	
		Z	5.57	67.54	16.83		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.69	67.58	16.77	0.46	130.0	± 9.6 %
		Y	5.73	67.78	16.94		130.0	
		Z	5.66	67.57	16.76		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.77	67.85	17.03	0.46	130.0	± 9.6 %
		Y	5.81	68.03	17.18		130.0	
		Z	5.73	67.82	17.01		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.55	67.27	16.73	0.46	130.0	± 9.6 %
		Y	5.60	67.47	16.89		130.0	
		Z	5.52	67.24	16.71		130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.69	67.68	16.94	0.46	130.0	± 9.6 %
		Y	5.73	67.87	17.10		130.0	
		Z	5.66	67.69	16.94		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.43	67.03	16.48	0.46	130.0	± 9.6 %
		Y'	5.48	67.26	16.66		130.0	
		Z	5.41	67.03	16.47		130.0	

10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.70	65.95	16.07	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)							
		Y	4.75	66.19	16.26	_	130.0	
10608-		Z	4.67	65.95	16.05	0.40	130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.89	66.37	16.24	0.46	130.0	± 9.6 %
		Y	4.95	66.62	16.43		130.0	
10609-		Z	4.86	66.36	16.22		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.78	66.23	16.09	0.46	130.0	± 9.6 %
		Y	4.84	66.50	16.29		130.0	
10610-	IEEE 802.11ac WiFi (20MHz, MCS3,	Z	4.75	66.21	16.06		130.0	
AAB	90pc duty cycle)	X	4.83	66.38	16.24	0.46	130.0	±9.6 %
· · · · · ·		Y	4.89	66.63	16.43		130.0	
10611	IEEE 802.11ac WiFi (20MHz, MCS4,	Z	4.80	66.36	16.22	0.40	130.0	
10611- AAB	90pc duty cycle)	X	4.75	66.21	16.10	0.46	130.0	± 9.6 %
		Y	4.81	66.47	16.30		130.0	
10612		Z	4.72	66.18	16.07	0.45	130.0	
10612- AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.77	66.37	16.14	0.46	130.0	± 9.6 %
		Y	4.83	66.65	16.36		130.0	
10613-	IEEE 802.11ac WiFi (20MHz, MCS6,	Z	4.73	66.35	16.12	0.10	130.0	
AAB	90pc duty cycle)	X	4.78	66.28	16.05	0.46	130.0	±9.6 %
		Y	4.84	66.57	16.26		130.0	
10614		Z	4.74	66.25	16.02	0.40	130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.71	66.42	16.24	0.46	130.0	± 9.6 %
		Y	4.77	66.68	16.44		130.0	
10015		Z	4.67	66.39	16.22		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.76	66.06	15.90	0.46	130.0	± 9.6 %
		Y	4.82	66.34	16.11		130.0	
10010		Z	4.72	66.04	15.87		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.36	66.52	16.31	0.46	130.0	± 9.6 %
		Y	5.40	66.73	16.47		130.0	
		Z	5.33	66.49	16.29		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.42	66.67	16.35	0.46	130.0	± 9.6 %
		Y	5.47	66.87	16.51		130.0	
		Z	5.40	66.69	16.36		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.31	66.69	16.37	0.46	130.0	± 9.6 %
		Y	5.36	66.91	16.54		130.0	
40010		Z	5.28	66.66	16.36		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.34	66.55	16.24	0.46	130.0	± 9.6 %
		Y	5.39	66.77	16.41		130.0	
10000		Z	5.31	66.53	16.23		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.44	66.61	16.33	0.46	130.0	± 9.6 %
		Y	5.49	66.85	16.50		130.0	
10001			5.40	66.57	16.30		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.41	66.65	16.46	0.46	130.0	± 9.6 %
		Y	5.46	66.85	16.61		130.0	
40000		Z	5.38	66.63	16.44		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.43	66.83	16.54	0.46	130.0	± 9.6 %
		Y	5.47	67.03	16.69		130.0	
		Z	5.41	66.83	16.53		130.0	

10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	E 94	66.27	10.00	0.40	100.0	
AAB	90pc duty cycle)		5.31	66.37	16.20	0.46	130.0	± 9.6 %
		Y	5.36	66.60	16.37		130.0	
		Z	5.28	66.35	16.18		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.51	66.60	16.37	0.46	130.0	± 9.6 %
		Y	5.55	66.80	16.53		130.0	
		Z	5.48	66.57	16.35		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.96	67.84	17.04	0.46	130.0	± 9.6 %
		Y	6.00	68.03	17.20		130.0	
		Z	5.91	67.77	17.00		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.63	66.56	16.25	0.46	130.0	± 9.6 %
		Y	5.67	66.76	16.40		130.0	
10007		Z	5.61	66.54	16.24	0.40	130.0	
	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.91	67.22	16.54	0.46	130.0	± 9.6 %
		Y	5.95	67.40	16.68		130.0	
40000		Z	5.89	67.20	16.54		130.0	
	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.69	66.73	16.24	0.46	130.0	± 9.6 %
		Y	5.74	66.95	16.40		130.0	
10000		Z	5.67	66.70	16.22		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.78	66.80	16.27	0.46	130.0	± 9.6 %
		Y	5.82	67.01	16.42		130.0	
40000		Z	5.76	66.81	16.27		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.42	68.87	17.30	0.46	130.0	± 9.6 %
		Y	6.45	69.07	17.46		130.0	
		Z	6.35	68.76	17.24		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.17	68.24	17.17	0.46	130.0	± 9.6 %
		Y	6.22	68.45	17.31		130.0	
		Z	6.11	68.14	17.12		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	×	5.86	67.20	16.67	0.46	130.0	± 9.6 %
		Y	5.89	67.37	16.79		130.0	
		Z	5.84	67.20	16.66		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.75	66.86	16.33	0.46	130.0	± 9.6 %
		Y	5.80	67.09	16.49		130.0	
		Z	5.72	66.81	16.30		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.73	66.86	16.39	0.46	130.0	± 9.6 %
		Y	5.78	67.07	16.54		130.0	
10005		Z	5.70	66.82	16.36		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.63	66.29	15.85	0.46	130.0	± 9.6 %
		Y	5.69	66.55	16.05		130.0	
10000		Z	5.60	66.24	15.82		130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.06	66.98	16.37	0.46	130.0	± 9.6 %
		Y	6.09	67.16	16.51		130.0	
40007		Z	6.04	66.95	16.36		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.23	67.40	16.57	0.46	130.0	± 9.6 %
		Y	6.27	67.58	16.70		130.0	
		Z	6.21	67.38	16.55		130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.23	67.37	16.53	0.46	130.0	± 9.6 %
		Y	6.27	67.56	16.67		130.0	
		Z	6.21	67.35	16.52		130.0	

10639-	IEEE 802.11ac WiFi (160MHz, MCS3,	X	6.21	67.31	16.55	0.46	130.0	± 9.6 %
AAC	90pc duty cycle)					0.10	100.0	1 0.0 %
····		Y	6.25	67.51	16.69		130.0	
10640-		Z	6.18	67.27	16.52		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.23	67.39	16.53	0.46	130.0	± 9.6 %
· · · · · · · · ·		Y	6.28	67.61	16.69		130.0	
10641-		Z	6.20	67.33	16.50		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.24	67.19	16.45	0.46	130.0	± 9.6 %
		Y	6.28	67.39	16.60		130.0	
10642-		Z	6.22	67.18	16.44		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.29	67.45	16.73	0.46	130.0	± 9.6 %
		Y	6.33	67.63	16.87		130.0	
10010		Z	6.26	67.41	16.72		130.0	
	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.13	67.18	16.51	0.46	130.0	± 9.6 %
		Y	6.18	67.38	16.66		130.0	
400.1		Z	6.11	67.15	16.49		130.0	
	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.35	67.83	16.86	0.46	130.0	± 9.6 %
		Y	6.40	68.06	17.03		130.0	
10015		Z	6.30	67.74	16.80		130.0	
10645- I AAC 9	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.89	68.98	17.38	0.46	130.0	± 9.6 %
		Y	6.90	69.10	17.50		130.0	
		Z	6.83	68.87	17.33		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	Х	48.50	125.76	41.37	9.30	60.0	± 9.6 %
		Y	90.47	140.91	45.72		60.0	
		Z	50.32	127.46	41.96		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	48.77	126.82	41.82	9.30	60.0	±9.6 %
		Y	98.14	143.92	46.67		60.0	
		Z	49.92	128.24	42.34		60.0	
10648- AAA	CDMA2000 (1x Advanced)	Х	0.66	62.51	9.96	0.00	150.0	±9.6 %
		Y	0.73	63.91	11.18		150.0	
		Z	0.63	62.25	9.61		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.17	68.03	16.99	2.23	80.0	±9.6 %
		Y	4.34	68.67	17.39		80.0	
		Z	4.13	68.01	16.93		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	Х	4.68	67.42	17.15	2.23	80.0	±9.6 %
		Y	4.82	67.93	17.48		80.0	
		Z	4.65	67.40	17.11		80.0	
10654-	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1,	X	4.64	67.10	17.16	2.23	80.0	±9.6 %
	Clipping 44%)							
	Clipping 44%)	Y	4.76	67.59	17.48		80.0	
	Clipping 44%)	Y Z	4.76 4.61	67.59 67.07	17.48 17.13		80.0 80.0	
AAB 10655- AAB	Clipping 44%) LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Z X	4.76 4.61 4.70	67.59 67.07 67.12	17.48 17.13 17.21	2.23	80.0 80.0 80.0	± 9.6 %
AAB 10655-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1,	Z X Y	4.61 4.70 4.82	67.07 67.12 67.61	17.13 17.21 17.53	2.23	80.0 80.0 80.0	± 9.6 %
AAB 10655- AAB 10658-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1,	Z X	4.61 4.70	67.07 67.12	17.13 17.21	2.23	80.0 80.0	± 9.6 %
AAB 10655- AAB 10658-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Z X Y Z	4.61 4.70 <u>4.82</u> 4.67	67.07 67.12 67.61 67.08	17.13 17.21 17.53 17.17		80.0 80.0 80.0 80.0 50.0	
AAB 10655-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Z X Y Z X Y	4.61 4.70 4.82 4.67 17.27 16.02	67.07 67.12 67.61 67.08 91.20 90.22	17.13 17.21 17.53 17.17 23.98 23.99		80.0 80.0 80.0 50.0 50.0	
AAB 10655- AAB 10658- AAA 10659-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Z X Y Z X	4.61 4.70 4.82 4.67 17.27	67.07 67.12 67.61 67.08 91.20	17.13 17.21 17.53 17.17 23.98		80.0 80.0 80.0 80.0 50.0	
AAB 10655- AAB 10658- AAA	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) Pulse Waveform (200Hz, 10%)	Z X Y Z X Y Z	4.61 4.70 4.82 4.67 17.27 16.02 18.59	67.07 67.12 67.61 67.08 91.20 90.22 92.23	17.13 17.21 17.53 17.17 23.98 23.99 24.12	10.00	80.0 80.0 80.0 50.0 50.0 50.0	± 9.6 %

February 13, 2018

10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	112.03	25.82	3.98	80.0	± 9.6 %
		Y	100.00	113.99	26.86		80.0	
		Z	100.00	111.43	25.48		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	111.06	24.05	2.22	100.0	± 9.6 %
		Y	100.00	114.62	25.75		100.0	
		Z	100.00	110.31	23.67		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	100.00	108.64	21.32	0.97	120.0	± 9.6 %
		Y	100.00	117.33	25.06		120.0	
		Z	100.00	107.31	20.72		120.0	

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

Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

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

Client PC Test

Certificate No: EX3-7409_Jun18

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7409	
Calibration procedure(s)	QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes	3
	BIN 07/16/2018	Ş
Calibration date:	June 25, 2018	
	ments the traceability to national standards, which realize the physical units of measurements (SI). certainties 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	lD	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature	
Calibrated by:	Claudio Leubler	Laboratory Technician)
				2
Approved by:	Katja Pokovic	Technical Manager	Jol Hy	4
			issued: June	26, 2018

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



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

Accreditation No.: SCS 0108

S

С

S

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- 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).

Probe EX3DV4

SN:7409

Manufactured: Calibrated:

November 24, 2015 June 25, 2018

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

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	0.38	0.33	0.38	± 10.1 %
DCP (mV) ⁸	100.8	102.3	97.7	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	C	D	VR	Unc [≞]
			dB	dB√μV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	157.1	±2.2 %
		Y	0.0	0.0	1.0		172.6	
		Z	0.0	0.0	1.0		175.7	

Note: For details on UID parameters see Appendix.

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	15.40	116.5	36.38	2.655	0.140	4.978	0.000	0.017	1.008
Y	27.94	206.6	35.20	4.338	0.095	4.989	1.642	0.000	1.004
Z	31.47	244.0	37.99	3.819	0.313	5.030	0.103	0.363	1.006

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

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

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

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

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	9.91	9.91	9.91	0.44	0.90	± 12.0 %
835	41.5	0.90	9.67	9.67	9.67	0.46	0.85	± 12.0 %
1750	40.1	1.37	8.43	8.43	8.43	0.38	0.80	± 12.0 %
1900	40.0	1.40	8.05	8.05	8.05	0.38	0.84	± 12.0 %
2300	39.5	1.67	7.57	7.57	7.57	0.32	0.80	± 12.0 %
2450	39.2	1.80	7.23	7.23	7.23	0.34	0.86	± 12.0 %
2600	39.0	1.96	6.98	6.98	6.98	0.39	0.86	± 12.0 %
5250	35.9	4.71	5.20	5.20	5.20	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.77	4.77	4.77	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.82	4.82	4.82	0.40	1.80	± 13.1 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

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

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

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

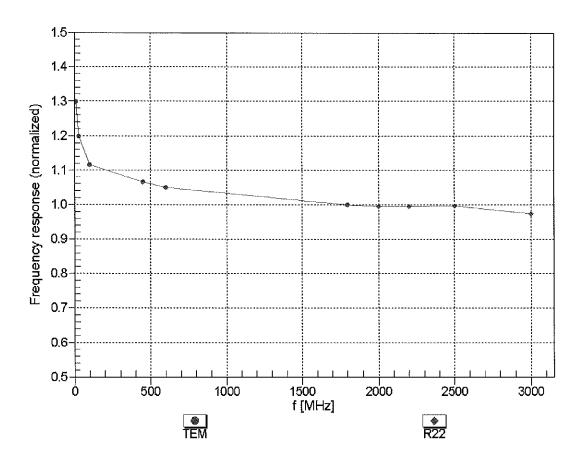
			-					
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	9.82	9.82	9.82	0.52	0.84	± 12.0 %
835	55.2	0.97	9.63	9.63	9.63	0.48	0.80	± 12.0 %
1750	53.4	1.49	7.91	7.91	7.91	0.36	0.93	± 12.0 %
1900	53.3	1.52	7.60	7.60	7.60	0.44	0.80	± 12.0 %
2300	52.9	1.81	7.36	7.36	7.36	0.38	0.88	± 12.0 %
2450	52.7	1.95	7.24	7.24	7.24	0.33	0.89	± 12.0 %
2600	52.5	2.16	7.07	7.07	7.07	0.32	0.96	± 12.0 %
5250	48.9	5.36	4.67	4.67	4.67	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.25	4.25	4.25	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.32	4.32	4.32	0.50	1.90	± 13.1 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

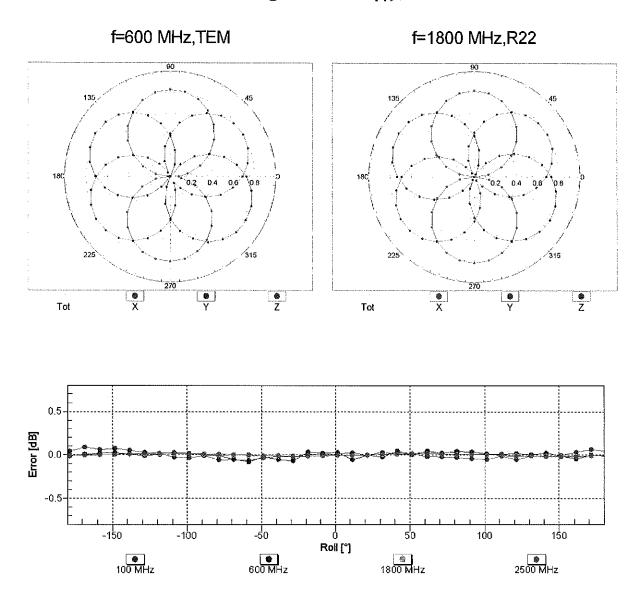
^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty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

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



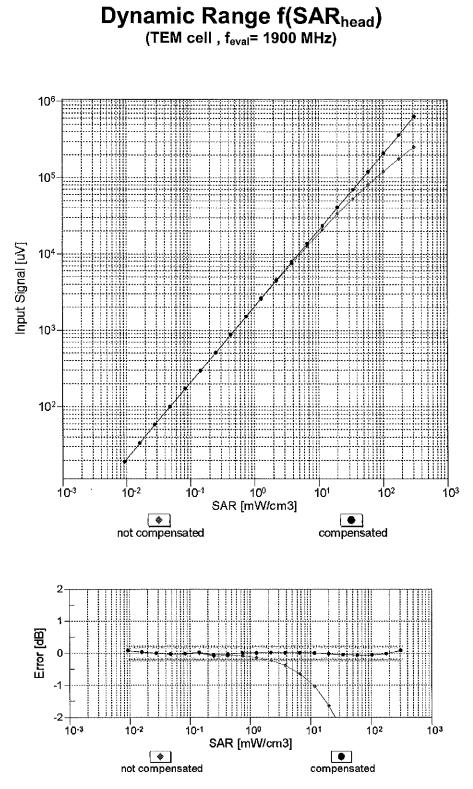
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

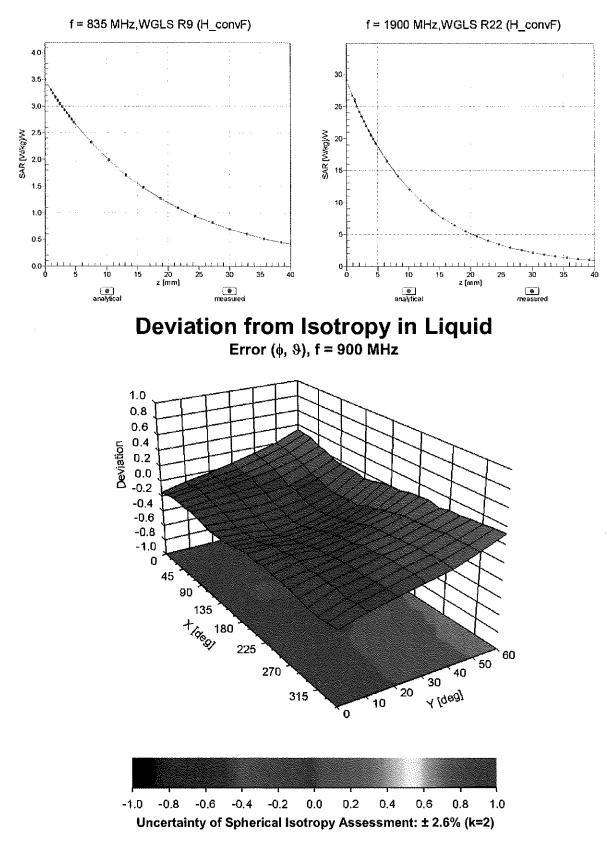


Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



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



Conversion Factor Assessment

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

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	41.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	157.1	± 2.2 %
		Y	0.00	0.00	1.00		172.6	
10010		Z	0.00	0.00	1.00		175.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	1.25	60.42	5.97	10.00	20.0	±9.6 %
		Y	1.37	61.35	6.72		20.0	
40044		Z	1.46	61.54	7.06		20.0	
10011- CAB	UMTS-FDD (WCDMA)	×	0.71	66.47	12.38	0.00	150.0	± 9.6 %
		Y	1.49	76.31	19.52		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z	0.80	65.38	13.27		150.0	
CAB	Mbps)	X	0.97	63.61	14.22	0.41	150.0	± 9.6 %
		Y Z	<u>1.14</u> 1.01	65.32 62.66	16.39		150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	3.98	66.92	14.20 16.39	1.46	150.0 150.0	± 9.6 %
CAB	OFDM, 6 Mbps)		4.54	07.00				
		Y	4.51	67.09	17.14		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z X	4.51 2.93	66.48 68.02	16.81 10.47	9.39	150.0 50.0	± 9.6 %
DAC	-							
		<u> </u>	5.30	74.12	13.20		50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z	8.30	79.26	15.55		50.0	
DAC	GERS-FDD (TDWA, GWSK, TNU)	X	2.04	64.26	8.75	9.57	50.0	± 9.6 %
		Y Z	3.75 5.18	70.52	11.87		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	0.77	74.16 60.84	13.81 5.97	6.56	50.0 60.0	± 9.6 %
		Y	100.00	98.81	18.33		60.0	
		Z	7.39	79.44	14,17		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	2.92	62.32	21.25	12.57	50.0	± 9.6 %
		Y	3.79	70.21	26.28		50.0	
10026-		Z	3.08	62.64	21.59		50.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	4.19	76.79	26.73	9.56	60.0	± 9.6 %
		Y Z	5.08 4.89	81.51	29.10		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	0.43	79.35 60.00	27.91 4.84	4.80	60.0 80.0	± 9.6 %
		Y	100.00	98.82	17.61		80.0	
		Ż	99,96	97.90	17.31		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	0.29	60.00	4.20	3.55	100.0	± 9.6 %
		Y	100.00	100.72	17.79		100.0	
10029-		Z	0.57	63.31	6.83		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	3.08	70.55	22.84	7.80	80.0	± 9.6 %
		Y Z	3.50	73.17	24.28		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	3.45 0.52	72.07 60.00	23.57 4.79	5.30	80.0 70.0	± 9.6 %
		Y	1.54	67.33	9.06		70.0	
		Ż	1.17	65.26	8.49		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	0.04	196.26	30.81	1.88	100.0	± 9.6 %
		Y	0.17	60.00	4.10		100.0	
		Z	15.90	60.96	1.69		100.0	

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	0.00	86.08	35.43	1.17	100.0	± 9.6 %
CAA		Y	99.99	344.89	100.44		100.0	
·		Υ Ζ	<u>99.99</u> 1.14	<u>344.89</u> 132.41	100.44		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	0.95	60.75	6.54	5.30	70.0	± 9.6 %
		Y	4.98	80.79	18.23		70.0	
		Ζ	3.25	75.39	16.74		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	3.04	65.72	5.34	1.88	100.0	± 9.6 %
		Υ	1.68	70.56	12.82	····	100.0	
40005		Z	0.99	64.34	10.07	4 47	100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	24.75	218.80	26.78 12.15	1.17	100.0	± 9.6 %
		Y Z	1.37	69.43		,	100.0	
10036-	UTTT 902 15 1 Plusteeth (9 DDSV DU1)		0.77 0.94	62.85 60.83	8.95 6.63	5.30	70.0	± 9.6 %
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Y	7.23	85.73	19.90	5.30	70.0	± 9.0 %
		Z	3.94	78.17	17.83		70.0	
10037-	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	<u> </u>	63.61	4.82	1.88	100.0	± 9.6 %
CAA	IEEE 802.15.1 Blueloo(II (8-DPSK, DH3)	^ Y	1.41	68.85	12.14	1.00	100.0	± 9.0 %
		r Z	0.93	63.88	9.84		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	26.17	217.46	9.04 26.16	1.17	100.0	± 9.6 %
CAA		^ Y	1.45	70.29	12.67	1.17	100.0	1 9.0 %
		Z	0.78	63.02	9.17		100.0	
10039-	CDMA2000 (1xRTT, RC1)	X	21.96	306.20	30.49	0.00	150.0	± 9.6 %
CAB		Y	1.63			0.00	150.0	± 9.0 %
		Z	0.63	72.13 61.62	12.95 7.75		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	1.01	60.95	6.26	7.78	50.0	± 9.6 %
		Y	1.74	65.58	9.03		50.0	· ·
		Z	1.74	65.58	9.34		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.10	124.30	3.45	0.00	150.0	± 9.6 %
		Y	0.01	119.74	2.99		150.0	
		Z	0.14	123.41	9.03		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	2.82	62.25	9.34	13.80	25.0	±9.6 %
		Y	3.46	64.98	10.90		25.0	
		Z	4.35	67.54	12.61		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	2.47	64.28	8.96	10.79	40.0	± 9.6 %
		Y	3,27	67.55	10.82		40.0	
		Z	4.02	69.88	12.36		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	2.81	66.64	10.78	9.03	50.0	± 9.6 %
		Y	11.82	86.24	20.09		50.0	
		Z	9.59	84.12	20.02		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	×	2.65	68.11	20.96	6.55	100.0	± 9.6 %
		Y	2.94	70.05	22.07		100.0	
		Z	2.91	69.15	21.44		100,0	
10059- CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 2 Mbps)	X	0.95	64.02	14.39	0.61	110.0	± 9.6 %
		Y	1.14	66.10	16.82		110.0	
1		Z	1.00	63.23	14.55		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	1.76	81.26	19.48	1.30	110.0	± 9.6 %
		Y	100.00	150.16	40.00		110.0	
		Z	1.90	81.85	20.27		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.18	69.71	16.58	2.04	110.0	± 9.6 %
		Y	1.94	78.32	21.99		110.0	
		Z	1.40	71.35	18.33		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	3.80	66.99	15.87	0.49	100.0	± 9.6 %
		Y	4.35	67.21	16.69		100.0	
		Z	4.31	66.43	16.23		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	3.81	67.06	15.96	0.72	100.0	± 9.6 %
		Y	4.36	67.29	16.77		100.0	
		Z	4.32	66.52	16.32		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	3.97	67.23	16.12	0.86	100.0	± 9.6 %
		Y	4.56	67.40	16.91		100.0	
		Z	4.55	66.72	16.52		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	3.85	66.82	16.06	1.21	100.0	± 9.6 %
		Y	4.42	67.15	16.92		100.0	
		Z	4.42	66.52	16.58		100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	3.83	66.65	16.06	1.46	100.0	± 9.6 %
		Y	4.41	67.05	17.01		100.0	
		Z	4.42	66.49	16.71		100.0	
10067- CAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 36 Mbps)	X	4.01	66.66	16.35	2.04	100.0	± 9.6 %
		Y	4.65	67.23	17.40		100.0	
		Z	4.70	66.78	17.19		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	4.12	66.97	16.78	2.55	100.0	± 9.6 %
		Y	4.69	67.14	17.56		100.0	
		Z	4.73	66.69	17.36		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	4.11	66.73	16.77	2.67	100.0	± 9.6 %
		Y	4.72	67.08	17.69		100.0	
		Z	4.78	66.70	17.53		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.07	66.96	16.68	1.99	100.0	± 9.6 %
		Y	4.59	67.07	17.37		100.0	
		Z	4.60	66.53	17.10	1	100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	3.98	66.89	16.71	2.30	100.0	± 9.6 %
		Y	4.51	67.19	17.50		100.0	
		Z	4.54	66.70	17.26		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.03	67.09	17.06	2.83	100.0	± 9.6 %
		Y	4.56	67.35	17.81		100.0	
		Z	4.59	66.87	17.58		100.0	
10074- CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.11	67.36	17.40	3.30	100.0	± 9.6 %
		Y	4.57	67.31	17.95		100.0	
		Z	4.60	66.82	17.73		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.18	67.58	17.73	3.82	90.0	± 9.6 %
		Y	4.58	67.25	18.15		90.0	
		Z	4.61	66.79	17.96		90.0	
10076- CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.24	67.48	17.91	4.15	90.0	± 9.6 %
		Y	4.61	67.08	18.28		90.0	
		Z	4.65	66.67	18.13		90.0	
10077- CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.28	67.60	18.06	4.30	90.0	± 9.6 %
		Y	4.64	67.18	18.41		90.0	
		Z	4.68	66.76	18.25	I	90.0	[

10081- CAB	CDMA2000 (1xRTT, RC3)	X	7.85	258.95	40.09	0.00	150.0	± 9.6 %
		Y	0.57	64.50	9.19		150.0	
		Z	0.37	60.00	6.09		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	72.13	59.07	0.77	4.77	80,0	± 9.6 %
		Y	7.02	60.09	1.53		80.0	
		Z	7.63	60.12	1.53		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	0.78	60.88	6.00	6.56	60.0	± 9.6 %
		Y	100.00	98.83	18.35		60.0	
10097- CAB	UMTS-FDD (HSDPA)	Z X	8.66 1.12	80.77 65.69	14.58 11.46	0.00	60.0 150.0	±9.6 %
0.10		Y	2.39	74.48	18.29		150.0	
		Ż	1.58	66.95	14.31		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.11	65.81	11.55	0.00	150.0	± 9.6 %
		Y	2.34	74.47	18.31		150.0	
		Z	1.54	66.88	14.28		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	4.22	76.90	26.77	9.56	60.0	±9.6 %
		Y	5.12	81.66	29.15		60.0	
		Z	4.92	79.46	27.95		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	2.39	69.31	16.37	0.00	150.0	± 9.6 %
		Y	3.20	72.58	18.18		150.0	
10101		Z	2.69	68.81	15.94		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	2.61	67.07	15.44	0.00	150.0	± 9.6 %
		Y	3.12	68.53	16.66		150.0	
		Z	2.91	66.65	15.40		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	×	2.71	67.23	15.58	0.00	150.0	± 9.6 %
		Y	3.22	68.53	16.74		150.0	
10103-	LTE-TDD (SC-FDMA, 100% RB, 20	Z X	3.02 3.72	66.72 71.26	15.54 18.49	3.98	150.0 65.0	± 9.6 %
CAD	MHz, QPSK)	<u> </u>						
		Y	4.70	73.63	19.84		65.0	
10/01		Z	4.41	71.81	18.98		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	×	3.95	69.27	17.90	3.98	65.0	± 9.6 %
		Y	4.71	71.04	19.29	ļ	65.0	
40405		Z	4.63	70.10	18.86		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.78	68.25	17.72	3.98	65.0	± 9.6 %
		Y	4.47	69.73	18.97		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Z X	4.37 1.98	68.68 69.15	18.48 15.95	0.00	65.0 150.0	± 9.6 %
		tγ	2.77	72.39	18.20		150.0	
		Ż	2.29	68.22	15.72		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.19	67.24	14.70	0.00	150.0	± 9.6 %
		Y	2.80	69.06	16.71		150.0	
		Z	2.54	66.58	15.14		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	1.35	66.94	13.41	0.00	150.0	± 9.6 %
		Y	2.32	72.63	18.00		150.0	
		Z	1.78	67.28	14.92		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	1.58	65.90	12.12	0.00	150.0	± 9.6 %
		Y	2.81	72.30	17.60		150.0	
		Z	2.22	67.49	14.99		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.30	67.45	14.81	0.00	150.0	± 9.6 %
		Y	2.93	69.12	16.76		150.0	
		Z	2.66	66.72	15.26		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	1.64	65.77	12.05	0.00	150.0	± 9.6 %
		Y	2.95	72.32	17.65		150.0	
		Z	2.37	67.73	15.17		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	4.34	66.99	16.28	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.86	67.57	16.78		150.0	
		Z	4.82	66.90	16.32		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	4.58	67.29	16.33	0.00	150.0	±9.6 %
		Y	5.08	67.61	16.77		150.0	
		Z	5.06	66.98	16.35		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	Х	4.40	67.26	16.31	0.00	150.0	± 9.6 %
		Y	4.93	67.75	16.79		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.89	67.04	16.31		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	4.33	66.90	16.26	0.00	150.0	± 9.6 %
		Y	4.84	67.46	16.74		150.0	
		Z	4.79	66.75	16.26		150.0	[
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	4.58	67.24	16.31	0.00	150.0	±9.6 %
		Y	5.15	67.78	16.86		150.0	
		Z	5.14	67.21	16.48		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	4.39	67.16	16.27	0.00	150.0	± 9.6 %
		Y	4.94	67.78	16.81		150.0	
		Z	4.90	67.08	16.34		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	2.65	67.18	15.35	0.00	150.0	±9.6 %
		Y	3.23	68.57	16.65		150.0	
		Z	3.03	66.74	15.44		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	2.80	67.68	15.68	0.00	150.0	± 9.6 %
		Y	3.37	68.79	16.86		150.0	
		Z	3.16	66.97	15.67		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	0.71	61.44	8.06	0.00	150.0	± 9.6 %
		Y	2.27	74.06	17.56		150.0	
		Z	1.48	66.51	13.59		150.0	1
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	0.73	60.00	6.15	0.00	150.0	± 9.6 %
		Y	2.80	73.44	16.54		150.0	
		Z	1.85	66.55	13.15		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	0.73	60.00	5.65	0.00	150.0	±9.6 %
		Y	1.85	66.75	12.85		150.0	
		Z	1.61	64.01	11.28		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	5.16	385.51	36.59	0.00	150.0	± 9.6 %
		Y	0.54	60.00	5.91		150.0	
		Z	0.58	60.00	5.88		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.00	60.00	0.00	0.00	150.0	± 9.6 %
		Y	0.74	60.00	4.95		150.0	
		Z	0.80	60.00	5.53		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.00	60.00	0.00	0.00	150.0	± 9.6 %
		Y	0.60	58.26	3.86		150.0	
		Z	0,82	60.00	5.58		150.0	

June 25, 2018

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.21	67.36	14.78	0.00	150.0	± 9.6 %
		Y	2.81	69.16	16.77		150.0	
		Z	2.55	66.65	15.19		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.32	67.56	14.88	0.00	150.0	± 9.6 %
		Y	2.94	69.22	16.82		150.0	
		Z	2.67	66.78	15.30		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.66	73.29	18.78	3.98	65.0	± 9.6 %
		Y	4.98	76.80	21.12		65.0	
		Z	4.55	74.40	20.06		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.31	68.29	16.15	3.98	65.0	± 9.6 %
		Y	4.23	70.96	18.67		65.0	
		Z	4.14	69.89	18.22		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.64	69.78	17.29	3.98	65.0	± 9.6 %
		Y	4.61	72.30	19.68		65.0	
		Z	4.49	71.11	19.19		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	1.38	67.29	13.63	0.00	150.0	± 9.6 %
		Y	2.40	73.30	18.35		150.0	
		Z	1.82	67.63	15.14		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	1.60	66.02	12.20	0.00	150.0	± 9.6 %
		Y	2.83	72.40	17.66		150.0	
		Z	2.23	67.54	15.03		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	0.51	60.00	5.91	0.00	150.0	± 9.6 %
		Y	2.15	74.23	16.90		150.0	
		Z	1.25	65.50	12.43		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	0.57	60.00	4.69	0.00	150.0	± 9.6 %
		Y	1.61	66.51	12.13		150.0	
		Z	1.35	63.41	10.38		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	1.65	65.90	12.13	0.00	150.0	±9.6 %
		Y	2.98	72.51	17.74		150.0	
		Z	2.38	67.83	15.24		150.0	[
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	0.59	60.00	4.69	0.00	150.0	± 9.6 %
		Y	1.68	66.77	12.27		150.0	
		Z	1.39	63.54	10.48		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	1.93	68.16	15.00	0.00	150.0	± 9.6 %
		Y	2.76	71.39	17.74		150.0	
		Ζ	2.38	67.93	15.64		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.12	67,05	14.02	0.00	150.0	±9.6 %
		Y	2.84	69.35	16.71		150.0	
		Z	2.55	66.69	15.09		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.21	67.37	14.17	0.00	150.0	± 9.6 %
		Y	2.96	69.65	16.87		150.0	
~		Z	2.66	66.96	15.26		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	2.13	65.17	17.70	3.01	150.0	± 9.6 %
		Y	3.00	69.75	19.60		150.0	
		Z	2.90	67.96	18.43		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	1.98	65.92	17.43	3.01	150.0	± 9.6 %
		Y	3.74	74.17	20.63		150.0	

Certificate No: EX3-7409_Jun18

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	x	2.18	68.43	19,32	3.01	150.0	± 9.6 %
		Y	4.55	78.58	22.96		150.0	
		Z	3.73	73.08	20.34	· ·····	150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	1.87	64.00	17.04	3.01	150.0	± 9.6 %
		Y	2.53	68.75	19.16		150.0	1
		Z	2.36	66.10	17.52	1	150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	1.85	66.74	18.73	3.01	150.0	± 9.6 %
		Y	3.84	78.32	23.19		150.0	
		Z	2.87	70.66	19.54		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	1.59	63.66	15.82	3.01	150.0	± 9.6 %
		Y	2.83	71.75	19.17		150.0	
10100		Z	2.39	66.90	16.66		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	1.63	66.94	19.47	6.02	65.0	± 9.6 %
		Υ	2.64	75.18	23.09		65.0	
		Z	2.68	72.94	21.86		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	1.75	70.70	19.61	6.02	65.0	± 9.6 %
		Y	6.55	90.87	26.66		65.0	
		Z	4.15	79.90	22.82		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	1.33	66.12	16.85	6.02	65.0	±9.6 %
		Y	3.87	81.08	22.62		65.0	1
		Z	2.77	72.65	19.43		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	1.85	63.78	16.81	3.01	150.0	± 9.6 %
		Y	2.49	68.40	18.88		150.0	
		Z	2,33	65.83	17.28	•••••	150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	1.86	66.75	18.74	3.01	150.0	±9.6 %
		Y	3.85	78.36	23.20		150.0	
		Z	2.87	70.68	19.55		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	1.86	63.82	16.84	3.01	150.0	±9.6 %
		Y	2.51	68.53	18.95		150.0	
		Z	2.34	65.93	17.35		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	1.85	66.70	18.70	3.01	150.0	± 9.6 %
		Y	3.81	78.15	23.10		150.0	
		Z	2.85	70.55	19.47		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	1.70	65.12	17.16	3.01	150.0	± 9.6 %
		Y	3.27	74.82	21.01		150.0	
		Z	2.59	68.61	17.93		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	1.59	63.66	15.82	3.01	150.0	± 9.6 %
		Υ	2.82	71.71	19.14		150.0	·
		Z	2.39	66.88	16.63		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	1.86	63.82	16.84	3.01	150.0	± 9.6 %
		Y	2.50	68.51	18.95		150.0	
		Z	2.34	65.92	17.34		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	1.85	66.68	18.69	3.01	150.0	± 9.6 %
		Y	3.80	78.11	23.08		150.0	
		Z	2.85	70.52	19.45		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	1.59	63.65	15.80	3.01	150.0	± 9.6 %
		Y	2.82	71.68	19,12	<u> </u>	150.0	
		Z	2.38	66.86	16.62			

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	1.86	63.84	16.85	3.01	150.0	± 9.6 %
		Y	2.51	68.55	18.97	,	150.0	
		z	2.35	65.96	17.36		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	1.86	66.74	18.73	3.01	150.0	± 9.6 %
		Y	3.83	78.22	23.13		150.0	
		Z	2.86	70.59	19.49		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	x	1.59	63.69	15.83	3.01	150.0	± 9.6 %
		Y	2.83	71.76	19.16		150.0	
		Ż	2.39	66.91	16.65		150.0	i
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	1,87	63.97	16.99	3.01	150.0	± 9.6 %
		Y	2.53	68.67	19.08		150.0	
		Z	2,36	66.04	17.45		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	х	1.89	67.14	19.05	3.01	150.0	± 9.6 %
		Y	4.00	79.20	23.64		150.0	
		Z	2.94	71.15	19.86		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	1.61	63.93	16.07	3.01	150.0	±9.6 %
		Y	2.91	72.32	19.52		150.0	
		Ζ	2.43	67.24	16.90		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	3.74	67.40	15.79	0.00	150.0	± 9.6 %
		Y	4.29	67.57	16.55		150.0	
		Z	4.20	66.51	15.90	······	150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	3.82	67.41	15.90	0.00	150.0	± 9.6 %
		Y	4.40	67.71	16.67		150.0	
		Z	4.32	66.72	16.05		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	3.83	67.37	15.89	0.00	150.0	± 9.6 %
		Y	4.42	67.68	16.66		150.0	
		Z	4.35	66.72	16.06		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	3.72	67.37	15.75	0.00	150.0	± 9.6 %
		Y	4.26	67,52	16.51		150.0	
		Z	4.17	66.48	15.88		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	3.82	67.41	15,91	0.00	150.0	± 9.6 %
		Y	4.41	67.70	16.67		150.0	
		Z	4.33	66.72	16.05		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	3.82	67.36	15.88	0.00	150.0	± 9.6 %
		Y	4.41	67.66	16.65		150.0	
		Ζ	4.34	66.71	16.05		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	3.68	67,48	15.78	0.00	150.0	±9.6 %
		Y	4.22	67.61	16.52		150.0	
		Z	4.13	66.53	15.85		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	3.82	67.41	15.91	0.00	150.0	± 9.6 %
		Y	4.40	67.66	16.65		150.0	
		Z	4.32	66.68	16.04		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	3.85	67.40	15.91	0.00	150.0	± 9.6 %
	·····	Y	4.43	67.62	16.64		150.0	
		Z	4.36	66.67	16.05		150.0	1
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	4.34	66.97	16.27	0.00	150.0	± 9.6 %
		Y	4.82	67.47	16.73		150.0	
		Z	4.77	66.77	16.26		150.0	····

June 25, 2018

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	4.49	67.10	16.25	0.00	150.0	± 9.6 %
		Y	5.02	67.50	16.74		150.0	
		Z	5.01	66.90	16.33		150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	4.35	67.14	16.26	0.00	150.0	± 9.6 %
		Y	4.86	67.63	16.73		150.0	
		Z	4.81	66.90	16.25		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	1.60	62.87	10.00	0.00	150.0	± 9.6 %
		Y	2.64	67.73	15.37		150.0	
		Z	2.42	65.46	14.06		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	1.83	71.58	20.13	6.02	65.0	± 9.6 %
		Y	7.36	93.10	27.50		65.0	
		Z	4.39	80.98	23.33		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	1.73	70.59	18.93	6.02	65.0	± 9.6 %
		Y	7.00	90.72	25.86		65.0	
		Z	4.34	79.99	22.28		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	1.83	69.36	20.71	6.02	65.0	± 9.6 %
		Y	3.28	79.62	24.97		65.0	
		Z	3.15	76.53	23.48		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	Х	1.76	70.79	19.64	6.02	65.0	± 9.6 %
		Y	6.63	91.03	26.72		65.0	
		Z	4.18	80.00	22.86		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	1.65	69.73	18,45	6.02	65.0	± 9.6 %
		Y	6.22	88.63	25.09		65.0	
		Z	4.10	78.96	21.82		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	1.79	68.81	20.33	6.02	65.0	± 9.6 %
		Y	3.15	78.74	24.52		65.0	
		Z	3.06	75.85	23.10		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	Х	1.76	70.77	19.64	6.02	65.0	± 9.6 %
		Y	6.61	91.00	26.71		65.0	
		Z	4.18	79.98	22.86		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	1.65	69.70	18.44	6.02	65.0	±9.6 %
		Y	6.19	88.57	25.08		65.0	
••••••••••		Z	4.09	78.93	21.81		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	1.76	68.43	20.02	6.02	65.0	± 9.6 %
		Y	3.07	78.12	24.14		65.0	
		Z	2.98	75.33	22.76		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	1.76	70.76	19.64	6.02	65.0	± 9.6 %
	······	Y	6.61	91.04	26.73		65.0	
		Z	4.18	80.00	22.87		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	1.66	69.79	18.48	6.02	65.0	± 9.6 %
		Y	6.30	88.80	25.14		65.0	
		Z	4.13	79.05	21.85		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	1.78	68.76	20.32	6.02	65.0	±9.6 %
		Y	3.15	78.74	24.53		65.0	
		Z	3.05	75.85	23.11		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	1.76	70.75	19.64	6.02	65.0	± 9.6 %
		Y	6.59	90.97	26.70		65.0	
		Ż	·					

۲

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	1.65	69.67	18.43	6.02	65.0	± 9.6 %
		Y	6.16	88.50	25.06		65.0	
		z	4.07	78.89	21.79		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	x	1.78	68.77	20.32	6.02	65.0	± 9.6 %
		Y	3.14	78.73	24.52		65.0	
		Z	3.05	75.83	23.10		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.09	71.04	21.81	6.98	65.0	± 9.6 %
		Y	5.84	80.29	25.20		65.0	
		Z	5.54	77.13	23.79		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	2.70	68,41	20.47	6.98	65.0	±9.6 %
		Y	4.94	76.94	23.76		65.0	
		Z	4.89	74.64	22.64		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	2.78	67.24	20.54	6.98	65.0	± 9.6 %
		Y	4.14	72.94	22.88		65.0	
		Z	4.22	71.72	22.18		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	0.80	57.73	3.36	3.98	65.0	± 9.6 %
		Y	2.15	64.01	10.18		65.0	
		Z	2.44	64.99	11.42		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	0.82	57.61	3.20	3.98	65.0	± 9.6 %
		Y	2.13	63.69	9.96		65.0	
		Z	2.42	64.65	11.19		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	0.87	60.00	5.50	3.98	65.0	± 9.6 %
		Y	2.12	67.09	12.65		65.0	
		Z	2.17	66.84	12.89		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	1.26	60.00	6,38	3.98	65.0	± 9.6 %
		Y	2.78	67.32	13.60		65.0	
		Z	2.82	66.99	13.82		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.30	60,00	6.40	3.98	65.0	± 9.6 %
		Υ	2.73	66.64	13.26		65.0	
		Z	2.81	66.52	13.58		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.24	61.72	8.36	3.98	65.0	± 9.6 %
		Y	3.85	75.74	18.20		65.0	
		Z	3.35	73.06	17.32		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.74	67.58	14.25	3.98	65.0	± 9.6 %
		Y	4.25	73.58	19.37		65.0	
		Z	4.02	71.93	18.78		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	2.46	65.14	12.48	3.98	65.0	± 9.6 %
		Y	3.86	70.68	17.56		65.0	
		Z	3.78	69.64	17.25		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.82	71.28	16.40	3.98	65.0	± 9.6 %
		Υ	4.98	79.52	21.77		65.0	
		Z	4.29	76.11	20.42		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.12	67.32	15.07	3,98	65.0	± 9.6 %
		Y	4.18	70.66	18.33		65.0	
		Z	4.10	69.61	17.93		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.39	68.52	15.96	3.98	65.0	± 9.6 %
	•	Y	4.50	71.75	19.15		65.0	
		Z	4.39	70.63	18.74		65.0	

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	×	3.40	72.07	17.90	3.98	65.0	± 9.6 %
		Y	4.72	76.03	20.86		65.0	
		Z	4.36	73.79	19.90		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.74	56.57	1.48	3.98	65.0	± 9.6 %
		Y	1.50	60.83	7.03		65.0	
		Z	1.77	61.73	8.31		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.63	56.72	1.58	3.98	65.0	± 9.6 %
		Y	1.50	60.62	6.80		65.0	
		Z	1.77	61.47	8.06		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	0.75	60.00	4.13	3.98	65.0	± 9.6 %
		Y	1.38	61.96	8.52		65.0	
		Z	1.52	62.42	9.24		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	1.62	61.68	8.48	3.98	65.0	± 9.6 %
		Y	3.35	69.89	15.82		65.0	
		Z	3.28	68.97	15.69		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	1.65	61.61	8.42	3.98	65.0	± 9.6 %
		Y	3.36	69.55	15.64		65.0	
		Z	3.31	68.75	15.57		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.63	64.06	10.69	3.98	65.0	± 9.6 %
		Y	4.19	76.83	19.42		65.0	
		Z	3.63	73.87	18.36		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.73	67.47	14.17	3.98	65.0	± 9.6 %
		Y	4.22	73.47	19.30		65.0	
		Z	4.00	71.83	18.72		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.46	65.13	12.47	3.98	65.0	± 9.6 %
		Y	3.85	70.66	17.56		65.0	1
		Z	3.77	69.62	17.25		65.0	1
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.78	71.03	16.25	3.98	65.0	± 9.6 %
		Y	4.91	79.23	21.63		65.0	
		Z	4.25	75.88	20.29		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.31	68.31	16.16	3.98	65.0	± 9.6 %
		Y	4.23	70.96	18.67		65.0	
		Z	4.14	69.89	18.23		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.64	69.75	17.27	3.98	65.0	±9.6 %
		Y	4.61	72.28	19.66		65.0	
		Z	4.48	71.09	19.18		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.65	73.23	18.74	3.98	65.0	± 9.6 %
		Y	4.96	76.74	21.09		65.0	T
		Z	4.55	74.35	20.04		65.0	T
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	4.08	69.60	17.97	3.98	65.0	± 9.6 %
		Y	4.89	71.20	19.41		65.0	
		Z	4.81	70.25	18.99		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	4.15	69.51	17.90	3.98	65.0	± 9.6 %
		Y	4.93	70.92	19.29		65.0	
		Z	4.85	69.98	18.89		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	4.11	72.44	19.03	3.98	65.0	± 9.6 %
		Y	5.01	74.05	20.18		65.0	
		Z	4.76	72.38	19.41		65.0	1

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	1.45	63.39	10.22	0.00	150.0	± 9.6 %
		Y	2.58	68.99	15.79		150.0	
		Z	2.36	65.99	14.08		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.00	66.09	12.05	0.00	150.0	± 9.6 %
		Y	1.98	74.04	18.23		150.0	
		Z	1.30	66.38	13.95		150.0	
10277- CAA	PHS (QPSK)	Х	4.43	65.00	5.66	9.03	50.0	± 9.6 %
		Y	1.25	57.54	2.57		50.0	
		Z	1.34	58.35	3.69		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	1.39	58.79	4.19	9.03	50.0	± 9.6 %
		Y	2.00	62.01	7.70		50.0	
		Ζ	2.27	62.99	8.81		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	×	1.42	58.87	4.28	9.03	50.0	± 9.6 %
		Y	2.04	62.14	7.84		50.0	
		Z	2.32	63.16	8.96		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	24.89	264.54	21.43	0.00	150.0	± 9.6 %
···		Y	0.75	64.32	9.28		150.0	
40004		Z	0.55	60.53	6.84		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	8.17	257.05	37.61	0.00	150.0	± 9.6 %
		Y	0.54	64.12	8.98		150.0	
		Z	0.37	60.00	6.07		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	2.31	326.58	8.83	0.00	150.0	± 9.6 %
·		Y	100.00	114.29	23.68		150.0	
		Ζ	0.37	60.29	6.50		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	×	2.41	304.08	37.98	0.00	150.0	± 9.6 %
		Y	100.00	121.87	26.96		150.0	
		Z	0.47	62.33	8.10		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.16	76.14	13.68	9.03	50.0	± 9.6 %
		Y	24.30	94.04	23.00		50.0	
		Z	21.29	93.19	23.41		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	×	2.00	69.33	16.06	0.00	150.0	± 9.6 %
		Y	2.80	72.57	18.31		150.0	
100		Z	2.31	68,33	15.80		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	8.49	243.95	30.00	0.00	150.0	± 9.6 %
		Y	0.98	64.80	10.42		150.0	
40000		Z	0.78	61.52	8.38		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	12.17	331.10	45.12	0.00	150.0	± 9.6 %
		Y	0.99	61.11	7.01	ļ	150.0	
40000		Z	1.06	61.03	7.46		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.15	348.38	28.30	0.00	150.0	± 9.6 %
		Y	0.82	59.43	5.36		150.0	
40004		Z	0.95	60.00	6.23		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	3.30	64.31	15.03	4.17	50.0	± 9.6 %
		Y	4.07	65.29	17.00	Į	50.0	
10052		Z	4.16	64.88	16.72		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	3.81	65.12	15.99	4.96	50.0	± 9.6 %
		Y	4.52	65.76	17.66		50.0	
		Z	4.66	65.71	17.60		50.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	3.64	65.07	15.71	4.96	50.0	± 9.6 %
	10Mi 12, 0+Q/10, 1 000)	Y	4.29	65.44	17.44		50.0	
							50.0	
10304-	IEEE 802.16e WiMAX (29:18, 5ms,	Z X	4.42	65.39	17.39	4.47	50.0	
AAA	10MHz, 64QAM, PUSC)		3.46	64.98	15.29	4.17	50.0	± 9.6 %
		Y	4.15	65.58	17.11		50.0	
		Z	4.21	64.95	16.68		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	2.52	62.00	12.12	6.02	35.0	± 9.6 %
		Y	3.52	65.78	17.45		35.0	
		Z	3.76	66.23	17.67		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	3.12	63.64	14.29	6.02	35.0	± 9.6 %
		Y	3.94	65.53	17.75		35.0	
		Z	4.14	65.73	17.85		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	3.01	63.42	14.02	6.02	35.0	± 9.6 %
		Y	3.81	65.44	17.59		35.0	
		Z	4.01	65.68	17.70	 	35.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	3.02	63.75	14.28	6.02	35.0	± 9.6 %
		Y	3.78	65.60	17.74	İ	35.0	
		Z	3.98	65.86	17.83	1	35.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	3.17	63,94	14.58	6.02	35.0	± 9.6 %
		Y	3.94	65.55	17.83		35.0	
		Z	4.14	65.77	17.93		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	3.11	63.82	14.42	6.02	35.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	3.89	65.58	17.76		35.0	
		Z	4.09	65.78	17.84		35.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.31	68.15	15.92	0.00	150.0	± 9.6 %
		Y	3.15	71.23	17.71	••••••	150.0	
	Man	Ż	2.66	67.57	15.55		150.0	
10313- AAA	IDEN 1:3	X	1.67	67.67	13.40	6.99	70.0	± 9.6 %
		Y	2.25	71.10	15.22		70.0	
		Z	1.73	67.06	13.24		70.0	
10314- AAA	iDEN 1:6	X	6.12	86.17	23.14	10.00	30.0	±9.6 %
		Y	7.14	89.19	24.60		30.0	
	n	Z	3.49	76.84	20.05		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.91	63.92	14.34	0.17	150.0	± 9.6 %
		Y	1.09	65.84	16.70	İ	150.0	1
		Z	0.93	62.70	14.16		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	3.71	66.95	15.64	0.17	150.0	± 9.6 %
		Y	4.26	67.26	16.51		150.0	
		Z	4.21	66.40	15.98		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	3.71	66.95	15.64	0.17	150.0	± 9.6 %
		Y	4.26	67.26	16.51		150.0	
		Z	4.21	66.40	15.98		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	3.67	66.95	15.61	0.00	150.0	± 9.6 %
		Y	4.32	67.59	16.58	[150.0	
		Z	4.27	66.67	15.99		150.0	
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	4.49	66.84	16.09	0.00	150.0	± 9.6 %
AAU								
70.0		Y	5.01	67.23	16.55		150.0	

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	4.90	67.23	16.33	0.00	150.0	±9.6 %
		Y	5.37	67.75	16.72		150.0	
		Z	5.33	67.10	16.30		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	24.89	264.54	21.43	0.00	115.0	± 9.6 %
		Y	0.75	64.32	9.28		115.0	
		Z	0.55	60.53	6.84		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	24.89	264.54	21.43	0.00	115.0	± 9.6 %
		Υ	0.75	64.32	9.28		115.0	
		Z	0.55	60.53	6.84		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	0.25	60.00	3.04	0.00	100.0	± 9.6 %
		Y	100.00	107.14	22.27		100.0	
		Z	35.03	104.04	23.84		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	1.11	74.02	16.29	3.23	80.0	± 9.6 %
		Y	100.00	123.32	29.06		80.0	
		Z	3.02	80.23	18.57		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.88	63.60	14.08	0.00	150.0	± 9.6 %
		Y	1.05	65.44	16.40		150.0	
		Z	0.90	62.27	13.77		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	3.72	67.22	15.78	0.00	150.0	± 9.6 %
		Y	4.26	67.46	16.59		150.0	
		Z	4.18	66.47	15.97		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	3.72	67.22	15.78	0.00	150.0	± 9.6 %
		Υ	4.26	67.46	16.59		150.0	
		Z	4.18	66.47	15.97		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	3.67	67.37	15.86	0.00	150.0	± 9.6 %
		Y	4.26	67.73	16.69		150.0	
		Z	4.18	66.68	16.03		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	3.70	67.32	15.83	0.00	150.0	± 9.6 %
		Y	4.28	67.63	16.66		150.0	
		Z	4.19	66.61	16.02		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	3.79	67.23	15.85	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.37	67.55	16.64		150.0	
		Z	4.30	66.59	16.04		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	3.85	67.43	15.91	0.00	150.0	± 9.6 %
		Y	4.48	67.79	16.72		150.0	
		Z	4.41	66.83	16.12		150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	3.80	67.32	15.87	0.00	150.0	± 9.6 %
		Y	4.41	67.73	16.70		150.0	
10425-	IEEE 802.11n (HT Greenfield, 15 Mbps,	Z X	4,34 4.52	66.77 67.29	16.09 16.36	0.00	150.0 150.0	± 9.6 %
AAB	BPSK)	Y	E 04	67.00	40.77		4000	
••••			5.01	67.60	16.77		150.0	
10400		Z	5.00	66.98	16.36		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	4.54	67.39	16.40	0.00	150.0	± 9.6 %
		Y	5.06	67.79	16.86		150.0	
		Z	5.04	67.17	16.45		150.0	

10427- ААВ	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	4.54	67.34	16,38	0.00	150.0	± 9.6 %
		Y	5.02	67.56	16.74	·····	150.0	
		Z	4.99	66.89	16.30		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	2.54	67.86	12.99	0.00	150.0	± 9.6 %
		Y	5.20	77.46	20.26		150.0	
		Z	4.04	72.15	17.87		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.04	66.93	14.37	0.00	150.0	±9.6 %
		Y	3.88	68.36	16.49		150.0	
		Ζ	3.75	66.95	15.66		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	×	3.52	67.40	15.50	0.00	150.0	± 9.6 %
		Y	4.19	67.98	16.66		150.0	
		Z	4.09	66.85	15.96		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	3.82	67.39	15.92	0.00	150.0	± 9.6 %
		Y	4.43	67.78	16.72		150.0	
		Z	4.36	66.81	16.12		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	1.61	62.74	9.15	0.00	150.0	± 9.6 %
		Y	5.68	78.98	20.05		150.0	
		Z	3.98	72.24	17.17		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	1.04	73.03	15.81	3.23	80.0	±9.6 %
		Υ	100.00	122.83	28.83		80.0	
		Z	2.85	79.40	18.23		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	1.63	62.08	8.98	0.00	150.0	± 9.6 %
		Y	3.10	68.15	14.99		150.0	
		Z	2.89	66.18	13.94		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	Х	2.97	66.84	14.33	0.00	150.0	± 9.6 %
		Y	3.76	68.19	16.40		150.0	
		Ζ	3.63	66.75	15.54		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	Х	3.43	67.31	15.47	0.00	150.0	± 9.6 %
		Y	4.05	67.84	16.58		150.0	
		Ζ	3.95	66.68	15.86		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	3.70	67.17	15.79	0.00	150.0	± 9.6 %
		Y	4.26	67.58	16.60		150.0	
		Ζ	4.17	66.58	15.96		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	Х	1.22	60.20	6.79	0.00	150.0	±9.6 %
		Y	2.78	67.25	13.76		150.0	
		Ζ	2.61	65.48	12.83		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	Х	5.60	67.64	16.61	0.00	150.0	± 9.6 %
		Y	6.26	68.94	17.34		150.0	
		Ζ	6.00	67.69	16.64		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.27	66.46	15.58	0.00	150.0	± 9.6 %
		Y	3.68	66.34	16.37		150.0	
		Ζ	3.59	65.30	15.71		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	1.12	60.00	5.83	0.00	150.0	±9.6 %
		Y	3.56	71.73	16.05		150.0	
		Ζ	3.03	68.42	14.58		150.0	1
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	2.37	61.19	9.10	0.00	150.0	±9.6 %
		Y	4.86	70,51	17.92		150.0	
		Ζ	4.63	68.94	17.35		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	Х	0.77	69.97	14.37	0.00	150.0	± 9.6 %
AAA		Y	1.81	83.33	22.94		150.0	
		Z	0.70	66.15	13.99		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.10	74.88	17.91	3.29	80.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	100.00	130.63	32.41		80.0	
		Z	2.28	78.08	18.84		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.93	230.19	29.26	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.55		80.0	
		Z	0.64	60.00	7.06		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.96	233.23	22.29	3.23	80.0	± 9.6 %
		Y Z	23.26 0.66	230.85 60.00	21.52 6.36		80.0 80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.60	67.04	13.62	3.23	80.0	± 9.6 %
·		Y	100.00	124.51	29.50		80.0	
		Z	1.46	72.00	15.83		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	6.88	228.32	21.10	3.23	80.0	± 9.6 %
		Y	0.24	55.14	2.95		80.0	
10100		Z	0.64	60.00	7.00		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.90	230.59	11.80	3.23	80.0	± 9.6 %
		Ý	24,92	227.37	29.84		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	0.66 0.65	60.00 68.17	6.32 14.23	3.23	80.0 80.0	± 9.6 %
1010		Y	100.00	125.25	29.82		80.0	
		Z	1.58	73.06	16.29		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	228.62	22.92	3.23	80.0	± 9.6 %
		Y	0.24	55.19	3.02		80.0	
		Z	0,64	60.00	7.02		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	4.89	230.67	12.36	3.23	80.0	± 9,6 %
		Y	24.62	227.52	30.16		80.0	
40470		Z	0.66	60.00	6.32		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.21	14.25	3.23	80,0	± 9.6 %
		Y 7	100.00	125.26	29.81		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.58 6.71	73.08 228.68	<u>16.29</u> 22.79	3.23	80.0 80.0	± 9.6 %
		Y	0.24	55.16	2.98		80.0	
		Z	0.64	60.00	7.01		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.83	230.72	12.16	3.23	80.0	± 9.6 %
		Y	24.39	227.78	30.29		80.0	
10/72	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	Z	0.66	60.00	6.30		80.0	
10473- AAC	QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68,12	14.21	3.23	80.0	± 9.6 %
······································		Y Z	100.00 1.57	125.20 73.01	29.78 16.25		80.0 80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	6.67	228.73	22.56	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.48		80.0	
		Z	0.64	60.00	7.01		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.82	230.67	11.80	3.23	80.0	± 9.6 %
		Y	24.34	227.67	30.21		80.0	
		Z	0.66	60.00	6.30		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	6.74	228.54	21.21	3.23	80.0	± 9.6 %
		Y	0.23	55.08	2.89		80.0	
		Z	0.64	60.00	6.98		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.84	230.57	11.22	3.23	80.0	± 9.6 %
		Y	24.37	227.68	30.04		80.0	
10.170		Z	0.66	60.00	6.29		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.02	84.98	21.47	3.23	80.0	±9.6 %
		Y Z	100.00	125.48	31.72		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.02 0.47	83.00 60.00	20.76 6.63	3.23	80.0 80.0	± 9.6 %
		Y	1.92	67.54	11.86		80.0	
		Z	1.73	65.44	11.67		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.22	55.04	3.12	3.23	80,0	± 9.6 %
		Y	1.09	61.90	8.89		80.0	
40400		Z	1.31	62.31	9.77		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	53.67	208.87	10.65	2,23	80.0	± 9.6 %
		Y	1.05	62.14	9.95		80.0	
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z X	0.98 64.01	60.56 327.64	9.26 15.81	2.23	80.0 80.0	± 9.6 %
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	Y Y	1.10	60.00	7.60	2.23		± 9.6 %
		Z	1.10	60.00	8.23		80.0 80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	72.15	316.72	7.23	2.23	80.0	± 9.6 %
		Y	1.13	60.00	7.59		80.0	<u> </u>
		Z	1.24	60.00	8.22		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.75	60.00	6.88	2.23	80.0	± 9.6 %
		Y	2.48	72.41	16.54	1	80.0	
		Z	1.64	65.93	13.71		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	1.01	60.00	5.53	2.23	80.0	± 9.6 %
		Y	1.68	63.79	11.57		80.0	
		Z	1.58	62.22	10.94		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	1.04	60.00	5.50	2.23	80.0	± 9.6 %
		Y	1.66	63.28	11.27		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	1.59 1.44	61.98 64.72	10.79 13.06	2.23	80.0 80.0	± 9.6 %
		Y	2.82	72.60	18.56		80.0	
		Z	2.27	68.12	16.38		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.87	10.73	2.23	80.0	± 9.6 %
		Y	2.82	68.91	16.54		80.0	
10100		Z	2.48	66.05	15.16		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.55	10.50	2.23	80.0	± 9.6 %
		Y	2.86	68.61	16.37		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	2.55 1.98	65.97 66.25	15.11 14.91	2.23	80.0 80.0	± 9.6 %
		Y	2.98	70.44	18.02		80.0	
		z	2.64	67.54	16.51		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	x	2.19	64.63	13.64	2.23	80.0	± 9.6 %
		Y	3.11	67.88	16.76	 	80.0	
		Z	2.90	65.95	15.77		80.0	

10100								
10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.21	64.43	13.47	2.23	80.0	± 9.6 %
		Y	3.16	67.71	16.66		80.0	
		Z	2.96	65.87	15.72		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.11	67.23	15.74	2.23	80.0	± 9.6 %
		Y	3.21	71.79	18.57		80.0	
		Z	2.78	68.52	16.88		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.35	65.50	14.66	2.23	80.0	± 9.6 %
		Y	3.14	68.07	17.04		80.0	
		Z	2.93	66.16	16.02		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.42	65.39	14.61	2.23	80.0	± 9.6 %
		Y	3.21	67.85	16.95		80.0	
		Z	3.02	66.06	16.01		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.50	220.48	26.76	2.23	80.0	± 9.6 %
		Y	0.82	60.00	6.90		80.0	
		Z	0.88	60.00	7.23		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.00	60.00	0.00	2.23	80.0	± 9.6 %
		Y	1.06	60.00	5.49		80.0	
		Z	1.08	60.00	6.01		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	0.00	60.00	0.00	2.23	80.0	± 9.6 %
		Y	1.10	60.00	5.30		80.0	
		Z	1.11	60.00	5.84		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.83	60.00	8.23	2.23	80.0	± 9.6 %
		Y	2.68	72.91	17.52		80.0	
		Z	1.91	67.05	14.90		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.03	60.00	6.96	2.23	80.0	± 9.6 %
		Y	2.26	66.74	13.90		80.0	
		Z	1.97	64.14	12.76		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.05	60.00	6.86	2.23	80.0	± 9.6 %
		Y	2.24	66.31	13.60		80.0	<u> </u>
		Z	1.99	63.95	12.58		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.42	64.51	12.94	2.23	80.0	± 9.6 %
		Y	2.78	72.32	18.42		80.0	
		Z	2.24	67.93	16.27		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.45	61.75	10.65	2.23	80.0	± 9.6 %
		Y	2.79	68.76	16.45		80.0	
	· · · · · · · · · · · · · · · · · · ·	Z	2.46	65.95	15.09		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.46	61.45	10.42	2.23	80.0	± 9.6 %
		Y	2.84	68.47	16.29		80.0	
		Z	2.53	65.87	15.05		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.09	67.08	15.65	2.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	3.18	71.61	18.48		80.0	
		Z	2.76	68.39	16.81		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.34	65.41	14.60	2.23	80.0	± 9.6 %
		Y	3.12	67,99	16.99		80.0	
			2.92	66.10	15.98			

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.40	65.29	14.54	2.23	80.0	±9.6 %
		Y	3.20	67.76	16.90		80.0	
		Z	3.01	65.99	15.96		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.58	67.03	16.09	2.23	80.0	±9.6 %
		Y	3.55	70.28	17.97		80.0	
10510		Z	3.24	67.94	16.71		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.84	65.59	15.48	2.23	80.0	± 9.6 %
		Y	3.55	67.42	17.00		80.0	
10511		Z	3.41	66.05	16.23		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.92	65.56	15.46	2.23	80.0	± 9.6 %
		Y	3.62	67.28	16.95		80.0	
107/-		Z	3.49	65.96	16.22		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.57	67.43	16.22	2.23	80.0	± 9.6 %
		Y	3.65	71.51	18.37	.	80.0	
10513-		Z	3.23	68.73	16.92		80.0	1002
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.79	65.51	15.59	2.23	80.0	± 9.6 %
		Y	3.45	67.50	17.07		80.0	
40544		Z	3.30	66.08	16.26		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.87	65.41	15.56	2.23	80.0	± 9.6 %
		Y	3.50	67.18	16.96		80.0	
		Z	3.36	65.86	16.21		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.84	63.77	14.11	0.00	150.0	± 9.6 %
		Y	1.02	65.86	16.61		150.0	
40540		Z	0.85	62.40	13.77		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.62	73.89	17.55	0.00	150.0	±9.6 %
		Y	4.44	111.45	33.24		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z X	0.45	67.70 65.50	14.48 14.61	0.00	150.0	
AAA	Mbps, 99pc duty cycle)	Ŷ	0.88		14.01	0.00	150.0 150.0	± 9.6 %
		Z	0.68	70.28 63.72	13.93		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	3.70	67.39	15.82	0.00	150.0	± 9.6 %
		Y	4.26	67.62	16.61		150.0	
		Z	4.17	66.58	15.96		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	3.79	67.51	15.88	0,00	150.0	± 9.6 %
		Y	4.38	67.73	16.67		150.0	
40500		Z	4.31	66.74	16.05	0.00	150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	3.65	67.31	15.75	0.00	150.0	± 9.6 %
		Y Z	4.25 4.16	67.68 66.65	16.61 15.95		150.0 150.0	
10521- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	3.59	67.16	15.66	0.00	150.0	± 9.6 %
		Y	4.18	67.62	16.58		150.0	1
		Z	4.10	66.58	15.92		150.0	
10522- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	3.61	67.21	15.68	0.00	150.0	± 9.6 %
		Y	4.20	67.65	16.61		150.0	
		Z	4.13	66.67	15.99		150.0	

10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	3.58	67.41	15.78	0.00	150.0	± 9.6 %
		Y	4.19	67.90	16.68		150.0	
		Z	4.09	66.77	15.97		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	3.55	67.17	15.73	0.00	150.0	± 9.6 %
		Y	4.18	67.74	16.69		150.0	
		Z	4.09	66.69	16.02		150.0	
10525- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	3.68	66.62	15.57	0.00	150.0	± 9.6 %
		Y	4.25	66.93	16.35		150.0	
		Z	4.15	65.82	15.66		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	3.72	66.70	15.62	0.00	150.0	± 9.6 %
		Y	4.34	67.14	16.44		150.0	
40507		Z	4.25	66.06	15.76		150.0	
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	3.68	66.74	15.58	0.00	150.0	± 9.6 %
		Y	4.29	67.16	16.40		150.0	
10500		Z	4.18	66.03	15.70		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	3.67	66.65	15.55	0.00	150.0	± 9.6 %
		Y	4.30	67.15	16.42		150.0	
40500		Z	4.20	66.04	15.73		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	3.67	66.65	15.55	0.00	150.0	± 9.6 %
		Y	4.30	67.15	16.42		150.0	
40504		Z	4.20	66.04	15.73		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	3.64	66.66	15.53	0.00	150.0	± 9.6 %
		Y	4.25	67.14	16.38		150.0	
		Z	4.15	66.02	15.69		150.0	
10532- AAB	IEEE 802.11ac WIFi (20MHz, MCS7, 99pc duty cycle)	X	3.57	66.55	15.48	0.00	150.0	± 9.6 %
		Y	4.15	67.03	16.34		150.0	
		Z	4.04	65.89	15.62		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	3.68	66.88	15.62	0.00	150.0	± 9.6 %
		Y	4.30	67.28	16.44		150.0	
		Z	4.20	66.13	15.73		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.34	66.44	15.93	0.00	150.0	± 9,6 %
		Y	4.85	66.86	16.39		150.0	
•		Z	4.79	66.06	15.87		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.34	66.46	15.95	0.00	150.0	± 9.6 %
		Y	4.87	66.95	16.44		150.0	
10553		Z	4.82	66.17	15.93		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.25	66.45	15.91	0.00	150.0	± 9.6 %
		Y	4.78	66.98	16.43		150.0	
1000-		Z	4.71	66.14	15.89		150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.35	66.61	16.01	0.00	150.0	± 9.6 %
		Y	4.86	67.05	16.47		150.0	
10		Z	4.80	66.24	15.94		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.37	66.44	15.94	0.00	150.0	± 9.6 %
		Y	4.89	66.89	16,42		150.0	
		Z	4.84	66.13	15.93		150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.31	66.35	15.93	0.00	150.0	± 9.6 %
		Y	4.83	66.86	16.43		150.0	
		Z	4.77	66.08	15.92		150.0	

10541- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.33	66.41	15.92	0.00	150.0	± 9.6 %
		Y	4.83	66.00	40.00		450.0	<u> </u>
		Z		66.83	16.39	·····	150.0	ļ
10542-	IEEE 802.11ac WiFI (40MHz, MCS8,	X	4.77	66.02 66.54	15.87	0.00	150.0	
AAB	99pc duty cycle)				16.01	0.00	150.0	± 9.6 %
	·····	Y	4.97	66.88	16.43		150.0	
40540		Z	4.91	66.12	15.94		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	4.48	66.49	16.02	0.00	150.0	± 9.6 %
		Y	5.04	66.97	16.50		150.0	
40544		Z	5.01	66.28	16.06		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	4.77	66.20	15.88	0.00	150.0	± 9.6 %
		Y	5.21	66.81	16.32		150.0	
10515		Z	5.15	66.11	15.87		150.0	
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	Х	4.82	66.41	15.96	0.00	150.0	± 9.6 %
		Y	5.37	67.24	16.50		150.0	
		Z	5.34	66.63	16.10		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	4.77	66.27	15.89	0.00	150.0	± 9.6 %
		Y	5.24	66.91	16.35		150.0	
		Z	5.18	66.22	15.90		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	4.83	66.38	15.95	0.00	150.0	± 9.6 %
		Y	5.36	67.18	16.48		150.0	
******		Z	5.31	66.51	16.04		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	4.82	66.54	16.01	0.00	150.0	± 9.6 %
		Y	5.39	67.48	16.61		150.0	
		Z	5.39	66.96	16.24		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	4.79	66.46	16.00	0.00	150.0	± 9.6 %
		Y	5.34	67.29	16.55		150.0	
		Z	5.30	66.62	16.12		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	4.75	66.25	15.87	0.00	150.0	± 9.6 %
		Y	5.21	66.84	16.29		150.0	
		Ż	5.16	66.14	15.84		150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	4.78	66.50	15.97	0.00	150.0	± 9.6 %
		Y	5.22	66.98	16.36		150.0	
		Z	5.16	66.23	15.88		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	4.79	66.33	15.90	0.00	150.0	± 9.6 %
		Y	5.26	66.86	16.32		150.0	
		Z	5.20	66.16	15.87		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	×	5.25	66,42	15.95	0.00	150.0	± 9.6 %
	- Contraction	Y	5.65	67.07	16.36		150.0	
		Ż	5.60	66.46	15.97		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.31	66.63	16.05	0.00	150.0	± 9.6 %
		Y	5.71	67.24	16.43		150.0	
		Z	5.68	66.67	16.06		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.32	66.65	16.05	0.00	150.0	± 9.6 %
		Y	5.77	67.42	16.51		150.0	
		Z	5.74	66.86	16.15		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	×	5.28	66.55	16.01	0.00	150.0	± 9.6 %
AAC		Y	5.72	67.25	16.45		150.0	

							1 1 - 2 2	<u> </u>
10558-	IEEE 802.11ac WiFi (160MHz, MCS4,	X	5.24	66.46	15.98	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)	<u> </u>	E 00	07.00	40.41		450.0	
		Y	5.69	67.20	16.44		150.0	
40500		Z	5.65	66.61	16.06	0.00	150.0	100%
10560-	IEEE 802.11ac WiFi (160MHz, MCS6,	X	5.28	66.44	16.00	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)		5 70	67.40	46.47		150.0	
······		Y 7	5.72	67.18	16.47		150.0	
40504		Z	5.68	66.60	16.09	0.00	150.0	1069/
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.21	66.38	15.99	0.00	150.0	± 9.6 %
AAC		Y	5.66	67.17	16.49		150.0	
		Z	5.63	66.59	16.12		150.0	
10562-	IEEE 802.11ac WiFi (160MHz, MCS8,	X	5.30	66.67	16.13	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)		0.00	00.01		0.00	100.0	
		Y	5.70	67.29	16.55		150.0	
· · · ·		Z	5.66	66.70	16.17		150.0	<u>.</u>
10563-	IEEE 802.11ac WiFi (160MHz, MCS9,	X	5.57	67.31	16.43	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)							
		Y	5.83	67.40	16.57		150.0	
		Z	5.78	66.77	16.18		150.0	
10564-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	3.98	67.19	15.91	0.46	150.0	±9.6 %
AAA	OFDM, 9 Mbps, 99pc duty cycle)			Į				L
,,,,,,,,,		Y	4.54	67.45	16.63		150.0	
		Z	4.49	66.59	16.10		150.0	
10565-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.14	67.73	16.32	0.46	150.0	± 9.6 %
AAA	OFDM, 12 Mbps, 99pc duty cycle)		. = =			j	170.0	
		Υ	4.73	67.88	16.97		150.0	
40700		Z	4.67	67.02	16.44		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	3.97	67.32	16.02	0.46	150.0	± 9.6 %
		Y	4.56	67.66	16.76		150.0	
		Z	4.51	66.79	16.21		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.06	67.96	16.56	0.46	150.0	± 9.6 %
		Y	4.62	68.16	17.21		150.0	
		Z	4.55	67.23	16.63		150.0	-
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	3.80	66.64	15.45	0.46	150.0	± 9.6 %
		Y	4.41	67.18	16.36		150.0	
		Z	4.38	66.42	15.88		150.0	1
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	×	4.07	68.35	16.82	0.46	150.0	± 9.6 %
		Y	4.63	68.53	17.43		150.0	<u> </u>
		Z	4.55	67.52	16.81		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	3.99	67.81	16.52	0.46	150.0	± 9.6 %
		Y	4.60	68.17	17.24		150.0	
		Z	4.53	67.25	16.66		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	0.93	63.68	14.15	0.46	130.0	± 9.6 %
		Y	1.11	65.62	16.53		130.0	
		z	0.97	62.81	14.25		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	0.94	64.27	14.56	0.46	130.0	± 9.6 %
		Y	1.13	66.40	17.03		130.0	
		Z	0.97	63.27	14.57		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.10	79.41	19.97	0.46	130.0	± 9.6 %
/ / / /		Y	29.09	140.84	40.18		130.0	
		Z	0.81	73.52	17.65		130.0	
10574-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	$\frac{2}{X}$	1.00	70.10	17.80	0.46	130.0	±9.6 %
AAA	Mbps, 90pc duty cycle)					0.40		- 3.0 %
		Y	1.40	75.63	21.83		130.0	
		Z	0.96	67.63	16.92	1	130.0	1

10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	3.74	66.83	15.70	0.46	130.0	± 9.6 %
AAA	OFDM, 6 Mbps, 90pc duty cycle)	-						
		Y	4.30	67.12	16.57		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	ZX	4.26	66.31	16.08		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)		3.78	67.20	15.91	0.46	130.0	± 9.6 %
		Y	4.34	67.41	16.71	ļ	130.0	-
10577-		Z	4.29	66.55	16.18		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	3.89	67.42	16.06	0.46	130.0	± 9.6 %
		<u>Y</u>	4.48	67.61	16.83		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.44	66.77	16.33		130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)	X	3.83	67.60	16.23	0.46	130.0	± 9.6 %
		Y	4.40	67.82	17.00	ļ	130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.35	66.92	16.45		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)	X	3.51	66.09	15.01	0.46	130.0	±9.6 %
	······	Y	4.12	66.74	16.08		130.0	
10580-		Z	4.09	65.97	15.60		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	3.49	65.97	14.89	0.46	130.0	±9.6 %
		Y	4.12	66.69	16.03		130.0	
10581-		Z	4.11	65.99	15.59		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	3.74	67.63	16.20	0.46	130.0	± 9.6 %
		Y	4.33	67.99	17.02		130.0	
40500		Z	4.26	67.01	16.43		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	3.37	65.61	14.64	0.46	130.0	± 9.6 %
		Y	4.03	66.45	15.82		130.0	
		Z	4.01	65.72	15.36		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	3.74	66.83	15,70	0.46	130.0	± 9.6 %
		Y	4.30	67.12	16.57		130.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.26	66.31	16.08		130.0	·
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	3.78	67.20	15.91	0.46	130.0	± 9.6 %
		Y	4.34	67.41	16.71		130.0	
		Z	4.29	66.55	16.18		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	3.89	67.42	16.06	0.46	130.0	± 9.6 %
		Y	4.48	67.61	16.83		130.0	
		Z	4.44	66.77	16.33		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	3.83	67.60	16.23	0.46	130.0	±9.6 %
		Y	4.40	67.82	17.00		130.0	
		Z	4.35	66.92	16.45		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	3.51	66.09	15.01	0.46	130.0	±9.6 %
		Y	4.12	66.74	16.08		130.0	
		Z	4.09	65.97	15.60		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	3.49	65.97	14.89	0.46	130.0	± 9.6 %
		Y	4.12	66.69	16.03		130.0	
10500		Z	4.11	65.99	15.59		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	3.74	67.63	16.20	0.46	130.0	± 9.6 %
		Y	4.33	67.99	17.02		130.0	
40500		Z	4.26	67.01	16.43		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	3.37	65.61	14.64	0.46	130.0	±9.6 %
		Y	4.03	66.45	15.82		130.0	
		Z	4.01	65.72	15.36		130.0	

					(100.0	
10591- AAB	IEEE 802.11n (HT Mixed, 20MHz,	X	3.91	67.05	15.98	0.46	130.0	± 9.6 %
AAD	MCS0, 90pc duty cycle)	Y	4.46	67.24	16.72		130.0	
	······································	Z	4.42	66.45	16.24		130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz,	X	3.96	67.20	16.07	0.46	130.0	± 9.6 %
AAB	MCS1, 90pc duty cycle)							
		Y	4.56	67.49	16.83		130.0	
		Z	4.52	66.71	16.36		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	3.89	67.09	15.91	0.46	130.0	± 9.6 %
AAB	MCS2, 90pc duty cycle)							
		Y	4.48	67.36	16.68		130.0	
		Z	4.44	66.57	16.20		130.0	
10594-	IEEE 802.11n (HT Mixed, 20MHz,	X	3.93	67.20	16.06	0.46	130.0	± 9.6 %
AAB	MCS3, 90pc duty cycle)							
		Y	4.53	67.56	16.87		130.0	
10505		Z	4.50	66.76	16.38	0.40	130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	X	3.88	67.15	15.95	0.46	130.0	± 9.6 %
AAB	MCS4, 90pc duty cycle)	Y	4.50	67.54	16.78		130.0	
			4.50	66.73	16.70		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,		<u> 4.40 </u> 3.78	66.88	15.82	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)		0.10	00.00	10.02	0.40	130.0	± 3.0 %
		Y	4.41	67.44	16.74		130.0	
		Ż	4.38	66.66	16.26		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	$-\bar{x}$	3.79	66.92	15.72	0,46	130.0	±9.6 %
AAB	MCS6, 90pc duty cycle)							
		Y	4.37	67.31	16.57		130.0	
		Z	4.34	66.51	16.09		130.0	
10598-	IEEE 802.11n (HT Mixed, 20MHz,	X	3.85	67.45	16.19	0.46	130.0	± 9.6 %
AAB	MCS7, 90pc duty cycle)							
		Y	4.40	67.66	16.93		130.0	
		Z	4.34	66.79	16.40		130.0	
10599-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.79	67.73	16.77	0.46	130.0	±9.6 %
AAB	MCS0, 90pc duty cycle)							
		Y	5.21	67.73	17.04	***	130.0	
40000		Z	5.16	67.02	16.62	0.40	130.0	
10600-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.68	67.39	16.57	0.46	130.0	± 9.6 %
AAB	MCS1, 90pc duty cycle)	Y	5.21	07.70	17.04		130.0	
		Z	5.26	67.78 67.42	16.79		130.0	}
10601-	IEEE 802.11n (HT Mixed, 40MHz,		4.64	67.32	16.79	0.46	130.0	± 9.6 %
AAB	MCS2, 90pc duty cycle)		4.04	01.52	10.00	0.40	130.0	1 29.0 %
		Y	5.18	67.81	17.08		130.0	
		Z	5.18	67.25	16.73		130.0	
10602-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.63	67.06	16.35	0.46	130.0	± 9.6 %
AAB	MCS3, 90pc duty cycle)		1.00	01.00	10.00	0.40	100.0	20.0 %
		Y	5.19	67.55	16.86		130.0	
		Z	5,23	67.15	16.59	1	130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.68	67.32	16.65	0.46	130.0	±9.6 %
AAB	MCS4, 90pc duty cycle)							
		Y	5.23	67.74	17.10		130.0	
		Z	5.27	67.35	16.84		130.0	
10604-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.64	67.04	16.46	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)							
		Y	5.12	67.34	16.87		130.0	
		Z	5.13	66.84	16.55		130.0	
10605-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.61	67.01	16.45	0.46	130.0	± 9.6 %
AAB	MCS6, 90pc duty cycle)							
		<u>Y</u>	5.17	67.54	16.97		130.0	<u> </u>
		Z	5.21	67.15	16.70		130.0	
10606-	IEEE 802.11n (HT Mixed, 40MHz,	X	4.52	66.73	16.13	0.46	130.0	±9.6 %
AAB	MCS7, 90pc duty cycle)		E 0.1	07.00	40.05		400.0	
		Y	5.04	67.22	16.65	ļ	130.0	.
		Z	5.04	66.71	16.33	1	130.0	1

AAB Stype duty cycle) Y 4.33 66,69 16.43 130.0 10600e IEEE 802.11ac WiFI (20MHz, MCS1, SAP X 382 66,58 15.58 130.0 ± 9.60 AAB SQpc duty cycle) Y 4.44 66.98 15.55 130.0 ± 9.60 10609- IEEE 802.11ac WiFI (20MHz, MCS2, AAB X 3.73 66.35 15.52 0.46 130.0 ± 9.60 10610- IEEE 802.11ac WiFI (20MHz, MCS2, AAB X 3.73 66.57 15.81 130.0 ± 9.60 10610- IEEE 802.11ac WiFI (20MHz, MCS3, AAB X 3.76 66.57 15.81 130.0 ± 9.60 10611- IEEE 802.11ac WiFI (20MHz, MCS4, AAB X 3.70 66.30 15.52 0.46 130.0 ± 9.60 10612- IEEE 802.11ac WiFI (20MHz, MCS4, AAB X 3.70 66.30 15.52 0.46 130.0 ± 9.60 10612- IEEE 802.11ac WiFI (20MHz, MCS5, AB X 3.61 66.07 16.30 130.0	40007					·····			
IEEE 802.11ac WiFi (20MHz, MCS1, X 3.82 66.54 15.73 0.46 130.0 ± 9.0 AAB 80pc duty cycle) Y 4.44 66.56 16.73 0.46 130.0 ± 9.0 IOB09- IEEE 802.11ac WiFi (20MHz, MCS2, X 3.73 66.35 15.52 0.46 130.0 ± 9.6 AAB 690pc duty cycle) Y 4.34 66.78 15.52 0.46 130.0 ± 9.6 AAB 690pc duty cycle) Y 4.34 66.78 15.81 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.57 15.62 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.40 66.69 15.52 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.30 66.73 16.37 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.73 16.37 0.46 130.0 ± 9.6		IEEE 802.11ac WIFI (20MHz, MCS0, 90pc duty cycle)		3.77	66.40	15.66	0.46	130.0	± 9.6 %
IdeGeP IEEE 802.11ac WiFi (20MHz, MCS1, 80pc duty cycle) X 3.82 66.54 15.73 0.46 130.0 ± 9.06 IDEGeP IEEE 802.11ac WiFi (20MHz, MCS2, AAB X 3.73 66.35 16.52 0.46 130.0 ± 9.06 IDEGP IEEE 802.11ac WiFi (20MHz, MCS2, AAB X 3.73 66.35 15.52 0.46 130.0 ± 9.06 IDEGP Y 4.34 66.78 16.32 0.46 130.0 ± 9.06 IDEG10 IEEE 802.11ac WiFi (20MHz, MCS3, AAB X 3.76 66.57 15.81 130.0 ± 9.06 IDEG10 IEEE 802.11ac WiFi (20MHz, MCS4, AB X 3.70 66.30 15.52 0.46 130.0 ± 9.06 IDEG11 IEEE 802.11ac WiFi (20MHz, MCS4, AB X 3.70 66.33 15.82 130.0 ± 9.06 IDEG2 Y 4.30 66.73 16.37 0.46 130.0 ± 9.06 IDEG2 Y 4.27 66.79 15.33 130.0 ± 9.06 <td></td> <td></td> <td>Y</td> <td>4.33</td> <td>66.69</td> <td>16.43</td> <td>1</td> <td>130.0</td> <td></td>			Y	4.33	66.69	16.43	1	130.0	
1600- AB IEEE 802.11ac WIFI (20MHz, MCS1, AB X 3.82 66.54 15.73 0.46 130.0 ± 9.6 1000- AB B0pc duly cycle) Y 4.44 66.56 16.65 130.0 130.0 1000- AB B0pc duly cycle) Y 4.43 66.60 16.01 130.0 ± 9.6 1010- 10610- IEEE 802.11ac WIFI (20MHz, MCS3, 300c duly cycle) X 3.73 66.52 15.70 0.46 130.0 ± 9.6 10610- IEEE 802.11ac WIFI (20MHz, MCS3, AAB X 3.78 66.52 15.70 0.46 130.0 ± 9.6 10611- IEEE 802.11ac WIFI (20MHz, MCS4, AAB X 3.70 66.30 15.52 0.46 130.0 ± 9.6 10612- IEE 802.11ac WIFI (20MHz, MCS5, AAB Y 4.30 66.73 16.37 0.46 130.0 ± 9.6 10614- IEEE 802.11ac WIFI (20MHz, MCS6, X 3.61 66.03 15.27 0.46 130.0 ± 9.6 10614- IEEE 802.11ac WIFI (20MHz, MCS6, X 3.64			Z						
10609- AAB IEEE 802 11ac WIF1 (20MHz, MCS2, 90pc duty cycle) X 3.73 66.35 15.52 0.46 130.0 ± 9.6 10610- AAB IEEE 802 11ac WIF1 (20MHz, MCS3, AAB X 3.73 66.35 15.52 0.46 130.0 ± 9.8 10610- AAB IEEE 802 11ac WIF1 (20MHz, MCS3, AAB X 3.79 66.52 15.70 0.46 130.0 ± 9.6 0011 IEEE 802 11ac WIF1 (20MHz, MCS4, AAB X 3.70 66.50 15.52 0.46 130.0 ± 9.6 001611- IEEE 802 11ac WIF1 (20MHz, MCS5, AAB X 3.70 66.33 15.62 146 130.0 ± 9.6 001612- IEEE 802 11ac WIF1 (20MHz, MCS5, AAB X 3.61 66.09 15.32 0.46 130.0 ± 9.6 001613- IEEE 802 11ac WIF1 (20MHz, MCS6, AAB X 3.64 66.03 15.27 0.46 130.0 ± 9.6 10614- IEEE 802 11ac WIF1 (20MHz, MCS6, AB X 3.64 66.03 15.27 0.46 130.0 ± 9.6	-						0.46		± 9.6 %
10609- AAB IEEE 802.11ac WIFI (20MHz, MCS2, 3.73 2 4.34 66.35 15.52 0.46 130.0 ± 9.6 01610- AAB IEEE 802.11ac WIFI (20MHz, MCS3, 90pc duty cycle) X 3.73 66.35 15.52 0.46 130.0 ± 9.6 01610- AAB IEEE 802.11ac WIFI (20MHz, MCS3, 90pc duty cycle) X 3.78 66.52 15.70 0.46 130.0 ± 9.6 01611- 01611- 90pc duty cycle) Y 4.40 66.09 16.56 130.0 ± 9.6 01611- 01612- 10612- 10613- 10613- 10613- 10613- 1644 IEEE 802.11ac WIFI (20MHz, MCS5, X 3.61 66.09 15.52 0.46 130.0 ± 9.6 01614- 10613- 10613- 10613- 10614- 10613- 10614- 164 IEEE 802.11ac WIFI (20MHz, MCS6, X 3.64 66.03 15.27 0.46 130.0 ± 9.6 10614- 10613- 10614- 10614- 10614- 10614- 10614- 10614- 164 IEEE 802.11ac WIFI (20MHz, MCS6, X 3.64 66.03 15.27 0.46 130.0 ± 9.6 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 10614- 1000- 10616- 10614- 10614- 10614- 10614- 1000- 10616- 10			Y	4.44	66.96	16.55		130.0	
16609 IEEE 802.11ac WIFI (20MHz, MCS2, X 3.73 66.35 15.52 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.34 66.78 16.36 130.0 130.0 10610- IEEE 802.11ac WIFI (20MHz, MCS3, X 3.78 66.52 15.70 0.46 130.0 19.6 10611- IEEE 802.11ac WIFI (20MHz, MCS4, X 3.70 66.50 15.52 0.46 130.0 19.6 10611- IEEE 802.11ac WIFI (20MHz, MCS6, X 3.70 66.73 16.37 130.0 19.6 10612- IEEE 802.11ac WIFI (20MHz, MCS6, X 3.61 66.99 15.37 0.46 130.0 19.6 10613- IEEE 802.11ac WIFI (20MHz, MCS6, X 3.61 66.59 16.20 130.0 19.0 10614- IEEE 802.11ac WIFI (20MHz, MCS7, X 3.70 66.56 15.77 0.46 130.0 19.0 10614- IEEE 802.11ac WIFI (20MHz, MCS7, X 3.70 66.56 15.77 0.46 130.0 19.0 10615-			Z	4.38					
10610 IEEE 802.11ac WIFI (20MHz, MCS3, 90pc duty cycle) X 3.78 66.52 15.70 0.46 130.0 ± 9.6 0611- 10611- 90pc duty cycle) Y 4.40 66.99 16.56 130.0 ± 9.6 0611- 90pc duty cycle) Y 4.40 66.07 16.00 130.0 ± 9.6 10611- 90pc duty cycle) Y 4.30 66.73 16.52 0.46 130.0 ± 9.6 10612- 10612- 10613- 10613- 10614- 90pc duty cycle) Y 4.20 66.79 16.38 130.0 ± 9.6 10614- 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 10613- 10614- 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 10614- 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 10615- 10615- 1615 IEEE 802.11ac WIFI (20MHz, MCS7, 4.22 56.57 15.67 130.0 ± 9.6 10616- 10616- 10616 IEEE 802.11ac WIFI (20MHz, MCS0, 4.45 66.49 15.60 130.0<		IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X				0.46		± 9.6 %
IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) X 3.78 66.52 15.70 0.46 130.0 AAB 90pc duty cycle) Y 4.40 66.97 16.66 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.40 66.73 16.67 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.30 66.73 16.37 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.20 66.73 16.37 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.22 66.73 16.37 0.46 130.0 ± 9.6 10612- IEEE 802.11ac WIFI (20MHz, MCS5, X 3.64 66.03 15.27 0.46 130.0 ± 9.6 4.89 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 4.89 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 10614- IEEE 802.11ac WIFI (20MHz, MCS6, X	····			4.34	66.78	16.36		130.0	
10610- AAB IEEE 802.11ac WIFI (20MHz, MCS3, pop duty cycle) X 3.78 66.52 15.70 0.46 130.0 ± 9.6 10611- 10611- 10611- 10612- AAB 12EE 802.11ac WIFI (20MHz, MCS4, 90pc duty cycle) Y 4.40 66.99 16.66 130.0 ± 9.6 10612- 010612- 10612- AAB 12EE 802.11ac WIFI (20MHz, MCS5, 90pc duty cycle) X 3.61 66.09 15.52 0.46 130.0 ± 9.6 10612- 010613- 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ± 9.6 10614- 90pc duty cycle) Y 4.27 66.59 15.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.22 65.72 15.84 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.30 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 15.67 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 15.61 130.0 ±					65.87	15.81		130.0	
IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) Z 4.34 66.07 16.02 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.30 66.73 16.37 130.0 ± 9.6 10612- IEEE 802.11ac WiFi (20MHz, MCS5, AAB X 3.61 66.73 16.37 130.0 ± 9.6 10613- IEEE 802.11ac WiFi (20MHz, MCS5, AAB X 3.61 66.09 15.37 0.46 130.0 ± 9.6 10613- IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 10614- IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.51 16.54 130.0 ± 9.6 <tr< td=""><td></td><td>IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)</td><td></td><td></td><td>66.52</td><td></td><td>0.46</td><td></td><td>± 9.6 %</td></tr<>		IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)			66.52		0.46		± 9.6 %
10611- 90pc duty cycle) IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) X 3.70 66.30 15.52 0.46 130.0 ± 9.6 10612- AAB IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) Y 4.30 66.73 16.37 130.0 ± 9.6 Y 4.27 66.73 16.38 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.79 16.38 130.0 10613- 01613- 80pc duty cycle) Y 4.27 66.59 15.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.71					66.99			130.0	
AAB 90pc duty cycle) Y 4.30 66.73 16.37 130.0 10612- IEEE 802.11ac WiFi (20MHz, MCS5, AAB X 3.61 66.73 16.37 130.0 ± 9.6 10613- IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 15.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.73 0.46 130.0 ± 9.6 10615- IEEE 802.11ac WiFI (20MHz, MCS8, X 3.64 65.99 15.16 0.46 130.0 ± 9.6					66.07	16.00		130.0	
Z 4.25 65.83 15.82 130.0 AAB 90pc duty cycle) Y 4.27 66.09 15.37 0.46 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ±9.6 10613- IEEE 802.11ac WiFi (20MHz, MCS6, X 3.64 66.03 15.27 0.46 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.73 0.46 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.73 0.46 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.56 15.76 130.0 ±9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ±9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0		IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)					0.46	130.0	± 9.6 %
10612- AAB IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) X 3.61 66.09 15.37 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 15.84 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.57 15.67 130.0 ± 9.6 10614- IEEE 802.11ac WIFI (20MHz, MCS7, AAB X 3.70 66.56 15.73 0.46 130.0 ± 9.6 10615- AAB 90pc duty cycle) Y 4.28 66.52 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle)	·	_				16.37		130.0	
10612- AAB IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) X 3.61 66.09 15.37 0.46 130.0 ± 9.6 10613- AAB 90pc duty cycle) Y 4.27 66.79 16.38 130.0 ± 9.6 10613- AAB 90pc duty cycle) Y 4.27 66.59 15.84 130.0 ± 9.6 10614- AAB IEEE 802.11ac WiFi (20MHz, MCS7, AAB X 3.64 66.59 16.20 130.0 ± 9.6 10614- AAB IEEE 802.11ac WiFi (20MHz, MCS7, Sopc duty cycle) X 3.70 66.59 15.64 130.0 ± 9.6 10615- AAB 90pc duty cycle) Y 4.27 66.60 15.96 130.0 ± 9.6 10615- AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 10616- 10616- 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.71 16.53 130.0 ± 9.6 AAB				4.25					
Z 4.22 65.92 15.84 130.0 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ±9.6 10614- AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ±9.6 10614- AAB 1EEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ±9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.64 130.0 ±9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 10615- IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.34 16.09 130.0 ±9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ±9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 <t< td=""><td></td><td>IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)</td><td></td><td></td><td>66.09</td><td>15.37</td><td>0.46</td><td></td><td>± 9.6 %</td></t<>		IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)			66.09	15.37	0.46		± 9.6 %
10613- AAB IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) X 3.64 66.03 15.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 AAB 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 10615- IEEE 802.11ac WiFi (20MHz, MCS8, X 3.64 65.99 15.16 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 10616- IEEE 802.11ac WiFi (40MHz, MCS0, X 4.45 66.31 16.66 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.07 16.13 130.0 ± 9.6 AAB								130.0	
10613- AAB IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) X 3.64 66.03 15.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.59 16.20 130.0 ± 9.6 AAB 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 15.46 130.0 ± 9.6 10615- IEEE 802.11ac WiFi (20MHz, MCS8, X 3.64 65.99 15.16 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.74 16.68 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycl									
Z 4.22 65.72 15.67 130.0 10614- AAB JEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ± 9.6 10615- AAB JOB c duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 10615- AAB JOP c duty cycle) X 3.64 65.99 15.16 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Z 4.23 66.54 15.56 130.0 ± 9.6 AAB 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 AB 90pc duty cycle) Y 4.97 66.78 <t< td=""><td></td><td>IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)</td><td></td><td></td><td>66.03</td><td>15.27</td><td>0.46</td><td>130.0</td><td>± 9.6 %</td></t<>		IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)			66.03	15.27	0.46	130.0	± 9.6 %
10614- AAB IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) X 3.70 66.56 15.73 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.27 66.95 16.54 130.0 ± 9.6 AB 90pc duty cycle) Y 4.22 66.90 15.96 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AB 90pc duty cycle) Y 4.28 66.54 15.66 130.0 ± 9.6 10616- AAB 90pc duty cycle) Y 4.23 66.71 16.53 130.0 ± 9.6 10617- BAB IEEE 802.11ac WiFi (40MHz, MCS1, POpc duty cycle) X 4.43 66.27 16.03 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.96 66.18 16.11 0.46 130.0 ± 9.6 AAB				4.27		16.20		130.0	
AAB 90pc duty cycle) Y 4.27 66.95 16.73 0.40 1000 1.3.0 10615- AAB 1EEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) X 3.64 65.99 15.16 0.46 130.0 ± 9.6 10615- AAB 90pc duty cycle) Y 4.22 66.52 16.09 130.0 ± 9.6 10616- AAB 1EEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 10616- AAB 1EEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.71 16.53 130.0 ± 9.6 10617- AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 10617- AAB 90pc duty cycle) Y 4.95 66.71 16.33 130.0 ± 9.6 10618- AAB 90pc duty cycle) Y 4.96 66.18 16.61 130.0 ± 9.6 10619- AAB 90pc duty cycle) Y 4.96 66.19 16.10 130.0				4.22	65.72	15.67		130.0	
Z 4.20 66.00 15.96 130.0 10615- AAB IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) X 3.64 65.99 15.16 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.23 65.64 15.56 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.61 130.0 ± 9.6		IEEE 802.11ac WiFl (20MHz, MCS7, 90pc duty cycle)	X	3.70			0.46		± 9.6 %
Z 4.20 66.00 15.96 130.0 10615- AAB JDE duty cycle) Y 3.64 65.99 15.16 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.28 66.52 16.09 130.0 ± 9.6 10616- AAB IEEE 802.11ac WiFi (40MHz, MCS0, AAB X 4.45 66.34 16.08 0.46 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, AAB Y 4.95 66.71 16.53 130.0 ± 9.6 10617- AAB JDe duty cycle) Y 4.95 66.71 16.03 0.46 130.0 ± 9.6 10617- AAB JDe duty cycle) Y 4.93 66.27 16.03 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.27 16.13 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.39 16.11 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y			Y	4.27	66.95	16.54		130.0	
10615- AAB IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) X 3.64 65.99 15.16 0.46 130.0 ± 9.6 10616- AAB Y 4.28 66.52 16.09 130.0 130.0 10616- AAB IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, AAB X 4.45 66.71 16.13 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, AAB X 4.43 66.27 16.03 0.46 130.0 ± 9.6 10618- AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 10618- AAB IEEE 802.11ac WiFi (40MHz, MCS2, AAB X 4.43 66.18 16.11 0.46 130.0 ± 9.6 10619- AAB 90pc duty cycle) Y 4.90 66.88 16.61 130.0 ± 9.6 10619- AAB 90pc duty cycle) Y 4.93 66.18 16.10			Z	4.20	66.00	15.96			
Z 4.23 65.64 15.56 130.0 10616- AAB 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) X 4.43 66.27 16.03 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.78 16.11 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.90 66.88 16.61 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.90 66.88 16.61 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.94 66.79 16.49<							0.46		±9.6 %
Z 4.23 65.64 15.56 130.0 10616- AAB IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.95 66.71 16.53 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) X 4.43 66.27 16.03 0.46 130.0 ± 9.6 10617- AAB IEEE 802.11ac WiFi (40MHz, MCS1, AAB X 4.43 66.27 16.03 0.46 130.0 ± 9.6 10618- AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.97 66.39 16.11 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.90 66.88 16.61 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.94 66.79 16.49 130.0 ± 9.6 AAB 90pc duty cycle			Y	4,28	66.52	16.09		130.0	
10616- AAB IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) X 4.45 66.34 16.08 0.46 130.0 ± 9.6 Y 4.95 66.71 16.53 130.0 130.0 130.0 130.0 130.0 10617- AAB 90pc duty cycle) Z 4.93 66.07 16.13 130.0 130.0 19.6 10617- AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 19.6 10618- AAB 90pc duty cycle) Y 4.97 66.78 16.54 130.0 19.6 10618- AAB 1EEE 802.11ac WiFi (40MHz, MCS2, AAB X 4.37 66.39 16.11 0.46 130.0 19.6 10619- AAB 90pc duty cycle) Y 4.90 66.88 16.61 130.0 19.6 10619- AAB 90pc duty cycle) Y 4.94 66.79 16.49 130.0 19.6 10620- AAB 90pc duty cycle) Y 4.94 66.13 15.93 0.46 130.0			Z						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)					0.46		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.95	66.71	16.53		130.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)					0.46		±9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.97	66.78	16.54		130.0	
10618- AAB IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) X 4.37 66.39 16.11 0.46 130.0 ± 9.6 Y 4.90 66.88 16.61 130.0 ± 9.6 Y 4.90 66.88 16.61 130.0 ± 9.6 I0619- AAB IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) X 4.42 66.32 16.00 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.94 66.79 16.49 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.93 66.18 16.10 130.0 ± 9.6 10620- AAB IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) X 4.43 66.13 15.93 0.46 130.0 ± 9.6 10621- AAB 90pc duty cycle) Y 4.96 66.62 16.45 130.0 ± 9.6 Y 4.96 66.62 16.45 130.0 ± 9.6 AAB 90pc duty cycle) Y 5.00 66.48 16.27									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			X				0.46		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.90	66.88	16.61		130.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						16.00	0.46		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
AAB 90pc duty cycle) Y 4.96 66.62 16.45 130.0 10621- IEEE 802.11ac WiFi (40MHz, MCS5, AAB Y 4.96 66.05 16.09 130.0 10621- IEEE 802.11ac WiFi (40MHz, MCS5, AAB Y 4.50 66.48 16.27 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 5.00 66.84 16.69 130.0 ± 9.6 10622- IEEE 802.11ac WiFi (40MHz, MCS6, AAB Y 4.46 66.43 16.25 0.46 130.0 ± 9.6 10622- IEEE 802.11ac WiFi (40MHz, MCS6, AAB Y 4.46 66.43 16.25 0.46 130.0 ± 9.6 AAB 90pc duty cycle) Y 4.98 66.91 16.73 130.0			Z						
Z 4.96 66.05 16.09 130.0 10621- AAB IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) X 4.50 66.48 16.27 0.46 130.0 ± 9.6 Y 5.00 66.84 16.69 130.0 ± 9.6 Z 4.97 66.18 16.29 130.0 10622- AAB IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) X 4.46 66.43 16.25 0.46 130.0 ± 9.6 Y 4.98 66.91 16.73 130.0 ± 9.6		IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	4.43		15.93	0.46	130.0	± 9.6 %
10621- AAB IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) X 4.50 66.48 16.27 0.46 130.0 ± 9.6 Y 5.00 66.84 16.69 130.0 ± 9.6 Z 4.97 66.18 16.29 130.0 10622- AAB IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) X 4.46 66.43 16.25 0.46 130.0 ± 9.6 Y 4.98 66.91 16.73 130.0 ± 9.6	~~~~								
AAB 90pc duty cycle) Y 5.00 66.84 16.69 130.0 Image: Constraint of the system o						•			
Z 4.97 66.18 16.29 130.0 10622- AAB IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) X 4.46 66.43 16.25 0.46 130.0 ± 9.6 Y 4.98 66.91 16.73 130.0 ± 9.6							0.46		± 9.6 %
10622- AAB IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) X 4.46 66.43 16.25 0.46 130.0 ± 9.6 Y 4.98 66.91 16.73 130.0 ± 9.6									
10622- AAB IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) X 4.46 66.43 16.25 0.46 130.0 ± 9.6 Y 4.98 66.91 16.73 130.0 ± 9.6						16.29			
							0.46		± 9.6 %
					66.91	16.73	-	130.0	
			Z	4.96	66.27	16.33		130.0	

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.39	66.10	15.89	0.46	130.0	± 9.6 %
		Y	4.89	66.49	16.36		130.0	
		Ż	4.86	65.84	15.96		130.0	·····
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	4.54	66.35	16.10	0.46	130.0	± 9.6 %
		Y	5.06	66.70	16.53		130.0	
		Z	5.05	66.11	16.17		130.0	
10625-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	4.65	66.63	16.32	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)	Y	5.15	66.88	16.69		130.0	_ 0.0 %
		Z	5.16	66.34	16.36		130.0	
10626-	IEEE 802.11ac WiFi (80MHz, MCS0,	X	4.87	66.09	16.03	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)					0.40		1 3.0 %
		Y	5.31	66.64	16.44		130.0	
		Z	5.28	66.07	16.09	~ / ~	130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	4.96	66.39	16.17	0.46	130.0	± 9.6 %
		Y	5.52	67.25	16.73		130.0	
		Z	5.53	66.80	16.43		130.0	
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	4.83	65.96	15.85	0.46	130.0	±9.6 %
		Y	5.28	66.56	16.30		130.0	
		Z	5.27	66.03	15.96		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	4.89	66.11	15.93	0.46	130.0	± 9.6 %
		Y	5.45	66.99	16.52		130.0	
		Ż	5.45	66.49	16.20		130.0	
10630-	IEEE 802.11ac WiFi (80MHz, MCS4,	X	4.94	66.47	16.13	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)					0.40		1.0.0 %
		Y	5.52	67.40	16.73		130.0	
		Z	5.58	67.09	16.50		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.04	67.01	16.63	0.46	130.0	± 9.6 %
		Y	5.56	67.66	17.07		130.0	
		Z	5.56	67.16	16.74		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	×	5.02	66.85	16.55	0.46	130.0	± 9.6 %
		Y	5.59	67.70	17.10		130.0	
		Z	5.59	67.18	16.77		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	×	4.86	66.17	16.01	0.46	130.0	±9.6 %
		Y	5.30	66.64	16.39		130.0	
		Z	5.27	66.07	16.03		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	4.95	66.64	16.30	0.46	130.0	± 9.6 %
·····	land the second s	Y	5.35	66.92	16.58	İ	130.0	
		Z	5.32	66.32	16.21		130.0	1
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	4.70	65.44	15.34	0.46	130.0	± 9.6 %
		Y	5.17	66.01	15.82	†	130.0	
**********		Z	5.16	65.50	15.50		130.0	l – – – – – – – – – – – – – – – – – – –
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.37	66.35	16.11	0.46	130.0	± 9.6 %
70.0		Y	5.75	66.94	16.50		130.0	
		Z	5.74	66.45	16.20	+	130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.47	66.68	16.28	0.46	130.0	± 9.6 %
7010		Y	5.84	67.17	16.61		130.0	
		Z			16.34			
10638-	IEEE 802.11ac WiFi (160MHz, MCS2,		5.85	66.75		0.40	130.0	+00%
AAC	90pc duty cycle)		5.45	66.60	16.21	0.46	130.0	± 9.6 %
i.		Y Z	5.91 5.90	67.37 66.89	16.68	ļ	130.0 130.0	

10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.40	66.48	16.20	0.46	130.0	± 9.6 %
		Y	5.83	07.45	40.04		402.0	
			<u> </u>	67.15	16.61		130.0	
10640-	IEEE 802.11ac WiFi (160MHz, MCS4,	$\frac{2}{X}$	5.32	66.67 66.22	16.32	0.40	130.0	1000
AAC	90pc duty cycle)				15.99	0.46	130.0	± 9.6 %
	·····	<u>Y</u>	5.75	66.89	16.42		130.0	
40044		Z	5.75	66.45	16.15		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.45	66.45	16.13	0.46	130.0	± 9.6 %
		Y	5.88	67.07	16.54		130.0	
10010		Z	5.90	66.70	16.30		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.46	66.60	16.39	0.46	130.0	± 9.6 %
		Y	5.90	67.28	16.81		130.0	
		Z	5.89	66.80	16.53		130.0	
10643- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.28	66.13	16.00	0.46	130.0	± 9.6 %
		Y	5.73	66.91	16.51		130.0	
		Z	5.74	66.48	16.24		130.0	
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.42	66.58	16.26	0.46	130.0	± 9.6 %
		Y	5.78	67.08	16.62		130.0	
		Z	5.78	66.62	16.33		130.0	
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	5.81	67.58	16.73	0.46	130.0	±9.6 %
		Y	5.91	67.16	16.62		130.0	
		Z	5.93	66.77	16.38		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	2.64	72.38	24.11	9.30	60.0	± 9.6 %
		Y	4.60	84.41	29.31		60.0	
		Z	4.84	83.41	28.63		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	2.46	71.01	23.55	9.30	60.0	± 9.6 %
		Y	4.04	81.81	28.38		60.0	
		Z	4.35	81.42	27.96		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	2.44	155.88	0.83	0.00	150.0	± 9.6 %
		Y	0.35	60.28	6.28		150.0	
		Z	0.35	60.00	5.54		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	2.08	63.49	12.30	2.23	80.0	± 9.6 %
		Y	3.15	67.39	16.19		80.0	
		Z	2.91	65.29	15.14		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.02	65.17	14.89	2.23	80.0	± 9.6 %
		Y	3.64	66.22	16.46	·····	80.0	
		Z	3.52	64.96	15.78		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.20	64.95	15.39	2.23	80.0	± 9.6 %
		Y	3.67	65.70	16.49	w	80.0	
		Z	3.57	64.61	15.88		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.35	64.77	15.59	2.23	80.0	± 9.6 %
		Y	3.76	65.50	16.51		80.0	
		Z	3.66	64.52	15.94		80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	Х	2.01	62.76	7.94	10.00	50.0	± 9.6 %
		Y	2.58	65.57	9.73		50.0	
		Z	3.05	67.26	11.01		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	0.84	60.00	5.36	6.99	60.0	± 9.6 %
		Y	1.33	63.54	7.82		60.0	

June 25, 2018

٠

10660- AAA	Pulse Waveform (200Hz, 40%)	X	0.39	60.00	3.98	3.98	80.0	± 9.6 %
		Y	0.54	61.57	5.88		80.0	
		Z	0.45	60.00	5.04		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	17.64	60.43	1.44	2.22	100.0	± 9.6 %
		Y	0.23	60.00	4.28		100.0	
······································		Z	0.25	60.00	3.48		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	0.00	84.91	40.93	0.97	120.0	± 9.6 %
************		Y	49.30	1078.61	357.44		120.0	
		Z	0.03	139.18	4.12		120.0	

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

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

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

Client	PC Test
--------	---------

Certificate	No: ES	3-3332	2 Aug	17	

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3332

Calibration procedure(s)

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

Calibration date:

August 14, 2017

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	(AILA
Approved by:	Kalja Pokovic	Technical Manager	
	이 같은 것 같은 것 같은 것 같은 것은 것 같은 것 같은 것 같은 것		Acto 45
		1. Alexandro and a false to b	Issued: August 16, 2017
This calibration certificat	e shall not be reproduced except in fu	III without written approval of the lat	boratory.



S С S

Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura

Swiss Calibration Service

Accreditation No.: SCS 0108

8/27/17

Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst

- C Service suisse d'étalonnage
- S 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
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DACV evotors to align probe concervation the test of and in the evotors

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).

Probe ES3DV3

SN:3332

Manufactured: Calibrated:

January 24, 2012 August 14, 2017

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	1.00	0.93	0.88	± 10.1 %
DCP (mV) ^B	104.0	103.0	103.0	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	С	D	VR	Unc ^E
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	192.0	±3.5 %
1		Y	0.0	0.0	1.0		194.3	
		Z	0.0	0.0	1.0		179.9	

Note: For details on UID parameters see Appendix.

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	
X	76.72	548.9	35.46	56.44	4.600	5.1	0.000	0.903	1.011
Y	44.78	323.3	35.85	29.01	2.529	5.1	0.000	0.546	1.009
Z	38.01	268.3	34.56	26.38	1.777	5.1	0.096	0.424	1.004

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

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

 ^B Numerical linearization parameter: uncertainty not required.
 ^E Uncertainty is determined using the max, deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.81	6.81	6.81	0.72	1.31	± 12.0 %
835	41.5	0.90	6.64	6.64	6.64	0.80	1.21	± 12.0 %
1750	40.1	1.37	5.56	5.56	5.56	0.80	1.20	± 12.0 %
1900	40.0	1.40	5.33	5.33	5.33	0.76	1.26	± 12.0 %
2300	39.5	1.67	4.99	4.99	4.99	0.70	1.36	± 12.0 %
2450	39.2	1.80	4.68	4.68	4.68	0.63	1.48	± 12.0 %
2600	39.0	1.96	4.56	4.56	4.56	0.80	1.23	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

validity can be extended to \pm 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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

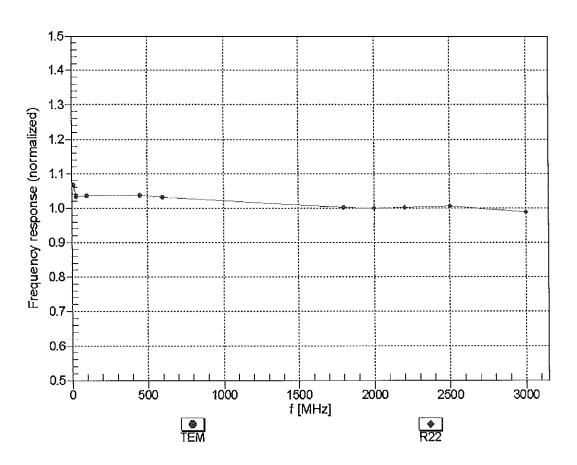
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.54	6.54	6.54	0.55	1.43	± 12.0 %
835	55.2	0.97	6.47	6.47	6.47	0.71	1.27	± 12.0 %
1750	53.4	1.49	5.16	5.16	5.16	0.80	1.22	± 12.0 %
1900	53.3	1.52	4.95	4.95	4.95	0.54	1.56	± 12.0 %
2300	52.9	1.81	4.74	4.74	4.74	0.80	1.30	± 12.0 %
2450	52.7	1.95	4.55	4.55	4.55	0.80	1.17	± 12.0 %
2600	52.5	2.16	4.43	4.43	4.43	0.80	1.12	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

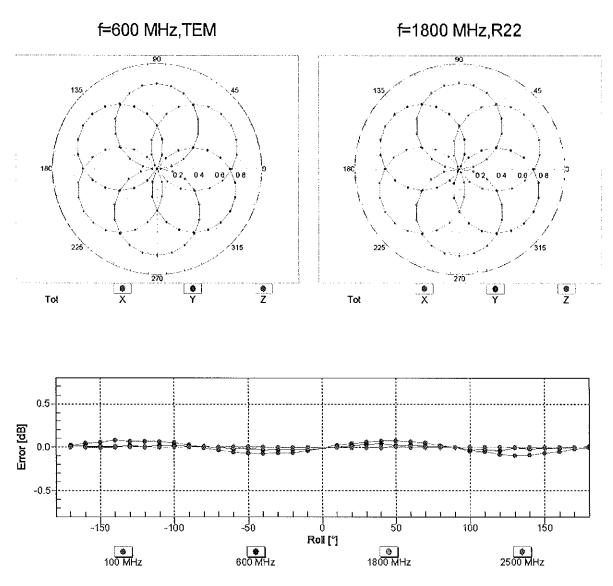
validity can be extended to \pm 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



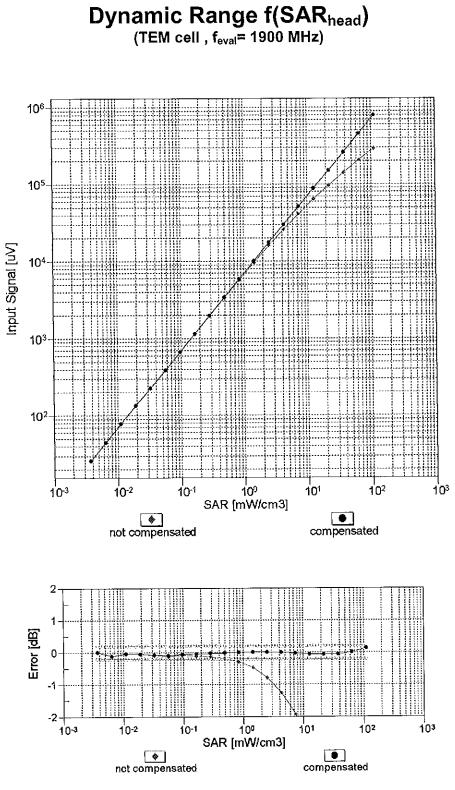
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

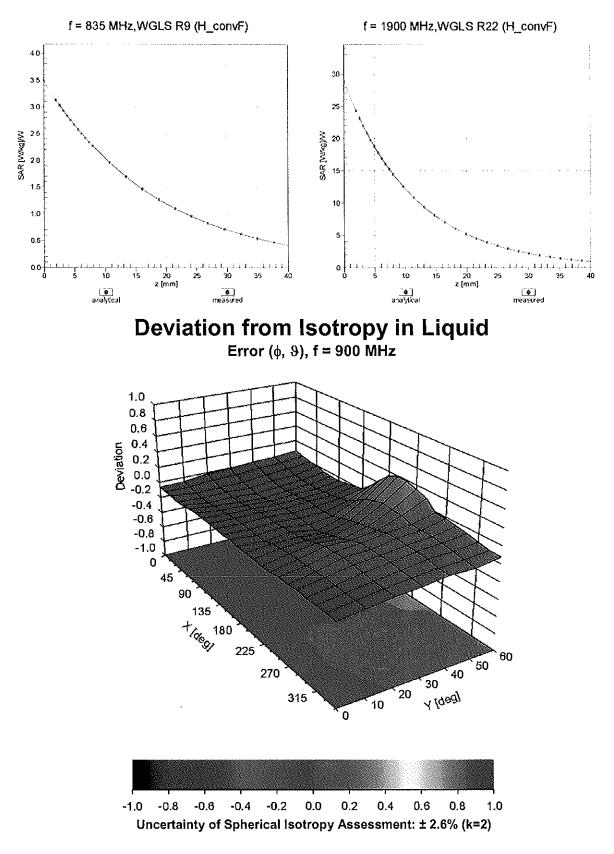


Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



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



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	50
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	192.0	± 3.5 %
		Y	0.00	0.00	1.00		194.3	
10010-	SAR Validation (Square, 100ms, 10ms)	ZX	0.00	0.00	1.00		179.9	
CAA	SALVandation (Square, 100ms, 10ms)		9.02	77.08	18.94	10.00	25.0	± 9.6 %
		Y	12.19	85.73	21.41		25.0	
10011-		Z	23.02	95.31	23.86	·	25.0	
CAB	UMTS-FDD (WCDMA)	X	1.60	76.05	19.77	0.00	150.0	±9.6 %
		Y	1.08	68.15	15.73		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	1.25	71.36	17.60		150.0	
CAB	Mbps)		1.52	68.53	17.98	0.41	150.0	± 9.6 %
		1 <	1.33	65.39	16.06		150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.37	66.35	16.79		150.0	
CAB	OFDM, 6 Mbps)	X	5.37	67.71	17.82	1.46	150.0	± 9.6 %
	1	Y	5.07	67.50	17.57		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z	4.99	67.81	17.71	0.00	150.0	
DAC		X	11.16	81.48	22.11	9.39	50.0	± 9.6 %
		Y	61.59	115.23	32.13		50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z X	100.00 11.07	122.78	33.35	0.57	50.0	
DAC				81.20	22.06	9.57	50.0	± 9.6 %
		Y	43.11	109.07	30.52		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z X	100.00 12.88	122.63 85.34	33.33 22.06	6.56	50.0 60.0	± 9.6 %
DAG		Y	100.00	120.15	31.36		60.0	
		Z	100.00	120.15	30.99	<u> </u>	60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	19.49	99.22	36.41	12.57	50.0	±9.6 %
		Y	15.67	100.74	38.44		50.0	
		Z	29.43	124.69	47.97		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	18.92	96.32	32.19	9.56	60.0	± 9.6 %
		Y	17.33	101.02	35.08		60.0	· · · · · · · · · · · · · · · · · · ·
		Z	24.89	113.23	39.81		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	24.19	95.70	24.33	4.80	80.0	± 9.6 %
		Y	100.00	119.30	30.03		80.0	
146		Z	100.00	120.36	30.17	1	80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	115.36	28.49	3.55	100.0	± 9.6 %
		Y	100.00	119.83	29.45		100.0	
10000		Z	100.00	122.10	30.18		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	16.27	93.78	30.32	7.80	80.0	± 9.6 %
		Y	11.67	92.24	30.90		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.37 15.68	97.80 88.86	33.46 22.54	5.30	80.0 70.0	± 9.6 %
CAA		Y	100.00	118.49	29.99	1	70.0	1
		Z	100.00	118.49	29.99		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	116.01	29.00	1.88	100.0	± 9.6 %
		Y	100.00	121.13	28.42		100.0	
		Z	100.00	121.13	30.32	1	100.0	

Certificate No: ES3-3332_Aug17

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	119.38	27.36	1.17	100.0	± 9.6 %
CAA						1.17	100.0	1 3.0 70
		Y	100.00	126.54	29.58		100.0	
		Z	100.00	136.16	33.43		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	13.27	88.21	24.10	5.30	70.0	± 9.6 %
		<u>Y</u>	20.91	99.02	27.13		70.0	
		Z	58.05	115.59	31.27		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	16.18	96.67	25.44	1.88	100.0	± 9.6 %
		Y	10.83	91.57	22.94		100.0	
10005		Z	52.78	113.06	28.24		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	12.45	95.04	24.79	1.17	100.0	± 9.6 %
		<u>Y</u>	5.49	83.70	20.10		100.0	
10036-	JEEE 202 45 1 Divetorth (0 DDDV(DU4)	Z	18.62	100.06	24.56		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	14.34	89.63	24.62	5.30	70.0	± 9.6 %
		Y	26.79	103.24	28.41		70.0	ļ
10037-	1666 902 15 1 Plusteath (0 DDDI/, D110)	Z	95.10	123.67	33.30	4	70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	15.98	96.45	25.32	1.88	100.0	± 9.6 %
		Y	9.62	89.98	22.43	ļ	100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	37.04	108.35	27.08		100.0	
CAA		X	13.91	96.94	25.41	1.17	100.0	± 9.6 %
		Y	5.69	84.50	20.47		100.0	
10039-		Z	19.52	101.18	25.01		100.0	
CAB	CDMA2000 (1xRTT, RC1)	X	3.28	80.46	20.53	0.00	150.0	± 9.6 %
		Y	1.92	73.09	15.89		150.0	
10010		Z	3.08	80.13	18.22		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	11.60	82.51	21.10	7.78	50.0	± 9.6 %
		Y	100.00	118.83	31.00		50.0	
40044		Z	100.00	118.47	30.39		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.02	128.88	9.05	0.00	150.0	± 9.6 %
		Y	0.00	96.92	0.26		150.0	
		Z	0.02	60.00	140.78		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	10.75	78.30	22.86	13.80	25.0	± 9.6 %
		Y	15.61	90.30	26.65		25.0	
10040		Z	32.75	104.57	30.45		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	10.92	80.23	22.15	10.79	40.0	± 9.6 %
<u>.</u>		Y	20.87	96.36	27.22		40.0	
10056-	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Z	64.62	115.72	32.06		40.0	
CAA	UMTS-TUD (TD-SCUMA, 1.28 Mcps)	X	11.51	81.76	22.84	9.03	50.0	± 9.6 %
		Y	15.28	90.93	25.77		50.0	
10058-	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Z	25.94	101.11	28.65		50.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	14.19	91.88	29.00	6.55	100.0	± 9.6 %
· · · ·		Y	8.68	86.53	28.09	<u> </u>	100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Z X	9.12 2.01	89.51 72.72	29.70 19.70	0.61	100.0 110.0	± 9.6 %
<u> </u>		Y	1.51	67.00	47.40	ļ	440.0	
		T Z	1.51	67.62 68.78	17.16	<u> </u>	110.0	
10060-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	X	100.00		17.99	1 20	110.0	
CAB	Mbps)			126.29	32.07	1.30	110.0	± 9.6 %
		Y	100.00	132.71	34.39		110.0	
		Z	100.00	137.07	36.21		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	36.66	112.50	30.92	2.04	110.0	± 9.6 %
		Y	11.07	98.15	27.76	i	110.0	
		Z	22.12	112.16	32.18		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	5.03	67.33	17.05	0.49	100.0	± 9.6 %
·		Y	4.77	67.19	16.82		100.0	
		Z	4.70	67.51	16.97		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	Х	5.09	67.56	17.23	0.72	100.0	± 9.6 %
		Y	4.81	67.36	16.96		100.0	
······		Z	4.74	67.68	17.11	·	100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.47	67.93	17.49	0.86	100.0	± 9.6 %
		Y	5.10	67.63	17.20		100.0	
10000		Z	5.00	67.90	17.32		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.40	68.08	17.70	1.21	100.0	±9.6 %
		Y	5.02	67.68	17.39		100.0	
		Z	4.92	67.92	17.50		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.49	68.31	17.98	1.46	100.0	± 9.6 %
		Y	5.08	67.82	17.62		100.0	
		Z	4.97	68.04	17.73		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.84	68.47	18.45	2.04	100.0	± 9.6 %
		Y	5.42	68.13	18.14		100.0	
		Z	5.31	68.42	18.28		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	6.07	69.08	18.91	2.55	100.0	±9.6 %
		Y	5.53	68.32	18.44		100.0	
		Z	5.39	68.51	18.54		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	6.13	68.90	19.06	2.67	100.0	± 9.6 %
		Y	5.61	68.37	18.66		100.0	
		Z	5.48	68.58	18.76		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.56	68.08	18.26	1.99	100.0	±9.6 %
		Y	5.22	67.75	17.96		100.0	
		Z	5.14	68.03	18.10		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.71	68.87	18.66	2.30	100.0	±9.6 %
		Y	5.28	68.28	18.29		100.0	
		Z	5.18	68.53	18.42		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.93	69.43	19.17	2.83	100.0	±9.6 %
		Y	5.43	68.68	18.74		100.0	
		Z	5.32	68.95	18.89		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	6.04	69.75	19.56	3.30	100.0	± 9.6 %
		Y	5.49	68.80	18.99		100.0	
		Z	5.38	69.07	19.15		100.0	
10075- CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	6.35	70.65	20.23	3.82	90.0	± 9.6 %
		Y	5.63	69.18	19.44		90.0	
		Z	5.49	69.37	19.56		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	6.37	70.50	20.38	4.15	90.0	±9.6 %
		Y	5.68	69.10	19.63		90.0	
		Z	5.56	69.34	19.78		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	6.43	70.65	20.50	4.30	90.0	± 9.6 %
		Y	5.73	69.22	19.75		90.0	
		Z	5.61	69.48	19.91		90.0	

10081-				1 00	1			
CAB	CDMA2000 (1xRTT, RC3)	X	1.62	75.66	18.40	0.00	150.0	±9.6 %
		Y	0.87	66.71	12.69		150.0	
10082-		Z	1.13	71.02	14.45		150.0	
CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	3.53	66.20	10.93	4.77	80.0	± 9.6 %
		Y	2.19	64.40	9.18		80.0	
		Z	1.96	64.15	8.74		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	12.79	85.25	22.06	6.56	60.0	± 9.6 %
		Y	100.00	120.23	31.42		60.0	
		Z	100.00	120.31	31.04		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.06	70.06	17.46	0.00	150.0	± 9.6 %
		Y	1.88	68.31	15.96		150.0	
		Z	2.04	70.38	16.98		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.02	70.12	17.47	0.00	150.0	± 9.6 %
		Y	1.84	68.27	15.94		150.0	·
		Z	2.00	70.37	16.98	1	150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	18.80	96.14	32.13	9.56	60.0	± 9.6 %
		Y	17.28	100.91	35.04		60.0	
		Z	24.81	113.10	39.77		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.84	73.61	18.19	0.00	150.0	± 9.6 %
		Y	3.15	70.58	16.91		150.0	
		Z	3.25	71.69	17.61		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.58	69.11	16.83	0.00	150.0	± 9.6 %
		Y	3.26	67.74	16.10		150.0	···
		Z	3.26	68.29	16.47	· · · · · ·	150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.66	68.88	16.84	0.00	150.0	±9.6 %
		Y	3.36	67.71	16.19		150.0	
		Z	3.36	68.23	16.52		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	9.75	77.78	20.81	3.98	65.0	± 9.6 %
		Y	8.78	79.16	21.83		65.0	
		Z	9.34	81.38	22.82		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	9.87	77.22	21.49	3.98	65.0	± 9.6 %
		Y	8.42	77.09	21.77	·	65.0	
<u> </u>		Ż	8.44	78.16	22.31		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	9.19	75.82	21.15	3.98	65.0	±9.6 %
		Y	8.07	76.20	21.66		65.0	
		Z	8.27	77.70	21.00	<u> </u>	65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.37	72.69	18.02	0.00	150.0	± 9.6 %
		Y	2.75	69.90	16.77		150.0	
		Ż	2.82	71.09	17.51	<u> </u>	150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.26	68.97	16.85	0.00	150.0	± 9.6 %
		Y	2.91	67.66	16.01		150.0	
40442		Z	2.92	68.36	16.42		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.79	71.81	17.85	0.00	150.0	±9.6 %
		Y	2.23	69.12	16.39		150.0	
		Z	2.31	70.62	17.23	· · ·	150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.96	69.58	17.27	0.00	150.0	± 9.6 %
		Y	2.63	68.64	16.31		150.0	
		Z	2.69	69.84	16.85		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.36	68.71	16.80	0.00	150.0	± 9.6 %
		Y	3.03	67.66	16.06		150.0	
		Z	3.04	68.35	16.45		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	3.10	69.46	17.27	0.00	150.0	± 9.6 %
		Y	2.78	68.78	16.44	İ	150.0	
		Z	2.83	69.92	16.93		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	Х	5.34	67.65	16.76	0.00	150.0	± 9.6 %
		Y	5.17	67.50	16.64		150.0	
		Z	5.08	67.64	16.74		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.80	68.17	17.01	0.00	150.0	± 9.6 %
		Y	5.44	67.60	16.69		150.0	
		Z	5.33	67.71	16.77		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.47	67.90	16.79	0.00	150.0	±9.6 %
		Y	5.25	67.68	16.65		150.0	
		Z	5.17	67.85	16.77		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.34	67.65	16.78	0.00	150.0	± 9.6 %
		Y	5.12	67.32	16.56		150.0	
		Z	5.07	67.59	16.73		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.79	68.04	16.95	0.00	150.0	± 9.6 %
		Y	5.52	67.82	16.81		150.0	
		Z	5.42	67.93	16.89		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.44	67.84	16.78	0.00	150.0	± 9.6 %
		Y	5.24	67.66	16.65		150.0	
		Z	5.17	67.84	16.77		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.72	68.86	16.76	0.00	150.0	± 9.6 %
		Y	3.39	67.72	16.10		150.0	
		Z	3.39	68.26	16.45		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.82	68.79	16.84	0.00	150.0	± 9.6 %
		Y	3.51	67.83	16.27		150.0	
		Z	3.51	68.36	16.60		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.57	71.96	17.88	0.00	150.0	±9.6 %
		Y	2.01	69.21	16.02		150.0	
		Z	2.13	71.18	16.95		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.89	70.53	17.42	0.00	150.0	±9.6 %
		Y	2.49	69.45	15.95		150.0	
		Z	2.62	71.11	16.52		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.69	68.52	16.05	0.00	150.0	± 9.6 %
		Y	2.23	66.92	14.20		150.0	
		Z	2.23	67.85	14.42		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	2.07	72.06	16.97	0.00	150.0	± 9.6 %
		Y	1.17	64.90	11.31		150.0	
		Z	1.08	64.84	10.72		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.64	77.66	18.95	0.00	150.0	± 9.6 %
		Y	1.89	66.33	11.57		150.0	
		Z	1.28	62.78	8.70		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	5.86	81.36	20.54	0.00	150.0	±9.6 %
		Y	2.26	68.50	12.73		150.0	
		Z		63.59				

Certificate No: ES3-3332_Aug17

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.27	69.03	16.89	0.00	150.0	± 9.6 %
		Y	2.92	67.72	16.06		150.0	╂────
		Ż	2.93	68.43	16.47		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.37	68.76	16.84	0.00	150.0	± 9.6 %
		Y	3.04	67.71	16.11	· · · · · · · · · · · · · · · · · · ·	150.0	<u> </u>
		Z	3.05	68.41	16.50		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.88	78.98	21.39	3.98	65.0	± 9.6 %
		Y	9.54	82.00	22.98		65.0	1
		Z	10.52	85.01	24.21		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	9.59	77.49	21.44	3.98	65.0	± 9.6 %
		Y	8.05	77.33	21.53		65.0	
		Z	8.15	78.63	22.11		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	9.88	78.01	21.96	3.98	65.0	± 9.6 %
		Y	8.51	78.32	22.28		65.0	
		Z	8.64	79.68	22.87		65.0	1
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.88	72.43	18.21	0.00	150.0	± 9.6 %
		Y	2.28	69.53	16.65		150.0	
		Z	2.36	71.01	17.47		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.96	69.57	17.27	0.00	150.0	± 9.6 %
		Y	2.63	68.66	16.33		150.0	1
		Z	2.70	69.87	16.88		150.0	1
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.50	72.75	18.17	0.00	150.0	± 9.6 %
		Y	1.86	69.32	15.77		150.0	
		Z	2.00	71.53	16.72		150.0	· · · · · ·
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.58	69.56	16.46	0.00	150.0	± 9.6 %
		Y	2.07	67.52	14.21		150.0	
		Z	2.11	68.66	14.46		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.11	69.51	17.31	0.00	150.0	± 9.6 %
·		Y	2.79	68.85	16.49		150.0	
		Z	2.84	70.00	16.99		150.0	1
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.70	69.94	16.71	0.00	150.0	± 9.6 %
		Y	2.17	67.94	14.47	· · · ·	150.0	· · ·
		Z	2.21	69.05	14.68		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.17	70.70	17.47	0.00	150.0	±9.6 %
		Y	2.80	69.22	16.63		150.0	
		Z	2.84	70.27	17.24		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.25	68.62	16.80	0.00	150.0	± 9.6 %
		Y	2.93	67.68	16.03		150.0	
		Z	2.94	68.43	16.42		150.0	<u>↑</u>
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.34	68.54	16.80	0.00	150.0	± 9.6 %
·		Y	3.04	67.85	16.15		150.0	
10100		Z	3.05	68.62	16.54		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.29	71.19	20.11	3.01	150.0	± 9.6 %
·		Y	3.58	69.86	19.45		150.0	
		Z	3.34	69.55	19.26	· ·	150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	5.65	74.34	20.64	3.01	150.0	± 9.6 %
		Y	4.34	72.64	19.86		150.0	
		Z	3.97	72.28	19.65		150.0	

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.08	75.90	21.58	3.01	150.0	± 9.6 %
		Y	4.83	75.01	21.26		150.0	
		Ż	4.38	74.50	20.98		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.41	74.54	21.42	3.01	150.0	± 9.6 %
		Y	2.96	68.83	19.02		150.0	
		Z	2.72	67.99	18.57		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	6.70	80.82	23.44	3.01	150.0	± 9.6 %
		Y	3.91	74.17	21.18		150.0	
40474		Z	3.42	72.70	20.49		150.0]
	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	5.50	76.54	20.93	3.01	150.0	± 9.6 %
		Y	3.29	70.45	18.57		150.0	
40470	ITC TOD (00 FOMA (DD 00 ML)	Z	2.94	69.58	18.14		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	25.76	101.07	30.32	6.02	65.0	± 9.6 %
		1	18.45	102.75	32.10		65.0	
10170		Z	20.86	107.70	33.85		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	19.21	92.24	26.33	6.02	65.0	± 9.6 %
		Y	26.29	105.14	31.12		65.0	
40474		Z	28.49	108.55	32.12		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	17.46	89.68	25.13	6.02	65.0	± 9.6 %
		Y	21.35	100.13	29.12		65.0	
40475		Z	22.92	103.28	30.05		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.34	74.12	21.15	3.01	150.0	±9.6 %
		Y	2.93	68.55	18.79		150.0	
		Z	2.70	67.77	18.36		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	6.71	80.84	23.45	3.01	150.0	±9.6 %
		Y	3.92	74.20	21.19		150.0	
		Z	3.42	72.72	20.50		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	4.38	74.32	21.26	3.01	150.0	± 9.6 %
		Y	2.95	68.69	18.87		150.0	
		Z	2.71	67.87	18.43		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	6.59	80.50	23.29	3.01	150.0	± 9.6 %
		Y	3.89	74.02	21.09		150.0	
		Z	3.41	72.61	20.43		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	6.03	78.45	22.01	3.01	150.0	±9.6 %
		Y	3.58	72.24	19.76		150.0	
		Z	3.16	71.11	19.23		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	5.47	76.42	20.86	3.01	150.0	±9.6 %
		Y	3.28	70.40	18.53		150.0	
		Z	2.94	69.55	18.12		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.38	74.30	21.25	3.01	150.0	± 9.6 %
		Y	2.95	68.67	18.87		150.0	
		Z	2.71	67.86	18.43		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	6.58	80.48	23.29	3.01	150.0	± 9.6 %
		Y	3.88	74.00	21.08		150.0	
		Z	3.40	72.59	20.42		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	5.46	76.40	20.85	3.01	150.0	± 9.6 %
		Y	3.28	70.38	18.52		150.0	
		Z	2.93	69.53	18.11	I.	150.0	

10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	4.39	74.34	21.27	3.01	150.0	± 9.6 %
CAD	QPSK)	 						
		Y	2.96	68.71	18.89		150.0	
40405		Z	2.72	67.89	18.44		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	6.61	80.55	23.32	3.01	150.0	± 9.6 %
		Y	3.90	74.06	21.11		150.0	
		Z	3,42	72.64	20.45		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	5.49	76.46	20.88	3.01	150.0	± 9.6 %
		Υ	3.29	70.44	18.55		150.0	
40407		Z	2.95	69.59	18.14		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	4.40	74.38	21.31	3.01	150.0	± 9.6 %
		Y	2.97	68.77	18.95		150.0	
10188-		Z	2.73	67.95	18.51		150.0	
CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	×	6.86	81.30	23.70	3.01	150.0	±9.6 %
		Y	4.01	74.64	21.46		150.0	
40400		Z	3.49	73.09	20.74		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	5.63	76.95	21.16	3.01	150.0	± 9.6 %
		Y	3.36	70.82	18.81		150.0	
40400		Z	3.00	69.90	18.37		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	×	4.76	66.98	16.56	0.00	150.0	±9.6 %
		Y	4.53	66.89	16.29		150.0	· · · · ·
		Z	4.48	67.27	16.46		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.98	67.40	16.66	0.00	150.0	± 9.6 %
		Y	4.70	67.19	16.42		150.0	
		Z	4.63	67.53	16.59		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	5.02	67.38	16.65	0.00	150.0	± 9.6 %
		ΙΥ	4.74	67.22	16.44		150.0	·
.		Z	4.67	67.55	16.61		150.0	· · · · · · · · · · · · · · · · · · ·
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.79	67.12	16.61	0.00	150.0	± 9.6 %
		Y	4.53	66.94	16.30		150.0	· · · · · · · · · · · · · · · · · · ·
		Z	4.47	67.29	16.46		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	5.00	67.41	16.67	0.00	150.0	± 9.6 %
		Y	4.71	67.21	16.43		150.0	······································
		Z	4.64	67.54	16.60		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	5.02	67.39	16.66	0.00	150.0	± 9.6 %
		Y	4.74	67.23	16.45	·	150.0	
		Z	4.67	67.55	16.61		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.75	67.15	16.58	0.00	150.0	± 9.6 %
		Y	4.48	66.96	16.27		150.0	···-
		Ζ	4.43	67.33	16.43		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	5.00	67.42	16.67	0.00	150.0	±9.6 %
		Y	4.70	67.17	16.42		150.0	
1		Z	4.63	67.50	16.58		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	5.03	67.33	16.65	0.00	150.0	±9.6 %
		Y	4.75	67.16	16.44		150.0	
		Z	4.68	67.49	16.60		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.32	67.70	16.79	0.00	150.0	± 9.6 %
		Y	5.10	67.32	16.56		150.0	

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.69	67.90	16.90	0.00	150.0	± 9.6 %
		Y	5.41	67.62	16.73		150.0	·
		Z	5.32	67.79	16.83		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.40	67.86	16.79	0.00	150.0	± 9.6 %
		Y	5.14	67.44	16.54		150.0	
		Z	5.08	67.68	16.69		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	3.04	66.91	16.27	0.00	150.0	± 9.6 %
		Y	2.80	66.45	15.40		150.0	
		Z	2.79	67.13	15.62		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	19.62	92.68	26.54	6.02	65.0	± 9.6 %
		Y	28.14	106.53	31.60		65.0	
.		Z	30.74	110.09	32.63		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	17.31	89.65	25.20	6.02	65.0	± 9.6 %
		Y	25.62	103.45	30.17	·	65.0	
		Z	27.71	106.63	31.05		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	25.12	101.14	30.46	6.02	65.0	± 9.6 %
		Y	22.85	107.40	33.58		65.0	
		Z	23.56	110.42	34.69		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	19.21	92.22	26.33	6.02	65.0	± 9.6 %
		Y	26.37	105.18	31.14		65.0	·
		Z	28.56	108.58	32.13		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	16.99	89.27	25.02	6.02	65.0	± 9.6 %
		Y	24.08	102.25	29.76		65.0	
		Z	25.76	105.25	30.60		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	24.47	100.57	30.23	6.02	65.0	± 9.6 %
		Y	21.54	106.10	33.13		65.0	
_		Z	22.10	109.02	34.22		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	19.21	92.23	26.33	6.02	65.0	± 9.6 %
		Y	26.35	105.17	31.13		65.0	
		Z	28.56	108.59	32.14		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	16.99	89.29	25.03	6.02	65.0	± 9.6 %
		Y	24.05	102.24	29.76		65.0	
		Z	25.73	105.25	30.60		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	23.75	99.87	29.94	6.02	65.0	± 9.6 %
		Y	20.44	104.88	32.66		65.0	
		Z	20.94	107.73	33.73		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	19.23	92.26	26.34	6.02	65.0	± 9.6 %
		Y	26.43	105.24	31.16		65.0	
		Z	28.68	108.68	32.16		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	17.05	89.34	25.04	6.02	65.0	± 9.6 %
		Y	24.28	102.38	29.79		65.0	
		Z	26.05	105.43	30.64		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	24.65	100.72	30.28	6.02	65.0	± 9.6 %
		Y	21.67	106.26	33.17		65.0	
		Z	22.28	109.22	34.28		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	19.21	92.24	26.33	6.02	65.0	± 9.6 %
		Y	26.34	105.18	31.13		65.0	
		Z	28.55	108.60	32.14		65.0	

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	17.00	89.31	25.04	6.02	65.0	± 9.6 %
		Y	24.00	102.22	29.75		65.0	
		Z	25.68	105.23	30.60		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	24.60	100.69	30.26	6.02	65.0	± 9.6 %
		Y	21.61	106.21	33.16		65.0	
		Z	22.24	109.18	34.27		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	14.83	87.15	27.43	6.98	65.0	± 9.6 %
		Y	11.87	87.25	27.69		65.0	
		Z	12.27	89.81	28.71		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	14.03	85.86	26.85	6.98	65.0	± 9.6 %
		Y	11.07	85.73	27.03		65.0	
		Z	11.88	89.15	28.39		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	12.50	85.61	27.61	6.98	65.0	± 9.6 %
		Y	8.91	82.53	26.67		65.0	
100.000		Z	9.40	85.62	28.06		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.84	80.28	21.46	3.98	65.0	± 9.6 %
		Y	8.60	79.06	19.82		65.0	
		Z	7.30	76.79	18.14		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.80	80.00	21.33	3.98	65.0	± 9.6 %
		Y	8.32	78.30	19.47		65.0	
		Z	7.01	75.95	17.75		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.19	81.67	21.72	3.98	65.0	± 9.6 %
		Y	9.19	82.92	21.40		65.0	
		Z	10.28	85.26	21.82		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	9.24	78.33	20.99	3.98	65.0	± 9.6 %
		Y	7.42	77.41	19.87		65.0	
		Z	7.44	78.18	19.81		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	9.29	78.02	20.88	3.98	65.0	± 9.6 %
		Y	7.28	76.69	19.57		65.0	
		Ζ	7.17	77.21	19.40		65.0	}
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.52	82.18	22.29	3.98	65.0	± 9.6 %
		Y	10.94	86.37	23.51		65.0	
		Z	13.59	90.89	24.82		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	9.84	79.38	22.27	3.98	65.0	± 9.6 %
		Y	8.59	80.24	22.59		65.0	
4005 /		Z	8.91	81.95	23.17		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	9.48	77.77	21.45	3.98	65.0	± 9.6 %
		Y	7.96	77.76	21.28		65.0	
40070		Z	8.06	79.03	21.69		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.35	81.23	22.32	3.98	65.0	± 9.6 %
		Y	10.67	85.75	24.25		65.0	
10253-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X	12.80 9.41	90.26 77.10	25.85 21.37	3.98	65.0 65.0	± 9.6 %
CAD	16-QAM)							ļ
		Y	7.89	76.83	21.30		65.0	ļ
10054		Z	7.98	78.11	21.82		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	9.73	77.64	21.86	3.98	65.0	± 9.6 %
		Y	8.31	77.74	21.96		65.0	
		Z	8.42	79.03	22.48		65.0	

E\$3DV3- \$N:3332

August 14, 2017

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.76	78.98	21.63	3.98	65.0	± 9.6 %
		Y	9.21	81.58	22.99		65.0	ł
		Z	10.10	84.50	24.17		65.0	<u> -</u>
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	10.36	79.33	20.55	3.98	65.0	± 9.6 %
		Y	6.89	75.10	17.29		65.0	1
· · · · · · · · · · · · · · · · · · ·		Z	5.38	71.84	15.02		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	10.33	78.98	20.36	3.98	65.0	±9.6 %
		Y	6.60	74.15	16.79		65.0	· · · · ·
		Z	5.14	70.90	14.50		65.0	1
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.84	80.89	21.06	3.98	65.0	± 9.6 %
		Y	6.93	77.80	18.67		65.0	
10050		Z	6.67	77.68	18.06		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	9.48	78.65	21.42	3.98	65.0	± 9.6 %
		Υ	7.89	78.48	20.85		65.0	1
		Z	8.05	79.67	21.05		65.0	1
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	9.52	78.48	21.39	3.98	65.0	± 9.6 %
		Y	7.84	78.08	20.70		65.0	
		Z	7.93	79.11	20.83		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.28	81.56	22.27	3.98	65.0	± 9.6 %
		Y	10.28	85.25	23.51		65.0	
		Z	12.40	89.51	24.85		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	9.83	79.35	22.25	3.98	65.0	± 9.6 %
		Y	8.56	80.18	22.55		65.0	
		Z	8.88	81.87	23.12		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	9.48	77.78	21.46	3.98	65.0	± 9.6 %
		Y	7.94	77.74	21.28		65.0	1
		Z	8.05	79.01	21.68	•	65.0	İ
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.32	81.15	22.28	3.98	65.0	± 9.6 %
		Y	10.57	85.55	24.15		65.0	
		Z	12.63	90.00	25.74		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	9.59	77.50	21.45	3.98	65.0	± 9.6 %
		Y	8.04	77.33	21.54		65.0	
		Z	8.14	78.63	22.11		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	9.89	78.01	21.96	3.98	65.0	± 9.6 %
		Y	8.50	78.31	22.27		65.0	
		Z	8.64	79.67	22.86		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.88	78.96	21.38	3.98	65.0	±9.6 %
		Y	9.52	81.96	22.96		65.0	
		Z	10.50	84.95	24.19		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	9.95	76.96	21.54	3.98	65.0	± 9.6 %
		Y	8.52	76.88	21.79		65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	Z X	8.53 9.89	77.92 76.68	22.30 21.52	3.98	65.0 65.0	± 9.6 %
CAD	MHz, 64-QAM)	+	A + 2				L	
		Y	8.46	76.46	21.67		65.0	
40070		Z	8.45	77.44	22.15		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	9.66	77.24	20.86	3.98	65.0	±9.6 %
		Y	8.81	78.78	21.90		65.0	
		Z	9.16	80.58	22.73		65.0	

Certificate No: ES3-3332_Aug17

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.74	67.26	16.17	0.00	150.0	± 9.6 %
		Y	2.61	66.92	15.38		150.0	
		Z	2.66	67.94	15.80		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	2.05	72.21	18.03	0.00	150.0	± 9.6 %
		Y	1.65	68.50	15.87		150.0	1
		Z	1.80	70.74	17.08		150.0	
10277- CAA	PHS (QPSK)	X	8.03	72.61	16.76	9.03	50.0	± 9.6 %
		Υ	5.31	69.07	13.45		50.0	
		Z	4.52	67.70	12.08		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.53	79.27	21.29	9.03	50.0	± 9.6 %
		Y	8.21	77.64	19.35		50.0	
10070		Z	7.62	76.93	18.36		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	10.71	79.48	21.37	9.03	50.0	± 9.6 %
		Y	8.29	77.74	19.41		50.0	
40000		Z	7.68	77.01	18.42	<u> </u>	50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.46	75.92	18.53	0.00	150.0	± 9.6 %
		Y	1.45	69.17	13.90		150.0	
10004		Z	1.74	72.52	15.01		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.54	75.02	18.13	0.00	150.0	±9.6 %
		Y	0.85	66.46	12.55		150.0	
40000		Z	1.09	70.54	14.22		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	2.85	86.00	22.76	0.00	150.0	± 9.6 %
		Y	1.20	72.00	15.52		150.0	
		Z	3.37	86.48	20.58	<u> </u>	150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	6.08	98.98	27.50	0.00	150.0	± 9.6 %
		Y	2.38	81.80	19.81		150.0	
10005		Z	91.77	132.75	32.89		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.42	82.00	23.75	9.03	50.0	± 9.6 %
		Y	13.54	88.04	25.23		50.0	
	·····	Ζ	20.14	95.71	27.34		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.39	72.81	18.09	0.00	150.0	± 9.6 %
		Y	2.76	70.00	16.84		150.0	
		Z	2.84	71.20	17.58		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	2.33	72.89	17.78	0.00	150.0	± 9.6 %
		Y	1.54	67.89	13.96		150.0	
40000		Z	1.61	69.51	14.40		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.61	76.96	19.19	0.00	150.0	±9.6 %
		Y	2.70	70.48	14.61		150.0	
40200		Z	1.96	66.96	12.10		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.49	71.59	16.26	0.00	150.0	± 9.6 %
		Y	1.91	65.24	11.36		150.0	
40004		Z	1.47	63.13	9.40		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	6.59	70.34	20.04	4.17	80.0	± 9.6 %
		Y	5.68	68.74	18.85		80.0	
10000		Z	5.70	69.67	19.26		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	7.28	71.73	21.22	4.96	80.0	± 9.6 %
		Y	6.10	69.04	19.43		80.0	
		Z	6.04	69.77	19.77		80.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	7.35	72.51	21.62	4.96	80.0	± 9.6 %
	1014112, 040(A1V), FUSU)	Y	E 0.4	00.00		<u> </u>	l	
· · · · · ·			5.94	69.06	19.41		80.0	ļ
10304-	IEEE 802.16e WiMAX (29:18, 5ms,	Z X	5.89	69.82	19.76		80.0	
AAA	10MHz, 64QAM, PUSC)		6.69	70.97	20.39	4.17	80.0	± 9.6 %
		Y	5.59	68.42	18.66		80.0	
10205		Z	5.56	69.20	19.00		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	14.75	90.64	29.58	6.02	50.0	± 9.6 %
		Y	10.18	84.38	26.41		50.0	
10000		Z	10.30	85.54	26.72		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	9.44	79.58	25.56	6.02	50.0	± 9.6 %
·		Y	7.33	75.98	23.40		50.0	
		Z	6.44	73.04	21.64		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	10.22	81.50	26.08	6.02	50.0	± 9.6 %
		Y	7.67	77.32	23.80		50.0	
		Z	7.49	77.77	23.93		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	10.67	82.66	26.55	6.02	50.0	± 9.6 %
		Y	7.93	78.29	24.23		50.0	
		Z	7.77	78.85	24.42	·	50.0	· · · · · · · · · · · · · · · · · · ·
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	9.59	79.83	25.67	6.02	50.0	±9.6 %
		Y	7.43	76.26	23.57		50.0	···· ··· ···
		Z	6.50	73.23	21.79	·	50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	9.69	80.24	25.70	6.02	50.0	± 9.6 %
		Y	7.48	76.59	23.59		50.0	
		Z	7.35	77.19	23.79		50.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.76	71.88	17.62	0.00	150.0	± 9.6 %
		Y	3.12	69.22	16.46		150.0	
		Z	3.20	70.27	17.11		150.0	
10313- AAA	iDEN 1:3	X	8.04	75.55	17.71	6.99	70.0	± 9.6 %
		Y	8.89	81.65	20.17		70.0	
		Z	12.54	87.83	22.26		70.0	
10314- AAA	IDEN 1:6	X	10.06	79.94	21.38	10.00	30.0	± 9.6 %
		Y	12.66	89.89	25.48	·	30.0	
		Z	20.06	99.62	28.65		30.0	
10315- AAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.30	67.68	17.69	0.17	150.0	± 9.6 %
		Y	1.18	64.90	15.80		150.0	· · · · ·
		Ż	1.23	65.94	16.59		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	x	4.90	67.26	16.78	0.17	150.0	± 9.6 %
		Y	4.64	67.10	16.54	· · ·	150.0	
		Z	4.58	67.43	16.69		150.0	h -
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.90	67.26	16.78	0.17	150.0	±9.6 %
		Y	4.64	67.10	16.54		150.0	
		Ż	4.58	67.43	16.69		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	5.01	67.47	16.66	0.00	150.0	±9.6%
		Y	4.68	67.24	16.42		150.0	· · · · · · · · · · · · · · · · · · ·
	1	Z	4.61	67.58	16.60		150.0	
10401-					1 10.00		100.0	
	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.58	67.43	16.66	0.00	150.0	± 9.6 %
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)					0.00	150.0 150.0	± 9.6 %

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.90	68.07	16.80	0.00	150.0	± 9.6 %
		Y	5.66	67.67	16.59		150.0	
		Z	5.60	67.87	16.71		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.46	75.92	18.53	0.00	115.0	± 9.6 %
		Y	1.45	69.17	13.90		115.0	<u> </u>
		Z	1.74	72.52	15.01		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.46	75.92	18.53	0.00	115.0	±9.6 %
		Y	1.45	69.17	13.90		115.0	
		Z	1.74	72.52	15.01		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	38.96	111.40	30.01	0.00	100.0	± 9.6 %
		Y	96.63	125.46	32.24		100.0	
10110		Z	100.00	123.89	30.87		100.0	
10410- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	79.33	113.95	29.40	3.23	80.0	± 9.6 %
		Y	100.00	123.80	32.02		80.0	
40445		Z	100.00	124.20	31.74		80.0	
10415- AAA	IEEE 802.11b WiFl 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.01	64.64	16.23	0.00	150.0	± 9.6 %
		Y	1.03	63.36	14.90		150.0	
10110		Z	1.08	64.37	15.69		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.76	67.00	16.58	0.00	150.0	± 9.6 %
		Y	4.53	66.92	16.37		150.0	
40447		Z	4.48	67.28	16.53		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.76	67.00	16.58	0.00	150.0	± 9.6 %
		Y	4.53	66.92	16.37		150.0	
10110		Z	4.48	67.28	16.53		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.74	67.14	16.57	0.00	150.0	± 9.6 %
		Y	4.53	67.10	16.40		150.0	
		Z	4.48	67.49	16. <u>5</u> 9	-	150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.77	67.10	16.59	0.00	150.0	± 9.6 %
		Y	4.55	67.04	16.39		150.0	
		Z	4.49	67.42	16.58		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.90	67.10	16.59	0.00	150.0	± 9.6 %
		Υ	4.66	67.03	16.41		150.0	1
		Z	4.60	67.38	16.58		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	5.14	67.54	16.75	0.00	150.0	± 9.6 %
		Y	4.81	67.33	16.51		150.0	
101		Z	4.74	67.65	16.67		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	×	5.04	67.47	16.71	0.00	150.0	± 9.6 %
		Y	4.74	67.28	16.49		150.0	
10105		Z	4.66	67.61	16.65		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.61	67.86	16.86	0.00	150.0	± 9.6 %
		Y	5.36	67.59	16.69		150.0	
10.0-		Z	5.29	67.80	16.81		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.62	67.87	16.86	0.00	150.0	±9.6 %
		Y	5.40	67.74	16.76	· · · · · ·	150.0	·
		Z	5.31	67.91	10.10		100.0	

V 5.39 67.63 167.60 150.0 10430. LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) X 4.60 70.33 18.46 0.00 150.0 ± 8.6 % AB Y 4.28 71.46 18.38 150.0 ± 8.6 % IO431. LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4.56 67.66 16.75 0.00 150.0 ± 9.6 % IO432. LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.56 67.65 16.72 0.00 150.0 ± 9.6 % IO432. LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 150.0 ± 9.6 % AB Z 4.43 67.74 16.61 150.0 ± 9.6 % AB Z 4.43 67.74 16.61 150.0 ± 9.6 % AB Z 4.43 67.74 16.43 150.0 ± 9.6 % AB Z 4.68 67.64 16.75 0.00 150.0 ± 9.6 % <t< th=""><th>10427- AAA</th><th>IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)</th><th>X</th><th>5.65</th><th>67.92</th><th>16.88</th><th>0.00</th><th>150.0</th><th>± 9.6 %</th></t<>	10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.65	67.92	16.88	0.00	150.0	± 9.6 %
10430- AAB LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) X 4,50 77.03 18,46 0.00 150.0 ± 9.6 % 10431- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4,26 77.32 18,66 150.0 ± 9.6 % 10431- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4,56 67.66 16.75 0.00 150.0 ± 9.6 % 10432- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.63 67.55 16.72 0.00 150.0 ± 9.6 % 10432- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 4.63 67.54 16.61 150.0 ± 9.6 % 10433- LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.67 150.0 ± 9.6 % 10434- MAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 160.0 ± 9.6 % 10435- LTE-TDD (SC-FDMA, 1 RB, 20 MHz, CIPSK, UL Subframez, 3.4,7,8,9) Y 70.07 112.66 29.06 3.23 80.0 ± 9.6 % 10447- LTE-TDD (SC-FDMA, 1 RB, 20 MHz, CIPSK, UL Subframez, 3.4,7,8,9)				5 30	67.62	46.70	·	450.0	
10430- AB LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) X 4.50 70.33 18.46 0.00 150.0 ± 9.6 % 10431- AB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4.56 67.60 16.75 0.00 150.0 10431- AB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4.56 67.50 16.75 0.00 150.0 ± 9.6 % 10432- AB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 150.0 ± 9.6 % 10432- AB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % 10433- AB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % 10434- AAB V-CDMA (BS Test Model 1, 64 DPCH) X 4.56 70.97 18.48 0.00 150.0 ± 9.6 % 10444- AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.56 70.87 18.48 0.60 160.0 ± 9.6 % 10445- CHE-TDD (SC-FDMA, 1 RB, 20 MHz, AC 73.07 112.66 29.06 3.23 60.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAB Find Find <thf< td=""><td>10430-</td><td></td><td></td><td>* ··· ··· ···</td><td></td><td></td><td></td><td></td><td></td></thf<>	10430-			* ··· ··· ···					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
10431. LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4.56 67.66 16.75 0.00 150.0 ± 9.6 % AAB Y 4.19 67.71 16.63 160.0 150.0 ± 9.6 % I0432. LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 150.0 ± 9.6 % AAB Y 4.50 67.35 16.43 160.0 ± 9.6 % I0433. LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.74 16.75 0.00 150.0 ± 9.6 % AAB Y 4.56 67.32 16.61 150.0 ± 9.6 % AAB Y 4.58 70.37 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.32 150.0 ± 9.6 % AAA Y 4.39 72.38 18.48 150.0 ± 9.6 % AAA Y 100.00 123.60 31.93 80.0 ± 9.6 % AAA CIPPSK, UL Subframe=2,3.4.7,8.9 Y 100.00 123.60 31.64 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>150.0</td><td></td></t<>								150.0	
10431. LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) X 4.56 67.66 16.75 0.00 150.0 ± 9.6 % AB Z 4.12 67.51 16.33 160.0 10432. LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 150.0 ± 9.6 % AAB Y 4.50 67.35 16.61 160.0 ± 9.6 % 10433. LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.74 16.61 150.0 ± 9.6 % AAB Y 4.75 67.32 16.51 150.0 ± 9.6 % I0434. W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.79 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.32 160.0 ± 9.6 % A.64 150.0 ± 9.6 % A.64 150.0 ± 9.6 % A.64 16.67 150.0 ± 9.6 % A.64 150.0 ± 9.6 % A.64 16.67 150.0 ± 9.6 % A.64 150.0 ± 9.6 % A.64 16.00 150.0 ± 9.6 %			Z	4.28	72.32	18.56		150.0	
Z 4.12 67.97 16.50 150.0 AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 150.0 ± 9.6 % AAB Z 4.43 67.36 16.43 150.0 ± 9.6 % AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % AAB Y 4.75 67.22 16.51 150.0 ± 9.6 % AAA Y 4.75 67.22 16.51 150.0 ± 9.6 % AAA Y 4.39 72.38 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.48 150.0 ± 9.6 % AAC QPSK, UL Subframe=2.34,7.8,9) Y 100.00 123.89 31.64 80.0 10447- LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, X 3.91 67.87 16.49 0.00 150.0 ± 9.6 % AAB LTE-FDD (OFDMA, 16 MHz, E-TM 3.		LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.56			0.00		± 9.6 %
Class- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.82 4.83 67.55 16.72 16.73 0.00 150.0 ± 9.6 % AAB Y 4.60 67.35 16.73 16.83 150.0 ± 9.6 % AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.71 150.0 ± 9.6 % AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.71 150.0 ± 9.6 % AAA Y 4.76 67.32 16.61 150.0 ± 9.6 % AAA Y 4.39 72.38 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.48 150.0 ± 9.6 % AAA Z 4.42 73.07 112.66 29.06 3.23 80.0 ± 9.6 % AAS QPSK ULSubframe=2,34,78,9) Y 100.00 123.86 31.64 80.0 10447- LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, X 3.91 67.87 16.49<			Y	4.19	67.51	16.33		150.0	
10432. AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) X 4.83 67.55 16.72 0.00 156.0 10433. AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.61 160.0 ±9.6 % 10433. AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ±9.6 % 10434- MAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ±9.6 % AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ±9.6 % AAA UTE-FDD (SC-FDMA, 1 R8, 20 MHz, AAC QPSK, UL Subframe=2,3.4.7,8,9) Y 73.07 112.66 29.06 3.23 80.0 ± 9.6 % AAB Clippin 44%) Y 3.41 66.80 156.2 150.0 10444- LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AB X 4.36 67.43 16.81 0.00 150.0 ± 9.6 % 10444- LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AB			Z	4.12	67.97	16.50			
Intersection Z 4.43 67.74 16.61 150.0 AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % 10434- AAB W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % 10434- MAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % AAA Y 4.33 72.38 18.32 150.0 ± 9.6 % AAC GPSK, UL Subframe=2,3.4,7,8,9) Y 100.00 123.60 31.93 80.0 ± 9.6 % AAC GPSK, UL Subframe=2,3.4,7,8,9) Y 100.00 123.60 31.93 80.0 ± 9.6 % AAB Clipping 44%) Y 3.47 67.50 16.53 150.0 ± 9.6 % AAB Clipping 44%) Y 3.47 67.63 16.61 0.00 150.0 ± 9.6 % AAB Clipping 44%)		LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X				0.00		± 9.6 %
Z 4.43 67.74 16.61 150.0 AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % AAB Y 4.75 67.32 16.51 150.0 ± 9.6 % 10434- W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % AAA			Y	4.50	67.35	16.43		150.0	
10433- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) X 5.06 67.54 16.75 0.00 150.0 ± 9.6 % 10434- AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.88 67.64 16.67 150.0 ± 9.6 % 10434- AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.88 67.64 16.67 150.0 ± 9.6 % 10435- AAC LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 73.07 112.66 29.06 3.23 80.0 ± 9.6 % 10447- AAC LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, AB Y 100.00 123.86 31.64 80.0 ± 9.6 % 10447- CHping 44%) Y 3.31 67.87 16.49 0.00 150.0 ± 9.6 % 10448- CHping 44%) Y 3.47 67.50 15.53 150.0 ± 9.6 % 10448- CHping 44%) Y 4.34 68.08 15.62 150.0 ± 9.6 % 10448- CHping 44%) Y 4.32 67.77 16.33 150.0 ± 9.6 % <t< td=""><td></td><td></td><td>Z</td><td>4.43</td><td></td><td></td><td></td><td></td><td></td></t<>			Z	4.43					
Z 4.68 67.64 16.67 150.0 AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.42 150.0 ± 9.6 % 10435- AAC QPSK, UL Subfram=2,3,4,7,8,9) Y 100.00 123.60 31.93 60.0 10447- AAB CIIpping 44%) Y 3.91 67.67 16.49 0.00 150.0 ± 9.6 % 10447- AAB CIIpping 44%) Y 3.47 67.50 15.53 150.0 ± 9.6 % 10447- AAB CIIpping 44%) Y 3.44 68.08 15.62 150.0 ± 9.6 % AAB CIIppin 44%) Y 4.36 67.43 16.61 0.00 150.0 ± 9.6 % AAB CIIppin 44%) Y 4.427 67.58 16.63 0.00 150.0 ± 9.6 % 10449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, CIIppin 44%) Y 4.27 67.58		LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)					0.00		± 9.6 %
Z 4.68 67.64 16.67 150.0 AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % AAA Y 4.39 72.38 18.42 150.0 ± 9.6 % 10435- AAC LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subfram=2,3,4,7,8,9) Y 100.00 123.60 31.93 60.0 10447- AAC QPSK, UL Subfram=2,3,4,7,8,9) Y 100.00 123.98 31.64 80.0 150.0 ± 9.6 % 10447- AAB CIlpping 44%) X 3.91 67.67 15.53 150.0 ± 9.6 % AAB CIlpping 44%) Y 3.47 67.60 15.62 150.0 ± 9.6 % AB Cilppin 44%) Y 4.04 67.29 16.20 150.0 ± 9.6 % AB Cilppin 44%) Y 4.36 67.73 16.63 0.00 150.0 ± 9.6 % AB Cilppin 44%) Y 4.32 67.58 16.51			Y	4.75	67.32	16.51		150.0	
10434- AAA W-CDMA (BS Test Model 1, 64 DPCH) X 4.58 70.97 18.48 0.00 150.0 ± 9.6 % Idvada X 4.39 72.38 18.32 150.0 10435- Idvada LTE-TDD (SC-FDMA, 1 RB, 20 MHz, GPSK, UL Subframe=2,3,4,7,8,9) X 73.07 112.66 29.06 3.23 80.0 ± 9.6 % AAC GPSK, UL Subframe=2,3,4,7,8,9) Y 100.00 123.60 31.93 80.0 ± 9.6 % AAB Clipping 44%) Y 100.00 123.60 31.93 80.0 ± 9.6 % 10447- LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, X 3.91 67.87 16.49 0.00 150.0 ± 9.6 % 10448- LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % AAB Clippin 44%) Y 4.04 87.29 16.20 150.0 ± 9.6 % AAB Clippin 44%) Y 4.32 67.77 16.38 150.0 150.0									
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		W-CDMA (BS Test Model 1, 64 DPCH)					0.00		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	MMA		+			<u> </u>			
10435- AAC LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 100.00 123.60 31.93 80.0 ± 9.6 % 10447- AAB LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, AB X 3.91 67.87 16.49 0.00 150.0 ± 9.6 % 10444- AAB LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, AB X 3.91 67.87 16.49 0.00 150.0 ± 9.6 % 10448- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AB X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10448- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AB X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, AB X 4.59 67.77 16.33 150.0 ± 9.6 % 10449- Clipping 44%) Y 4.62 67.08 16.51 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.54 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.54 150.0 ± 9.6 % AAB Clipping 44%									
AAC QPSK, UL Subframe=2,3,4,7,8,9 Y 100.00 123.60 31.93 80.0 10447- LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, AAB Z 100.00 123.80 31.64 80.0 10447- LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, AAB X 3.91 67.87 16.49 0.00 150.0 ± 9.6 % 10448- LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AAB X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10449- LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, AAB X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10449- LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, AAB X 4.59 67.37 16.63 0.00 150.0 ± 9.6 % 10450- LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, AAB X 4.59 67.37 16.63 0.00 150.0 ± 9.6 % AAB Clipping 44%) Y 4.32 67.18 16.36 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.36								150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)					3.23	80.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				100.00	123.60	31.93		80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Z	100.00	123.98	31.64			
Industa Z 3.41 68.08 15.62 150.0 10448- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%) X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) Y 4.04 67.29 16.20 150.0 ± 9.6 % AAB Cliping 44%) Y 4.02 67.37 16.63 0.00 150.0 ± 9.6 % AAB Cliping 44%) Y 4.32 67.18 16.53 150.0 ± 9.6 % 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.28 16.61 150.0 ± 9.6 % 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.28 16.54 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.35 0.00 150.0 ± 9.6 % AAA W-CDMA (BS Test Model 1, 64 DPCH, AAA X 3.88 68.25 16.35 0.00 150.0			X	3.91	67.87	16.49	0.00		± 9.6 %
Industa Z 3.41 68.08 15.62 150.0 10448- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%) X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % 10449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) Y 4.04 67.29 16.20 150.0 ± 9.6 % AAB Cliping 44%) Y 4.02 67.37 16.63 0.00 150.0 ± 9.6 % AAB Cliping 44%) Y 4.32 67.18 16.53 150.0 ± 9.6 % 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.28 16.61 150.0 ± 9.6 % 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.28 16.54 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.35 0.00 150.0 ± 9.6 % AAA W-CDMA (BS Test Model 1, 64 DPCH, AAA X 3.88 68.25 16.35 0.00 150.0			Y	3.47	67.50	15.53		150.0	
10448- AAB LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%) X 4.36 67.43 16.61 0.00 150.0 ± 9.6 % I0449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) Y 4.04 67.29 16.20 150.0 ± 9.6 % I0449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) X 4.59 67.37 16.63 0.00 150.0 ± 9.6 % I0450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.59 67.37 16.62 0.00 150.0 ± 9.6 % I0450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.29 16.62 0.00 150.0 ± 9.6 % I0451- AAB V-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % I0456- AAA V-CDMA (BS Test Model 1, 64 -QAM, AAA Y 3.34 67.60 15.06 150.0 ± 9.6 % I0456- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, AAA X 6.45 68.48 17.01 0.00 1									
Y 4.04 67.29 16.20 150.0 I0449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) X 4.59 67.37 16.63 0.00 150.0 ± 9.6 % I0450- AAB Y 4.32 67.18 16.33 150.0 ± 9.6 % I0450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.29 16.62 0.00 150.0 ± 9.6 % I0450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) X 4.75 67.29 16.62 0.00 150.0 ± 9.6 % I0451- AAA W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % I0451- AAA W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % I0455- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, AAA X 6.45 68.48 17.01 0.00 150.0 ± 9.6 % I0455- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, AAA X 6.4							0.00		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4 04	67.29	16.20		150.0	
10449- AAB LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) X 4.59 67.37 16.63 0.00 150.0 ± 9.6 % AAB Y 4.32 67.18 16.33 150.0 10450- 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, AAB X 4.75 67.29 16.62 0.00 150.0 ± 9.6 % 10450- AAB LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, AAB X 4.75 67.29 16.62 0.00 150.0 ± 9.6 % AAB Clipping 44%) Y 4.52 67.08 16.36 150.0 ± 9.6 % I0451- AAA W-CDMA (BS Test Model 1, 64 DPCH, AAA X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % I0456- AAA V-CDMA (BS Test Model 1, 64 -QAM, AAA X 6.45 68.48 17.01 0.00 150.0 ± 9.6 % I0456- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, AAA X 6.45 68.48 17.01 0.00 150.0 ± 9.6 % I0457- AAA UMTS-FDD (DC-HSDPA) X									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			İΥ	4.32	67.18	16.33		150.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
Z 4.47 67.43 16.54 150.0 10451- AAA W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % AAA Y 3.34 67.60 15.06 150.0 ± 9.6 % AAA Y 3.34 67.60 15.06 150.0 ± 9.6 % IMAS Y 3.34 67.60 15.06 150.0 ± 9.6 % 10456- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle) X 6.45 68.48 17.01 0.00 150.0 ± 9.6 % AAA 99pc duty cycle) Y 6.28 68.20 16.88 150.0 ± 9.6 % AAA Y 3.87 65.68 16.38 0.00 150.0 ± 9.6 % 10457- AAA UMTS-FDD (DC-HSDPA) X 3.87 65.68 16.38 0.00 150.0 ± 9.6 % AAA Z 3.81 65.57 16.07 150.0 ± 9.6 % AAA			Y	4.52	67.08	16.36		150.0	
10451- AAA W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) X 3.88 68.25 16.35 0.00 150.0 ± 9.6 % AAA Y 3.34 67.60 15.06 150.0 150.0 ± 9.6 % Image: Clipping 44%) Z 3.25 68.08 15.03 150.0 ± 9.6 % 10456- AAA IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle) Y 6.45 68.48 17.01 0.00 150.0 ± 9.6 % AAA 99pc duty cycle) Y 6.28 68.20 16.88 150.0 ± 9.6 % Image: Clipping 44%) Y 6.28 68.20 16.88 150.0 ± 9.6 % AAA 99pc duty cycle) Y 6.28 68.20 16.88 150.0 ± 9.6 % 10457- AAA UMTS-FDD (DC-HSDPA) X 3.87 65.68 16.37 0.00 150.0 ± 9.6 % AAA CDMA2000 (1xEV-DO, Rev. B, 2 X 3.63 67.17 15.82 0.00 150.0 ± 9.6 % AAA Clipping 44% Y 3.13 66.82 14.32 150.0					1				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			X		+		0.00		± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	3.34	67.60	15.06		150.0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							0.00		± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	6.28	68.20	16.88		150.0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		UMTS-FDD (DC-HSDPA)	X	3.87			0.00		±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	3.81	65.57	16.07		150.0	
10458- AAA CDMA2000 (1xEV-DO, Rev. B, 2 carriers) X 3.63 67.17 15.82 0.00 150.0 ± 9.6 % Y 3.13 66.82 14.32 150.0 150.0 100 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Z 2.97 66.93 13.99 150.0 10459- AAA CDMA2000 (1xEV-DO, Rev. B, 3 carriers) X 4.79 65.36 16.37 0.00 150.0 ± 9.6 % Y 4.24 65.27 15.46 150.0 150.0							0.00		±9.6 %
Z 2.97 66.93 13.99 150.0 10459- AAA CDMA2000 (1xEV-DO, Rev. B, 3 carriers) X 4.79 65.36 16.37 0.00 150.0 ± 9.6 % Y 4.24 65.27 15.46 150.0 150.0			Y	3.13	66.82	14.32		150.0	
10459- AAA CDMA2000 (1xEV-DO, Rev. B, 3 carriers) X 4.79 65.36 16.37 0.00 150.0 ± 9.6 % Y 4.24 65.27 15.46 150.0 ±									
Y 4.24 65.27 15.46 150.0							0.00		± 9.6 %
			l v	4 24	65.27	15.46		150.0	
			Z	4.13	65.72	15.38		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	1.54	79.74	21.99	0.00	150.0	± 9.6 %
AAA			0.05		10.01			
		Y Z	0.95	69.06 73.20	16.64		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.00	19.00 30.59	3.29	150.0 80.0	± 9.6 %
		Y	100.00	127.27	33.69		80.0	
		Z	100.00	128.13	33.61		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.76	26.18	3.23	80.0	± 9.6 %
		Y	100.00	111.69	26.26		80.0	
40400		Z	100.00	109.78	24.92		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	61.06	101.21	23.94	3.23	80.0	± 9.6 %
		Y	100.00	108.45	24.70		80.0	
10464-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz,	Z X	9.38 100.00	82.48 116.66	17.38 29.84	3.23	80.0 80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)							
		Y	100.00	125.35	32.64		80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	Z X	100.00	125.94	32.43		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	Y		108.47	26.02	3.23	80.0	± 9.6 %
			100.00 44.16	<u>111.17</u> 100.58	26.01 22.73	<u> </u>	80.0	
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	44.10	96.75	22.73	3.23	80.0	100%
AAA	QAM, UL Subframe=2,3,4,7,8,9)	Y	42.99	98.93		3.23	80.0	± 9.6 %
		Z	42.99 5.89	77.61	22.41		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	116.79	29.90	3.23	80.0 80.0	± 9.6 %
		Y	100.00	125.60	32.75		80.0	
		Z	100.00	126.22	32.56		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.56	26.07	3.23	80.0	± 9.6 %
		Y	100.00	111.35	26.09		80.0	
		Z	61.74	104.33	23.64		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	43.83	97.08	22.83	3.23	80.0	± 9.6 %
		Y	46.06	99.70	22.59		80.0	
10170		Z	6.04	77.89	15.93		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	116.81	29.90	3.23	80.0	±9.6 %
111		Y	100.00	125.63	32.76	<u> </u>	80.0	
10471-		Z	100.00	126.25	32.56		80.0	
AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.53	26.05	3.23	80.0	±9.6 %
		Y Z	100.00	111.31	26.07		80.0	<u> </u>
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	61.64 44.10	104.26 97.14	23.61 22.84	3.23	80.0 80.0	± 9.6 %
		Y	46.39	99.73	22.59	<u> </u>	80.0	— <u> </u>
		z	6.02	77.83	15.90	<u> </u>	80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	116.79	29.89	3.23	80.0	±9.6 %
		Y	100.00	125.60	32.74		80.0	
		Z	100.00	126.23	32.55		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.54	26.05	3.23	80.0	±9.6 %
		Y	100.00	111.32	26.07		80.0	
40475		Z	60.20	104.02	23.55		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	43.66	97.03	22.81	3.23	80.0	±9.6 %
		Y	44.87	99.39	22.51		80.0	
		Z	5.94	77.72	15.87		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.43	26.00	3.23	80.0	±9.6 %
		Y	100.00	111.14	25.99		80.0	
		Z	48.11	101.47	22.92		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	43.04	96.84	22.76	3.23	80.0	± 9.6 %
		Y	43.24	98.94	22.39		80.0	
		Z	5.86	77.55	15.80		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	18.43	95.26	26.62	3.23	80.0	± 9.6 %
		Y	47.63	113.17	30.89		80.0	
10480-		Z	79.42	120.84	32.18		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	15.38	87.90	23.16	3.23	80.0	± 9.6 %
•		Y	35.80	101.51	25.84		80.0	
10481-	ITE TOD (00 EDMA SON DD 4 411)	Z	33.10	99.76	24.57		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	14.20	86.14	22.35	3.23	80.0	± 9.6 %
		Y	23.64	94.76	23.60		80.0	
10482-		Z	17.83	90.68	21.64		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	11.00	86.13	22.59	2.23	80.0	± 9.6 %
		Y	6.54	80.66	19.81		80.0	
10400		Z	10.00	86.91	21.46	0.00	80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	11.81	84.53	22.26	2.23	80.0	± 9.6 %
		 I 	9.59	82.56	20.08		80.0	
10404		Z	5.79	75.74	16.81	0.00	80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	11.16	83.50	21.93	2.23	80.0	± 9.6 %
		Y	8.15	80.18	19.27		80.0	
10105		Z	5.05	73.86	16.10		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	11.03	86.44	23.15	2.23	80.0	± 9.6 %
		Y	6.87	82.16	21.41		80.0	
10100		Z	9.87	88.59	23.41		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.95	77.02	19.85	2.23	80.0	± 9.6 %
		Y	4.98	74.27	17.96		80.0	
		Z	5.53	76.50	18.48		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	6.82	76.43	19.65	2.23	80.0	±9.6 %
		Y	4.85	73.54	17.65		80.0	
10488-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	Z X	5.25 9.46	75.41 82.96	18.04 22.30	2.23	80.0 80.0	± 9.6 %
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	Y	5.99	78.96	21.12		80.0	l ·
		Z	6.82	82.33	21.12	1	80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.62	75.52	19.96	2.23	80.0	± 9.6 %
		Y	4.91	73.20	18.90		80.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.11	74.84	19.54		80.0	1
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.56	74.88	19.76	2.23	80.0	± 9.6 %
		Y	4.94	72.82	18.76		80.0	
		Z	5.10	74.33	19.33		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.98	78.75	20.93	2.23	80.0	± 9.6 %
		Y	5.56	75.73	20.09		80.0	ļ
		Z	5.84	77.68	21.00	L	80.0	l
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.52	73.74	19.47	2.23	80.0	± 9.6 %
		Y	5.01	71.66	18.63		80.0	
		Z	5.04	72.68	19.10		80.0	

10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.52	73.38	19.36	2.23	80.0	± 9.6 %
		Y	5.05	71.42	18.55	<u> </u>	80.0	
		Ż	5.05	72.38	18.97	<u> </u>	80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.30	81.16	21.56	2.23	80.0	± 9.6 %
		Y	6.19	77.55	20.65		80.0	1
		Z	6.63	79.81	21.68		80.0	· · · ·
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	74.54	19.74	2.23	80.0	± 9.6 %
		Y	5.09	72.10	18.86		80.0	
		Z	5.10	73.07	19.34		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.67	73.87	19.53	2.23	80.0	±9.6 %
		Y	5.11	71.66	18.72		80.0	
10.107		Z	5.11	72.57	19.16		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.58	84.00	21.43	2.23	80.0	± 9.6 %
		Y	4.27	74.12	16.39		80.0	
40400		Z	5.12	76.54	16.66		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.19	75.19	17.72	2.23	80.0	± 9.6 %
		Ý	2.33	64.39	11.23		80.0	· · · · · ·
1010-		Z	1.83	62.54	9.68		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.08	74.60	17.40	2.23	80.0	± 9.6 %
		Y	2.20	63.55	10.68		80.0	<u> </u>
		Z	1.70	61.64	9.07	· · · · · · · · · · · · · · · · · · ·	80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.69	83.97	22.50	2.23	80.0	± 9.6 %
		Y	6.26	80.30	21.12		80.0	
10501		Z	7.99	85.23	22.80		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.73	76.14	19.79	2.23	80.0	± 9.6 %
		Y	4.97	73.89	18.33		80.0	
40,000		Z	5.41	76.03	18.94		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.66	75.65	19.59	2.23	80.0	± 9.6 %
		Y	4.97	73.54	18.13		80.0	
40500		Z	5.36	75.51	18.67		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.33	82.74	22.21	2.23	80.0	± 9.6 %
		Y	5.90	78.70	21.01		80.0	
10504-		Z	6.71	82.03	22.35		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.59	75.44	19.92	2.23	80.0	± 9.6 %
			4.88	73.08	18.84		80.0	
10505-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	Z X	5.07	74.71	19.47		80.0	
AAC	64-QAM, UL Subframe=2,3,4,7,8,9)		6.52	74.79	19.72	2.23	80.0	±9.6 %
	<u> </u>	Y	4.91	72.71	18.70		80.0	
10506-	LTE-TDD (SC-FDMA, 100% RB, 10	Z X	5.07	74.21	19.27		80.0	
AAC	MHz, QPSK, UL Subframe=2,3,4,7,8,9)		9.21	81.00	21.50	2.23	80.0	± 9.6 %
		Y	6.13	77.37	20.57		80.0	
10507-	LTE-TDD (SC-FDMA, 100% RB, 10	Z	6.56	79.62	21.60		80.0	L
10507- AAC	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.72	74.48	19.71	2.23	80.0	± 9.6 %
		Y	5.07	72.03	18.82		80.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.65	73.80	19.50	2.23	80.0	± 9.6 %
		Y	5.09	71.58	18.67		80.0	
		Z	5.09	72.48	19.12		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.15	77.43	20.26	2.23	80.0	±9.6 %
		Y	5.99	74.82	19.62		80.0	
10510		Z	6.17	76.24	20.35		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.94	73.36	19.32	2.23	80.0	± 9.6 %
		Ϋ́	5.42	71.16	18.60		80.0	
10511		Z	5.37	71.81	18.97		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.87	72.87	19.19	2.23	80.0	± 9.6 %
		Y	5.44	70.83	18.50		80.0	
10515		Z	5.39	71.45	18.85		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	9.41	80.22	21.09	2.23	80.0	±9.6 %
		Y	6.52	76.83	20.24		80.0	
10513-	LTC TOD (00 CDMA, 400% DD, 00	Z	6.84	78.58	21.10		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	7.03	74.19	19.61	2.23	80.0	± 9.6 %
		Y	5.36	71.56	18.76		80.0	
		Z	5.31	72.21	19.14		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.85	73.42	19.39	2.23	80.0	± 9.6 %
		Y	5.32	71.03	18.59		80.0	
		Z	5.27	71.61	18.94		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.98	65.05	16.44	0.00	150.0	± 9.6 %
		Y	1.00	63.56	14.97		150.0	
40540		Z	1.05	64.66	15.82		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X Y	0.67	168.11	45.87	0.00	150.0	± 9.6 %
		Z	1.04	71.83 80.65	18.15 22.82		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	0.96	70.11	18.69	0.00	150.0 150.0	
AAA	Mbps, 99pc duty cycle)	Ŷ	0.85	65.61	15.70	0.00	150.0	±9.6 %
		Z	0.93	67.57	17.12		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.76	67.10	16.57	0.00	150.0	±9.6 %
		Y	4.53	67.01	16.35		150.0	
		Z	4.47	67.38	16.53		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	5.02	67.44	16.72	0.00	150.0	± 9.6 %
		Υ	4.70	67.22	16.46		150.0	
		Z	4.63	67.55	16.62		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.86	67.45	16.66	0.00	150.0	± 9.6 %
		Y	4.55	67.17	16.38		150.0	
10521-	IEEE 802.11a/h WIFI 5 GHz (OFDM, 24	ZX	4.48	67.50	16.54	0.00	150.0	
AAA	Mbps, 99pc duty cycle)	Y	4.79	67.47	16.66	0.00	150.0	± 9.6 %
		Z	4.48	67.16 67.48			150.0	
					16.53		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.82	67.32	16.63	0.00	150.0	± 9.6 %
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X Y	4.82	67.32 67.29	16.63	0.00	150.0	±9.6 %

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.69	67.31	16.53	0.00	150.0	± 9.6 %
		Y	4.44	67.17	16.32		150.0	
		Z	4.39	67.59	16.54	<u> </u>	150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	Х	4.78	67.32	16.64	0.00	150.0	± 9.6 %
		Y	4.49	67.20	16.43		150.0	
		Z	4.42	67.57	16.62		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.72	66.35	16.23	0.00	150.0	± 9.6 %
		Y	4.49	66.26	16.02		150.0	
		Z	4.45	66.66	16.22		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.95	66.78	16.37	0.00	150.0	± 9.6 %
		Y	4.64	66.60	16.16		150.0	
40507		Z	4.58	66.96	16.34		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.86	66.80	16.35	0.00	150.0	± 9.6 %
		Y	4.57	66.56	16.10		150.0	
40500		Z	4.51	66.93	16.29		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.89	66.82	16.38	0.00	150.0	± 9.6 %
		Y	4.58	66.57	16.13		150.0	
10500		Z	4.52	66.94	16.32		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.89	66.82	16.38	0.00	150.0	± 9.6 %
		Y	4.58	66.57	16.13		150.0	
40504		Z	4.52	66.94	16.32		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.92	67.00	16.42	0.00	150.0	± 9.6 %
· · · ·		Y	4.57	66.66	16.14		150.0	
		Z	4.49	66.99	16.31		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.76	66.93	16.40	0.00	150.0	± 9.6 %
		Y	4.43	66.51	16.07		150.0	
		Z	4.37	66.85	16.25		150.0	·
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.90	66.82	16.35	0.00	150.0	± 9.6 %
		Y	4.59	66.64	16.13		150.0	
		Z	4.53	67.03	16.33		150.0	l
10534- 	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.38	66.99	16.41	0.00	150.0	± 9.6 %
		Y	5.14	66.65	16.20		150.0	
		Z	5.08	66.89	16.34		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.47	67.13	16.46	0.00	150.0	± 9.6 %
		Y	5.21	66.87	16.30		150.0	
10500		Z	5.13	67.05	16.42		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.32	67.12	16.45	0.00	150.0	± 9.6 %
		Y	5.08	66.81	16.25		150.0	
		Z	5.02	67.06	16.40		150.0	· · · · · · · · · · · · · · · · · · ·
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.39	67.07	16.42	0.00	150.0	± 9.6 %
		Y	5.13	66.76	16.23		150.0	· · · · · · · · · · · · · · · · · · ·
10500		Z	5.08	67.03	16.39		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X _	5.52	67.19	16.52	0.00	150.0	± 9.6 %
		Y	5.21	66.77	16.27		150.0	
		Z	5.14	66.99	16.41		150.0	· · · · · · · · · · · · · · · · · · ·
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.40	67.10	16.49	0.00	150.0	±9.6 %
		Y	5.15	66.79	16.30		150.0	
		Z	5.07	66.96	16.41		150.0	

August 14, 2017

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.41	67.10	16.49	0.00	150.0	± 9.6 %
		Y	5.12	66.64	16.21		150.0	
		Z	5.05	66.85	16.21		150.0	
10542-	IEEE 802.11ac WiFi (40MHz, MCS8,	X	5.53	67.02	16.46	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	5.28	66.73	16.27		150.0	
		Z	5.20	66.95	16.27			
10543-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	5.65			0.00	150.0	
AAA	99pc duty cycle)			67.09	16.50	0.00	150.0	± 9.6 %
		Y	5.35	66.75	16.31		150.0	
		Z	5.28	67.01	16.46		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.63	67.05	16.36	0.00	150.0	± 9.6 %
		Y	5.46	66.75	16.19		150.0	
		Z	5.42	66.95	16.31		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.85	67.43	16.48	0.00	150.0	± 9.6 %
		ΤY Ι	5.67	67.24	16.39		150.0	
		z	5.61	67.44	16.52	l	150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.76	67.40	16.49	0.00	150.0	± 9.6 %
7 7 7 1		Y	5.52	66.00	10.00		450.0	
		Z		66.93	16.25		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,		5.45	67.09	16.35	0.00	150.0	10.00
AAA	99pc duty cycle)	X	5.86	67.50	16.53	0.00	150.0	±9.6 %
		Y	5.59	67.00	16.28		150.0	
		Z	5.54	67.20	16.40		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.21	68.68	17.08	0.00	150.0	± 9.6 %
		Y	5.87	68.02	16.76		150.0	
		Z	5.72	67.95	16.76		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.77	67.31	16.45	0.00	150.0	± 9.6 %
		Y	5.57	67.05	16.32		150.0	
		z	5.52	67.30	16.47		150.0	
10551-	IEEE 802.11ac WiFi (80MHz, MCS7,	X	5.80	67.45	16.48	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)					0.00		1 3.0 78
		Y	5.55	67.00	16.26		150.0	
40550		Z	5.45	67.07	16.32		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.69	67.19	16.37	0.00	150.0	± 9.6 %
		Y	5.47	66.81	16.17		150.0	
		Z	5.43	67.06	16.31		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.78	67.21	16.40	0.00	150.0	± 9.6 %
		Y	5.54	66.82	16.20		150.0	
		Z	5.48	67.01	16.32		150.0	
10554- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.03	67.43	16.45	0.00	150.0	± 9.6 %
AAB		Y	5.89	67.12	16.28		150.0	
		Z	5.84	67.28	16.38		150.0	
			J.U T			0.00	150.0	± 9.6 %
10555- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 99nc duty cycle)	X	6.22	67.88	16.64	0.00		- 010 /0
10555- ААВ	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X Y	6.02	67.44	16.43	0.00	150.0	
AAB	99pc duty cycle)	X Y Z	6.02 5.95	67.44 67.54	16.43 16.50	0.00	150.0 150.0	
	99pc duty cycle) IEEE 802.11ac WiFi (160MHz, MCS2,	X Y	6.02	67.44	16.43	0.00	150.0	± 9.6 %
AAB 10556-	99pc duty cycle)	X Y Z X	6.02 5.95 6.20	67.44 67.54 67.79	16.43 16.50 16.59		150.0 150.0 150.0	
AAB 10556-	99pc duty cycle) IEEE 802.11ac WiFi (160MHz, MCS2,	X Y Z X Y	6.02 5.95 6.20 6.04	67.44 67.54 67.79 67.49	16.43 16.50 16.59 16.44		150.0 150.0 150.0 150.0	
AAB 10556- AAB 10557-	99pc duty cycle) IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) IEEE 802.11ac WiFi (160MHz, MCS3,	X Y Z X	6.02 5.95 6.20	67.44 67.54 67.79	16.43 16.50 16.59		150.0 150.0 150.0	
AAB 10556- AAB	99pc duty cycle) IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X Y Z X Y Z	6.02 5.95 6.20 6.04 5.99	67.44 67.54 67.79 67.49 67.66	16.43 16.50 16.59 16.44 16.55	0.00	150.0 150.0 150.0 150.0 150.0	± 9.6 %

Certificate No: ES3-3332_Aug17

10558- AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.28	68.03	16.75	0.00	150.0	± 9.6 %
		Y	6.04	67.52	16.49		150.0	· [· · · · · · · · · · · · · · · · · ·
		Z	5.95	67.59	16.55		150.0	<u> </u>
10560- AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.28	67.87	16.71	0.00	150.0	± 9.6 %
		Y	6.03	67.35	16.44		150.0	
		Z	5.96	67.49	16.53		150.0	
10561- AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.18	67.80	16.71	0.00	150.0	± 9.6 %
		Y	5.96	67.36	16.48		150.0	
		Z	5.90	67.49	16.57	· · · · · · · · · · · · · · · · · · ·	150.0	
10562- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.37	68.38	17.01	0.00	150.0	± 9.6 %
		Y	6.06	67.66	16.63		150.0	
		Z	5.96	67.67	16.66		150.0	
10563- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.58	68.54	17.02	0.00	150.0	± 9.6 %
		Y	6.18	67.65	16.59		150.0	}
		Z	6.05	67.62	16.60		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.11	67.26	16.76	0.46	150.0	± 9.6 %
		Y	4.86	67.10	16.52		150.0	
		Z	4.80	67.44	16.68		150.0	1
10565- AAA	IEEE 802.11g WiFI 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.41	67.77	17.08	0.46	150.0	± 9.6 %
		Y	5.08	67.53	16.83		150.0	
		Z	5.00	67.82	16.97		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.23	67.67	16.93	0.46	150.0	± 9.6 %
		Y	4.92	67.38	16.66		150.0	
		Z	4.84	67.67	16.80		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.26	68.03	17.24	0.46	150.0	± 9.6 %
		Y	4.95	67.77	17.01		150.0	
		_ Z _	4.87	68.04	17.15		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.14	67.36	16.67	0.46	150.0	± 9.6 %
		Y	4.84	67.19	16.45		150.0	
		Z	4.75	67.49	16.60		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.19	68.02	17.24	0.46	150.0	± 9.6 %
		Y	4.92	67.92	17.11		150.0	
		Z	4.86	68.27	17.29		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.23	67.81	17.17	0.46	150.0	±9.6 %
		Y	4.94	67.74	17.02		150.0	
10571		Z	4.86	68.06	17.18		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.68	70.36	18.73	0.46	130.0	± 9.6 %
		Y	1.37	66.32	16.49		130.0	
40570		Z	1.41	67.39	17.29		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.75	71.47	19.28	0.46	130.0	±9.6 %
		Y	1.40	67.01	16.89		130.0	
40070		Z	1.45	68.17	17.74		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	142.31	37.38	0.46	130.0	±9.6 %
		Y	5.69	99.12	27.30		130.0	
40574		Z	66.26	143.73	39.41		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	3.57	87.71	25.60	0.46	130.0	±9.6 %
		Y	1.70	74.22	20.29		130.0	
	1	Z	1.88	76.94	21.86			

10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.95	67.19	16.89	0.46	130.0	± 9.6 %
AAA	OFDM, 6 Mbps, 90pc duty cycle)							
		Y	4.69	67.03	16.64		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.63	67.35	16.80		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)	X	4.98	67.35	16.96	0.46	130.0	± 9.6 %
		Y	4.72	67.20	16.72		130.0	
40577		Z	4.66	67.55	16.88		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	5.24	67.69	17.13	0.46	130.0	± 9.6 %
		Y	4.90	67.46	16.87		130.0	
10578-		Z	4.82	67.76	17.01		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	5.14	67.89	17.23	0.46	130.0	± 9.6 %
		Y	4.81	67.63	16.98		130.0	
10579-		Z	4.73	67.92	17.12		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.94	67.39	16.68	0.46	130.0	± 9.6 %
		Y	4.58	66.91	16.29		130.0	.
10500		Z	4.50	67.21	16.45		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.98	67.29	16.65	0.46	130.0	± 9.6 %
		Y	4.62	66.97	16.32		130.0	
40504		Z	4.54	67.27	16.48	. <u>.</u>	130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	5.07	68.07	17.23	0.46	130.0	± 9.6 %
		Y	4.72	67.70	16.95		130.0	
40500		Z	4.65	68.04	17.12		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.90	67.13	16.49	0.46	130.0	±9.6 %
		Y	4.51	66.68	16.07		130.0	
		Z	4.43	67.00	16.24		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.95	67.19	16.89	0.46	130.0	±9.6 %
		Y	4.69	67.03	16.64		130.0	
		Z	4.63	67.35	16.80		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.98	67.35	16.96	0.46	130.0	± 9.6 %
		Y	4.72	67.20	16.72		130.0	
		Z	4.66	67.55	16.88		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.24	67.69	17.13	0.46	130.0	± 9.6 %
		Y	4.90	67.46	16.87		130.0	
		Z	4.82	67.76	17.01		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	5.14	67.89	17.23	0.46	130.0	± 9.6 %
		Y	4.81	67.63	16.98		130.0	
		Z	4.73	67.92	17.12		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.94	67.39	16.68	0.46	130.0	±9.6 %
		Y	4.58	66.91	16.29		130.0	
		Z	4.50	67.21	16.45		130.0	
10588- AAA	IEEE 802.11a/h WiFl 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.98	67.29	16.65	0.46	130.0	± 9.6 %
		Y	4.62	66.97	16.32		130.0	
10-51		Z	4.54	67.27	16.48		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	5.07	68.07	17.23	0.46	130.0	± 9.6 %
		Y	4.72	67.70	16.95		130.0	
		Z	4.65	68.04	17.12		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.90	67.13	16.49	0.46	130.0	± 9.6 %
		Y	4.51	66.68	16.07		130.0	
		Z	4.43	67.00	16.24		130.0	1

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	5.10	67.21	16.96	0.46	130.0	± 9.6 %
		Y	4.84	67.07	16.74		130.0	
		z	4.77	67.39	16.89		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.29	67.56	17.07	0.46	130.0	± 9.6 %
		Y	4.98	67.40	16.87	···· ·	130.0	
		Z	4.90	67.69	17.01		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.23	67.57	17.01	0.46	130.0	±9.6 %
		Ý	4.90	67.30	16.75		130.0	
		Z	4.82	67.59	16.88		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.28	67.68	17.13	0.46	130.0	± 9.6 %
		Ϋ́	4.96	67.47	16.91		130.0	
		Z	4.88	67.75	17.04		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.27	67.71	17.06	0.46	130.0	± 9.6 %
		Y	4.93	67.44	16.81		130.0	
10565		Z	4.85	67.75	16.96		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.21	67.70	17.06	0.46	130.0	± 9.6 %
		Y	4.86	67.44	16.81		130.0	
10505		Z	4.78	67.74	16.97		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	5.16	67.68	17.00	0.46	130.0	± 9.6 %
		Y	4.81	67.32	16.68		130.0	
		Z	4.73	67.61	16.83		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.15	67.96	17.27	0.46	130.0	± 9.6 %
		Y	4.80	67.55	16.95		130.0	
		Z	4.72	67.82	17.08		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.77	67.84	17.13	0.46	130.0	± 9.6 %
		Y	5.52	67.58	16.96		130.0	
		Z	5.45	67.81	17.10		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	6.05	68.67	17.52	0.46	130.0	± 9.6 %
		Y	5.68	68.13	17.21		130.0	
		Z	5.58	68.26	17.30		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.85	68.16	17.28	0.46	130.0	± 9.6 %
		Y	5.55	67.80	17.06		130.0	
		Z	5.46	67.98	17.17		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.99	68.30	17.27	0.46	130.0	± 9.6 %
		Y	5.68	67.95	17.06		130.0	
1005-		Z X	5.60	68.17	17.19		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)		6.09	68.64	17.55	0.46	130.0	± 9.6 %
		Y	5.74	68.19	17.31		130.0	
		Z	5.66	68.42	17.44		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.79	67.86	17.16	0.46	130.0	± 9.6 %
		Y	5.59	67.76	17.08		130.0	
10005		Z	5.54	68.06	17.25		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.90	68.15	17.31	0.46	130.0	± 9.6 %
		Y	5.67	68.01	17.21		130.0	
		Z	5.56	68.12	17.28		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.65	67.59	16.91	0.46	130.0	±9.6 %
		Y	5.37	67.19	16.65		130.0	
		Z	5.33	67.51	16.83		130.0	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.92	66.49	16.57	0.46	130.0	± 9.6 %
<u>////</u>				<u> </u>		·		
		Y	4.68	66.39	16.37	ļ	130.0	
10608-	1EEE 902 11 - 14/15: (2014) - 14004	Z	4.62	66.76	16.54		130.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.16	66.93	16.72	0.46	130.0	± 9.6 %
		Y	4.85	66.77	16.53		130.0	1
		Z	4.77	67.10	16.69		130.0	·
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	5.06	66.87	16.62	0.46	130.0	± 9.6 %
		Y	4.74	66.62	16.36		130.0	
		Z	4.67	66.96	16.53		130.0	ł
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	x	5.11	67.01	16.76	0.46	130.0	± 9.6 %
		Y	4.79	66.78	16.53		130.0	
		Z	4.72	67.11	16.69		130.0	<u> </u>
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	5.05	66.92	16.66	0.46	130.0	± 9.6 %
		Y	4.71	66.59	16.38	·	130.0	
		z	4.64	66.93	16.55		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	x	5.07	67.04	16.68	0.46	130.0	± 9.6 %
		- Y	4.72	66.76	16.43		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	4.64	67.09	16.61		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	5.09	66.98	16.60	0.46	130.0	± 9.6 %
		Y	4.71	66.61	16.29		130.0	
		Z	4.63	66.91	16.45		130.0	·
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	5.02	67.21	16.84	0.46	130.0	± 9.6 %
		Y	4.67	66.81	16.53		130.0	
		Z	4.59	67.11	16.69		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	5.05	66.70	16.43	0.46	130.0	± 9.6 %
		Y	4.71	66.43	16.16		130.0	
		Z	4.64	66.79	16.34		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.58	67.10	16.74	0.46	130.0	±9.6 %
		Y	5.33	66.79	16.55		130.0	
		Z	5.25	67.00	16.67		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.66	67.25	16.77	0.46	130.0	± 9.6 %
		Y	5.41	67.04	16.65		130.0	
		Z	5.31	67.19	16.74		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	- - -	5.54	67.29	16.82	0.46	130.0	± 9.6 %
		Y	5.29	67.03	16.66		130.0	
		Z	5.22	67.24	16.78		130.0	· · · · · ·
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.56	67.09	16.66	0.46	130.0	±9.6 %
		Y	5.30	66.81	16.48		130.0	····
		Z	5.23	67.05	16.63		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.71	67.30	16.81	0.46	130.0	± 9.6 %
<u> </u>		Y	5.38	66.84	16.54		130.0	
		Z	5.30	67.04	16.67		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.66	67.28	16.90	0.46	130.0	±9.6 %
		Y	5.39	66.98	16.73		130.0	
		Z	5.30	67.12	16.82		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.65	67.37	16.94	0.46	130.0	±9.6 %
		Y	5.40	67.13	16.80		130.0	
		z	5.30	67.22	16.87		130.0	

10623-	IEEE 802.11ac WiFi (40MHz, MCS7,		E E0	07.44	10 70	0.40	1 100.0	
AAA	90pc duty cycle)	X	5.58	67.14	16.73	0.46	130.0	± 9.6 %
		Y	5.28	66.65	16.43		130.0	
		Z	5.18	66.78	16.52	· · · ·	130.0	
10624-	IEEE 802.11ac WiFi (40MHz, MCS8,	X	5.72	67.10	16.77	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)				-			
		Y	5.47	66.85	16.60		130.0	
40005		Z	5.38	67.03	16.70		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.05	67.87	17.19	0.46	130.0	± 9.6 %
		Y	5.77	67.66	17.06		130.0	
40000		Z	5.49	67.24	16.87		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.80	67.08	16.64	0.46	130.0	± 9.6 %
		Y	5.63	66.82	16.50		130.0	
10007		Z	5.57	66.99	16.60		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.05	67.56	16.82	0.46	130.0	± 9.6 %
		Y	5.90	67.51	16.81		130.0	
		Z	5.83	67.67	16.91		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.89	67.33	16.66	0.46	130.0	± 9.6 %
		Y	5.66	66.90	16.43		130.0	
		Z	5.58	67.01	16.51		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	6.01	67.46	16.71	0.46	130.0	± 9.6 %
		Y	5.74	67.00	16.48		130.0	
		Z	5.68	67.19	16.60		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.66	69.52	17.74	0.46	130.0	± 9.6 %
		Y	6.23	68.64	17.29		130.0	
		Z	5.99	68.32	17.17		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.51	69.16	17.72	0.46	130.0	± 9.6 %
		Y	6.05	68.21	17.27		130.0	
		Z	5.91	68.16	17.27		130.0	······
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.07	67.76	17.04	0.46	130.0	± 9.6 %
		Y	5.87	67.57	16.97		130.0	
		Z	5.81	67.79	17.10	·	130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	6.04	67.71	16.86	0.46	130.0	± 9.6 %
		Y	5.71	67.04	16.54		130.0	
		Z	5.62	67.14	16.61	·	130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	6.01	67.64	16.89	0.46	130.0	± 9.6 %
		Y	5.69	67.06	16.60	· · ·	130.0	
		Z	5.63	67.23	16.71		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.88	66.99	16.33	0.46	130.0	± 9.6 %
		Y	5.57	66.39	16.00		130.0	
		Z	5.49	66.55	16.11	· · · ·	130.0	· · · · · · · · · · · · · · · · · · ·
10636- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.20	67.47	16.73	0.46	130.0	± 9.6 %
		Y	6.06	67.19	16.58	·	130.0	·
		Z	6.01	67.33	16.67		130.0	· · · · ·
10637- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.43	68.00	16.96	0.46	130.0	± 9.6 %
		Y	6.23	67.63	16.79		130.0	
		Z	6.14	67.69	16.84		130.0	
10638- AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.38	67.82	16.85	0.46	130.0	± 9.6 %
AAB	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		1	
		Y	6.23	67.59	16.75		130.0	

August 14, 2017

10639- AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.40	67.91	16.95	0.46	130.0	± 9.6 %
		Y	6.18	67.47	16.73	<u>† </u>	130.0	<u> </u>
		Z	6.11	67.58	16.80	<u> </u>	130.0	·
10640- AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.45	68.06	16.97	0.46	130.0	±9.6 %
		Y	6.19	67.49	16.68	- ·· ·	130.0	·
		Z	6.09	67.54	16.73		130.0	
10641- AAB	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.42	67.72	16.82	0.46	130.0	± 9.6 %
		Y	6.26	67.48	16.70		130.0	· · · ·
		Z	6.18	67.60	16.78		130.0	· · · ·
10642- AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.51	68.09	17.16	0.46	130.0	± 9.6 %
· · ·		Υ	6.27	67.64	16.94	· · · · · ·	130.0	
		Z	6.19	67.74	17.01	-	130.0	
10643- AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.33	67.78	16.92	0.46	130.0	± 9.6 %
		Y	6.13	67.39	16.71		130.0	
		Z	6.05	67.49	16.79	İ	130.0	· · · · · · · · · · · · · · · · · · ·
10644- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.62	68.66	17.38	0.46	130.0	± 9.6 %
····-		Y	6.24	67.74	16.91		130.0	
10015		Z	6.11	67.69	16.91		130.0	
10645- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.82	68.76	17.37	0.46	130.0	± 9.6 %
		Y	6.42	67.94	16.97		130.0	
10010		Z	6.29	67.89	16.97		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	22.37	99.45	32.18	9.30	60.0	± 9.6 %
		Y	34.93	118.52	39.50		60.0	
40047		Z	65.31	137.01	45.15		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	23.87	101.54	32.95	9.30	60.0	± 9.6 %
		Y	35.03	119.53	39.96		60.0	
40040		Z	61.92	136.93	45.35		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	1.11	70.04	15.37	0.00	150.0	± 9.6 %
		Y	0.68	63.85	10.64		150.0	
40050		Z	0.72	65.39	11.21		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	5.43	70.91	18.53	2.23	80.0	± 9.6 %
·		Y	4.44	69.41	17.59		80.0	
40050		Z	4.46	70.35	17.94		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	5.75	69.79	18.37	2.23	80.0	± 9.6 %
		Y	4.85	68.29	17.59		80.0	
1005		Z	4.80	68.81	17.83		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	5.63	69.47	18.36	2.23	80.0	±9.6 %
		Y	4.81	67.88	17.59		80.0	
		Z	4.76	68.31	17.81		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	5.69	69.55	18.41	2.23	80.0	± 9.6 %
	· · · ·	Y	4.87	67.81	17.62		80.0	
		Z	4.82	68.18	17.82		80.0	

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

Calibration Laboratory of

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





S

С

S

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

Accreditation No.: SCS 0108

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

Client PC Test

Certificate No: ES3-3347_Mar18

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3347	
Calibration procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes	vois
Calibration date:	March 27, 2018	
	ments the traceability to national standards, which realize the physical units of measurements (SI). certainties with confidence probability are given on the following pages and are part of the certificate.	
All calibrations have been cone	fucted in the closed laboratory facility: environment temperature (22 \pm 3)°C and humidity < 70%.	
Calibration Equipment used (N	I&TE critical for calibration)	

Scheduled Calibration Primary Standards ID Cal Date (Certificate No.) Power meter NRP SN: 104778 04-Apr-17 (No. 217-02521/02522) Apr-18 Power sensor NRP-Z91 SN: 103244 04-Apr-17 (No. 217-02521) Apr-18 Apr-18 Power sensor NRP-Z91 04-Apr-17 (No. 217-02525) SN: 103245 Apr-18 Reference 20 dB Attenuator SN: S5277 (20x) 07-Apr-17 (No. 217-02528) Reference Probe ES3DV2 SN: 3013 30-Dec-17 (No. ES3-3013_Dec17) Dec-18 DAE4 SN: 660 21-Dec-17 (No. DAE4-660_Dec17) Dec-18 Scheduled Check Check Date (in house) Secondary Standards ID Power meter E4419B SN: GB41293874 06-Apr-16 (in house check Jun-16) In house check: Jun-18 06-Apr-16 (in house check Jun-16) In house check: Jun-18 Power sensor E4412A SN: MY41498087 SN: 000110210 06-Apr-16 (in house check Jun-16) In house check: Jun-18 Power sensor E4412A In house check: Jun-18 RF generator HP 8648C SN: US3642U01700 04-Aug-99 (in house check Jun-16) 18-Oct-01 (in house check Oct-17) In house check: Oct-18 Network Analyzer HP 8753E SN: US37390585

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	
			<u>11.11225</u>
Approved by:	Katja Pokovic	Technical Manager	10 M
			10000
			Issued: March 27, 2018
This calibration certificat	e shall not be reproduced except in full	without written approval of the lab	oratory.

Calibration Laboratory of

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





Schweizerischer Kalibrierdienst S

Service suisse d'étalonnage

Accreditation No.: SCS 0108

- С Servizio svizzero di taratura S
 - Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

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

Glossary:

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- 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 $\vartheta = 0$ (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Probe ES3DV3

SN:3347

Manufactured: Repaired: Calibrated:

March 15, 2012 March 15, 2018 March 27, 2018

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.15	1.18	1.21	± 10.1 %
DCP (mV) ^B	101.9	105.1	102.9	

Modulation Calibration Parameters

UID	Communication System Name	***	A dB	B dB√μV	С	D dB	VR mV	Unc [≞] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	201.8	±3.3 %
		Y	0,0	0.0	1.0		203.9	
		Z	0.0	0.0	1.0		204.8	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ⁻²	T2 ms.V⁻¹	T3 ms	T4 V⁻²	T5 V ⁻¹	Т6
X	52.41	376.6	35.43	28.01	1.852	5.10	0.578	0.488	1.008
Y	42.65	300.9	34.31	25.12	1.310	5.10	1.279	0.204	1.011
Z	48.12	344.8	35.26	27.10	1.587	5.10	0.868	0.385	1.009

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

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6). ^B Numerical linearization parameter: uncertainty not required. ^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.77	6.77	6.77	0.65	1.32	± 12.0 %
835	41.5	0.90	6.41	6.41	6.41	0.40	1.64	± 12.0 %
1750	40.1	1.37	5.58	5.58	5.58	0.54	1.42	± 12.0 %
1900	40.0	1.40	5.36	5.36	5.36	0.80	1.16	± 12.0 %
2300	39.5	1.67	5.1 1	5.11	5.11	0.74	1.29	± 12.0 %
2450	39.2	1.80	4.81	4.81	4.81	0.80	1.24	± 12.0 %
2600	39.0	1.96	4.66	4.66	4.66	0.75	1.25	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity 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 \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

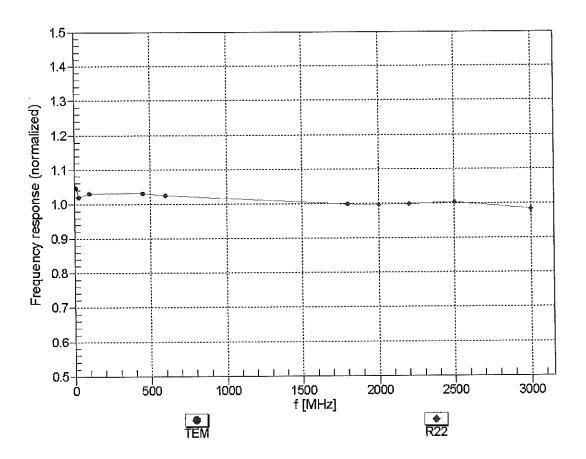
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.59	6.59	6.59	0.77	1.22	± 12.0 %
835	55.2	0.97	6.37	6.37	6.37	0.80	1.17	± 12.0 %
1750	53.4	1.49	5.17	5.17	5.17	0.49	1.59	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.52	1.49	± 12.0 %
2300	52.9	1.81	4.74	4.74	4.74	0.80	1.25	± 12.0 %
2450	52.7	1.95	4.64	4.64	4.64	0.75	1.20	± 12.0 %
2600	52.5	2.16	4.49	4.49	4.49	0.80	1.20	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

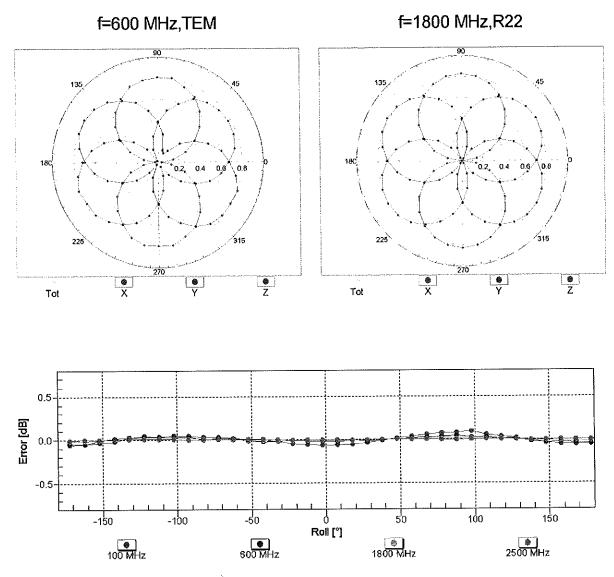
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF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

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



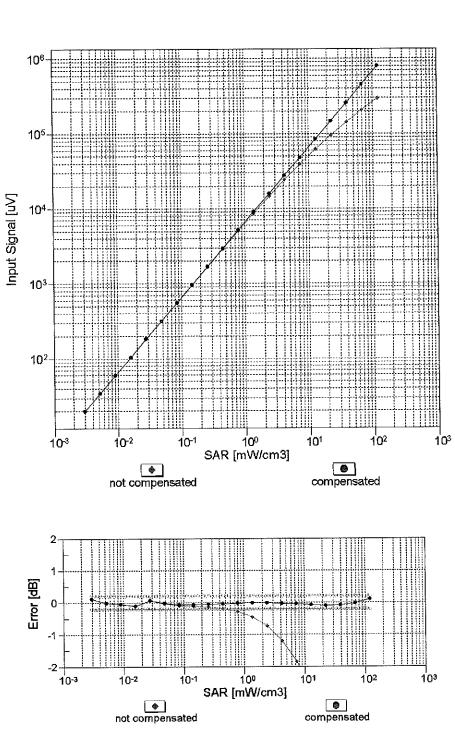
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



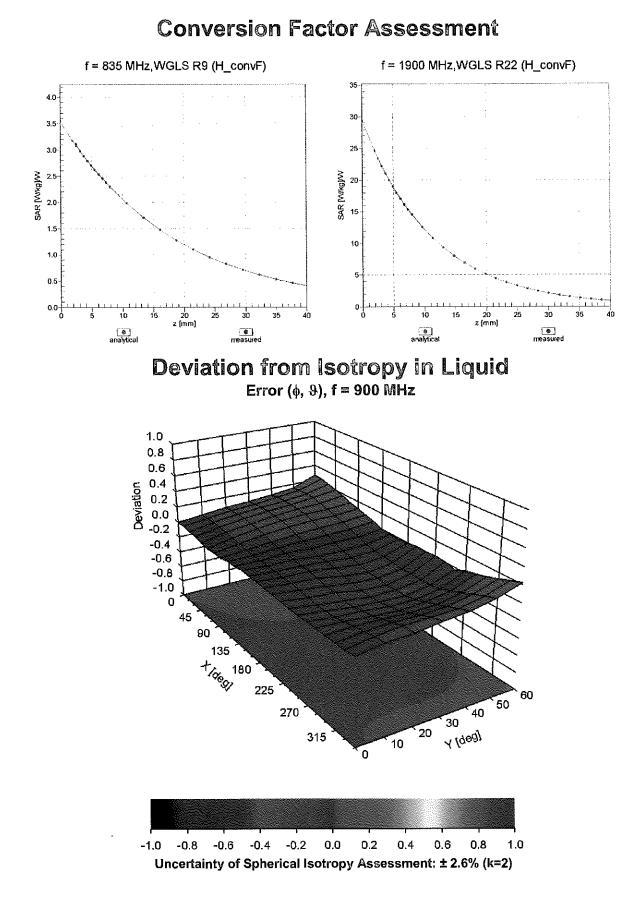
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



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

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



Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-16.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

X.

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	201.8	± 3.3 %
		Y	0.00	0.00	1.00		203.9	
10010-		Z	0.00	0.00	1.00		204.8	
CAA	SAR Validation (Square, 100ms, 10ms)	X	7.57	78.06	17.49	10.00	25.0	± 9.6 %
		Y	9.85	82.39	18.69		25.0	
10011-	UMTS-FDD (WCDMA)	Z	7.35	77.81	17.08		25.0	
CAB		X	0.93	66,02	14.08	0.00	150.0	± 9.6 %
		Y	0.97	66.67	14.52		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z	0.93	66.21	14.17		150.0	
CAB	Mbps)	X	1.22	64.40	15.16	0.41	150.0	± 9.6 %
		Y	1.24	64.68	15.35		150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.21	64.49	15.23	4.40	150.0	
CAB	OFDM, 6 Mbps)	×	5.02	67.09	17.26	1.46	150.0	± 9.6 %
		Y	4.93	67.32	17.31	ļ	150,0	
10021-	GSM-FDD (TDMA, GMSK)	ZX	4.97	67.16	17.27		150.0	
DAC			91.36	118.07	31.34	9.39	50.0	± 9.6 %
		Y	100.00	119.30	31.14	ļ	50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z X	100.00	118.75	31.10	0.57	50.0	100%
DAC			58.54	111.16	29.65	9.57	50.0	± 9.6 %
		Y Z	100.00	119.20	31.14		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	118.71 115.85	31.13 28.82	6.56	50.0 60.0	± 9.6 %
0/10		Y	100.00	116.32	28.70		60.0	
		Z	100.00	115.26	28.36		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	19.84	109.66	41.73	12.57	50.0	±9.6 %
		Y	49.03	143.08	53.86		50.0	
		Z	21.37	113.26	43.24		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.22	106.46	36.65	9.56	60.0	± 9.6 %
		Y	31.58	119.85	41.69		60.0	
40007		Z	22.56	108.96	37.62		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	114.36	27.28	4.80	80.0	±9.6 %
		Y	100.00	115.58	27.56		80.0	
10028-	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	113.91 113.86	26.92 26.30	3.55	80.0 100.0	± 9.6 %
DAC						L		
		Y	100.00	115.98	27.02	 	100.0	
10029-	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Z	100.00	113.53	26.01	7.00	100.0	+0.0 %
DAC		X	12.94	95.02	31.64	7.80	80.0	± 9.6 %
		Y Z	14.07	99.40	33.81	 	80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	12.89 100.00	95.72 113.99	32.02 27.43	5.30	80.0 70.0	± 9.6 %
UAA		Y	100.00	114.60	27.41	<u> </u>	70.0	
		Z	100.00	113.38	26.98		70.0	1
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	111.77	23.93	1.88	100.0	± 9.6 %
		Y	100.00	115.39	25.33	1	100.0	
		Z	100.00	111.26	23.59		100.0	

40022	IFFF 002 15 1 Plustooth (CESK DUS)	Х	400.00	111.85	22.94	1.17	100.0	± 9.6 %
10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	^	100.00	CO.III	22,94	1.17	100.0	19.0 %
		Y	100.00	118.40	25.59		100.0	
		Ζ	100.00	111.34	22.62		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	23.91	101.19	27.41	5.30	70.0	±9.6 %
		Y	36.18	107.81	28.88		70.0	
		Ζ	30.63	104.89	28.18		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	6.24	84.08	20.44	1.88	100.0	±9.6 %
		Υ	7.24	85.92	20.55		100.0	
		Ζ	6.85	85.19	20.50		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3.29	76.95	17.63	1.17	100.0	± 9.6 %
		Y	3.58	78.09	17.57		100.0	
		Z	3,42	77.43	17.51		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	32.79	106.39	28.91	5.30	70.0	±9.6 %
		Y	55.24	114.58	30.68	L	70.0	
40007		Z	45.73	111.34	29.95	<u> </u>	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.86	83.28	20.13	1.88	100.0	± 9.6 %
		Y	6.54	84.66	20.12		100.0	
40000		Z	6.31	84.13	20.12		100.0	100%
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.39	77.59	17.96	1.17	100.0	±9.6 %
		Y	3.66	78.64	17.87		100.0	
		Z	3.53	78.11	17.85		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.52	69.16	14.18	0.00	150.0	±9.6 %
		Y	1.40	68.90	13.55		150.0	
		Z	1.46	69.03	13.83		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	114.62	28.47	7.78	50.0	± 9.6 %
		Y	100.00	114.70	28.14		50.0	
		Z	100.00	113.88	27.92		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	121.88	0.68	0.00	150.0	± 9.6 %
		Y	0.00	97.83	1.91		150.0	
		Z	0.01	122.55	0.35		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	×	17.94	92.17	26.06	13.80	25.0	± 9.6 %
		Y	42.19	107.21	29.95		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	Z X	24.74 22.69	97.63 96.29	27.36 25.94	10.79	25.0 40.0	± 9.6 %
		Y	68.20	113.74	30.23		40.0	
		Z	32.65	101.85	27.19	+	40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	x	16.99	92.79	25.84	9.03	50.0	± 9.6 %
		Y	27.63	101.84	28.34		50.0	
		Z	20.13	95.81	26.57		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.12	87.95	28.36	6.55	100.0	± 9.6 %
		Y	8.98	89.45	29.43		100.0	
		Z	8.90	88.06	28.51		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	×	1.37	66.39	16.16	0.61	110.0	± 9.6 %
		Y	1.38	66.59	16.33		110.0	
		Z	1.36	66.49	16.23		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	128.08	31.98	1.30	110.0	± 9.6 %
		Y	100.00	131.22	33.31		110.0	1
		Z	100.00	128.65	32.15		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	9.25	94.71	26.12	2.04	110.0	± 9.6 %
		Y	9.59	96.73	27.06		110.0	
10000		Z	10.28	96.95	26.85		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.74	66.85	16.53	0.49	100.0	± 9.6 %
		Y	4.66	67.04	16.57		100.0	
		Z	4.70	66.90	16.54		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.78	67.00	16.67	0.72	100.0	± 9.6 %
		Y	4.69	67.19	16.70		100.0	· · · · · · · · · · · · · · · · · · ·
10001		Z	4.73	67.05	16.68		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.09	67.32	16.93	0.86	100.0	± 9.6 %
	······································	Y	4.97	67.46	16.94		100.0	
		Z	5.03	67.35	16.93		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.99	67.34	17.10	1.21	100.0	± 9.6 %
		Y	4.88	67.46	17.11		100.0	[
		Z	4.93	67.36	17.10	-	100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.05	67.46	17.33	1.46	100.0	±9.6 %
		Y	4.92	67.57	17.33		100.0	
		Z	4.98	67.48	17.32		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.36	67.67	17.81	2.04	100.0	± 9.6 %
		Y	5.25	67.92	17.88		100.0	
		Z	5.30	67.73	17.82		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.48	67.95	18.15	2.55	100.0	± 9.6 %
		Y	5.33	68.04	18.16		100.0	
		Z	5.40	67.94	18.13		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.56	67.94	18.35	2.67	100.0	±9.6 %
		Y	5.42	68.11	18.40		100.0	
		Z	5.49	67.96	18.34		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.16	67.32	17.64	1.99	100.0	± 9.6 %
		Y	5.07	67.53	17.70		100.0	
		Z	5.11	67.37	17.65		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.20	67.83	17.95	2.30	100.0	± 9.6 %
		Y	5.09	67.99	18.00		100.0	
		Z	5.14	67.86	17.96		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.32	68.17	18.37	2.83	100.0	±9.6 %
	•	Y	5.22	68.36	18.44		100.0	
		Ż	5.26	68.20	18.38		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.35	68.22	18.60	3.30	100.0	± 9.6 %
		Y	5.26	68.43	18.68		100.0	
		Z	5.29	68.25	18.61		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.48	68.62	19.07	3.82	90.0	± 9.6 %
		Y	5.35	68.73	19.11		90.0	
40070		Z	5.40	68.60	19.05		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.50	68.45	19.21	4.15	90.0	± 9.6 %
		Y	5.40	68.64	19.31		90.0	
100000		Z	5.44	68.46	19.21		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.54	68.54	19.31	4.30	90.0	±9.6 %
		Y	5,44	68.76	19.43		90.0	
		Z	5.48	68.56	19.32		90.0	

10081-	CDMA2000 (1xRTT, RC3)	x	0.74	64.32	11.31	0.00	150.0	± 9.6 %
CAB		Y	0.70	64.20	10.81		150.0	
		T Z	0.70	64.15	10.92		150.0	
10082-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	X	1.69	62.26	7.32	4.77	80.0	± 9.6 %
CAB	DQPSK, Fullrate)	- <u>v</u>	1.49	62.02	6.99		80.0	
		Y	and the second second second second second second second second second second second second second second second				80.0	
		Z	1.55	61.83	6.90	0.50		1069/
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	×	100.00	115.94	28.89	6.56	60.0	± 9.6 %
		Y	100.00	116.39	28.75		60.0	
		Z	100.00	115.35	28.42		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.73	66.76	14.97	0.00	150.0	± 9.6 %
		Y	1.76	67.41	15.16		150.0	
		Ζ	1.72	67.00	15.02		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	х	1.69	66.71	14.93	0.00	150.0	± 9.6 %
		Y	1.72	67.36	15.13		150.0	
		Ζ	1.69	66.94	14.98		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Х	21.17	106.37	36.62	9.56	60.0	± 9,6 %
		Y	31.53	119.75	41.66		60.0	
		Z	22.53	108.88	37.59		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	3.02	69.66	16.13	0.00	150.0	± 9.6 %
		Y	2.98	69.86	16.33	1	150.0	
		Z	2.99	69.71	16.19		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.20	67.30	15.63	0.00	150.0	± 9.6 %
		Y	3.15	67.42	15.72		150.0	
		z	3.17	67.31	15.65		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.31	67.28	15.74	0.00	150.0	± 9.6 %
		Y	3.26	67.39	15,81		150.0	
		Z	3.27	67.30	15.76		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.39	78.42	21.27	3.98	65.0	±9.6 %
0.0		Υ	8.55	79.75	21.92		65.0	
		z	8.43	78.92	21.50		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.28	76.92	21.52	3.98	65.0	± 9.6 %
		Y	8.11	77.48	21.85		65.0	
		z	8.18	77.09	21.61		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.63	75.31	21.13	3.98	65.0	± 9.6 %
0.0		Y	7.72	76.48	21.73		65.0	
		Z	7.57	75.55	21.26		65.0	1
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.65	68.92	15.95	0.00	150.0	± 9.6 %
		Y	2.59	69.14	16.15		150.0	1
		Ż	2.61	68.99	16.01		150.0	1
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.86	67.08	15.50	0.00	150.0	± 9.6 %
		Y	2.80	67.24	15.55		150.0	
		Z	2.82	67.11	15.51		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	×	2.15	67.97	15.52	0.00	150.0	± 9.6 %
~		Y	2.09	68.27	15.68	İ	150.0	
		Ż	2.11	68.06	15.56		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	x	2.54	67.60	15.65	0.00	150.0	± 9.6 %
UNE		Y	2.49	67.90	15.64		150.0	
	1		1 2	01.00	1 10.0-7	1	1 .00.0	1

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.98	67.08	15.57	0.00	150.0	±9.6 %
	1	Y	2.92	67.27	15.62		150.0	·
	······································	Z	2.94	67.13	15.58		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.70	67.76	15.81	0.00	150.0	± 9.6 %
		Y	2.63	68.07	15.78		150.0	
		Z	2.66	67.92	15.82		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.13	67.22	16.34	0.00	150.0	± 9.6 %
		Y	5.06	67.35	16.39		150.0	
10//7		Z	5.10	67.28	16.37		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.46	67.47	16.48	0.00	150.0	±9.6 %
		Y	5.32	67.42	16.43		150.0	
40440		Z	5.39	67.43	16.46		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.25	67.46	16.39	0.00	150.0	± 9.6 %
		Y	5.15	67.53	16.41		150.0	
40447		Z	5.20	67.47	16.40		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.10	67.11	16.30	0.00	150.0	± 9.6 %
		Y	5.03	67.22	16.34		150.0	
40440		Z	5.06	67.11	16.31		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.56	67.71	16.61	0.00	150.0	± 9.6 %
		Y	5.40	67.63	16.55		150.0	
40440		Z	5.48	67.67	16.59		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.22	67.39	16.37	0.00	150.0	± 9.6 %
		Y	5.13	67.49	16.40		150.0	
		Z	5.18	67.42	16.38		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.35	67.28	15.66	0.00	150.0	± 9.6 %
		Y	3.29	67.41	15.73		150.0	
		Z	3.31	67.30	15.68		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.47	67.38	15.84	0.00	150.0	±9.6 %
		Y	3.41	67.52	15.90		150.0	
		Z	3.43	67.42	15.86		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.91	67.75	15.10	0.00	150.0	± 9.6 %
		Y	1.84	68.07	15.11		150.0	
		Z	1.87	67.86	15.08		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.37	68.04	15.25	0.00	150.0	± 9.6 %
		Y	2.29	68.28	15.02		150.0	
10414		Z	2.33	68.17	15.16	<u> </u>	150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.20	66.14	13.84	0.00	150.0	± 9.6 %
		Y	2.08	66.17	13.48		150.0	
40445		Z	2.13	66.11	13.65		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.17	64.40	11.32	0.00	150.0	± 9.6 %
		Y	0.99	63.23	9.93	<u> </u>	150.0	
40440		Z	1.08	63.80	10.61		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.07	66.79	12.08	0.00	150.0	± 9.6 %
		Y	1.74	65.46	10.58		150.0	
404/		Z	1.93	66.25	11.43		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.41	68.68	13.11	0.00	150.0	± 9.6 %
		Y	2.02	67.13	11.50		150.0	
	1	Z	2.26	68.13	12.45		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.87	67.13	15.54	0.00	150.0	±9.6 %
		Y	2.81	67.29	15.59		150.0	
		z	2.83	67.17	15.55		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.99	67.13	15.61	0.00	150.0	±9.6 %
		Y	2,93	67.31	15.66		150.0	
		Z	2,95	67.18	15.62		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.21	81.33	22.45	3.98	65.0	±9.6 %
		Y	9.55	83.12	23.24		65.0	
		Z	9.38	82.15	22.79		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.89	77.12	21.32	3.98	65.0	±9.6 %
		Y	7.75	77.78	21.62		65.0	
		Z	7.80	77.32	21.39		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	8.33	78.05	22.06	3.98	65.0	± 9.6 %
		Y	8.20	78.76	22.36		65.0	
		Z	8.27	78.34	22.17		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.19	68.34	15.77	0.00	150.0	±9.6 %
		Y	2.13	68.58	15.88		150.0	
		Z	2.15	68.43	15.80		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	×	2.54	67.61	15.66	0.00	150.0	± 9.6 %
		Y	2.49	67.93	15.66	t	150.0	
		Ζ	2.51	67.76	15.67		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.75	67.70	14.83	0.00	150.0	± 9.6 %
		Y	1.67	67.86	14.67		150.0	
		Z	1.70	67.75	14.73		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	2.01	66.49	13.77	0.00	150.0	± 9.6 %
		Y	1.89	66.41	13.28		150.0	
		Z	1,95	66.44	13.53		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.70	67.82	15.85	0.00	150.0	± 9.6 %
		Y	2.64	68.13	15.83		150.0	
		Z	2.67	67.98	15.86		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.11	66.90	14.04	0.00	150.0	±9.6 %
		Y	1.98	66.74	13.50		150.0	
		Z	2.04	66.83	13.79		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.69	68.21	15.87	0.00	150.0	± 9.6 %
		Y	2.64	68.50	16.02		150.0	
		Ζ	2.66	68.34	15.93		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.88	67.04	15.53	0.00	150.0	± 9.6 %
		Y	2.82	67.25	15.56		150.0	
		Z	2.84	67.11	15.53		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	2.99	67.17	15.64	0.00	150.0	± 9.6 %
	·····	Y	2.93	67.43	15.68		150.0	
		Z	2.96	67.27	15.66		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.67	69.76	19.07	3.01	150.0	± 9.6 %
		Y	3.59	70.61	19.72		150.0	
		Z	3.64	70.17	19.36		150,0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.60	72.78	19.56	3.01	150.0	± 9.6 %
		Y	4.59	74.59	20.58		150.0	
		Z	4.60	73.54	19.97		150.0	İ

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.10	75.00	20.86	3.01	150.0	± 9.6 %
		Y	5.17	77.15	22.00		150.0	
		Z	5.18	76.08	21.41		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.14	69.82	19.09	3.01	150.0	± 9.6 %
		Y	2,99	70.11	19.57		150.0	
		Z	3.08	69.99	19.30		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.48	76.11	21.47	3.01	150.0	± 9.6 %
		Υ	4.42	77.92	22.61		150.0	T
40474		Z	4.51	77.09	22.03		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	×	3.64	71.74	18.65	3.01	150.0	± 9.6 %
	a ang ang ang ang ang ang ang ang ang an	Y	3.56	73.31	19.70		150.0	
10172-		Z	3.59	72.29	19.01		150.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	21.10	104.74	32.18	6.02	65.0	± 9.6 %
		Y	44.31	124.23	38.59		65.0	
10470		Z	24.87	109.58	33.89		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	×	37.36	109.91	31.76	6.02	65.0	± 9.6 %
<u> </u>		Y	100.00	131.53	37.83		65.0	
10174-		Z	66,45	121.49	34.95		65.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	28.71	103.81	29.50	6.02	65.0	± 9.6 %
		Y	93.12	128.22	36.43		65.0	
40475		Z	36.57	109.34	31.20		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	×	3.10	69.50	18.83	3.01	150.0	±9.6 %
		Y	2.96	69.84	19.35		150.0	
40470		Z	3.04	69.66	19.04		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	4.49	76.13	21.48	3.01	150.0	± 9.6 %
·····		Υ	4.43	77.95	22.63		150.0	
40477		Z	4.52	77.11	22.04		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.13	69.65	18.93	3.01	150.0	± 9.6 %
		Y	2.98	69.97	19.42		150.0	
		Z	3.07	69.81	19.14		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	Х	4.43	75.88	21.35	3.01	150.0	± 9.6 %
		Y	4.39	77.75	22.52		150.0	
		Z	4.47	76.86	21.91		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.01	73.75	19.90	3.01	150.0	± 9.6 %
		Y	3.96	75.54	21.04		150.0	
40400		Z	4.01	74.52	20.37		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.63	71.66	18.60	3.01	150.0	± 9.6 %
		Y	3.55	73.25	19.66		150.0	
40404		Z	3.59	72.21	18.96		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.13	69.64	18.92	3.01	150.0	± 9.6 %
		Y	2.98	69.95	19.42		150.0	
40402		Z	3.06	69.80	19.13		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	4.42	75.86	21.34	3.01	150.0	±9.6 %
		Y	4.38	77.72	22.51		150.0	
		Z	4.46	76.83	21.90		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.62	71.63	18.59	3.01	150.0	± 9.6 %
		Y	3.55	73.22	19.65		150.0	
		Z	3.58	72.19	18.94		150.0	

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	х	3.14	69.68	18.95	3.01	150.0	± 9.6 %
0,10		Y	2.99	69.99	19.44		150.0	
		ż	3.07	69.84	19.16		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	4.45	75.93	21.38	3.01	150.0	± 9.6 %
		Y	4.40	77.80	22.55		150.0	
		Ζ	4.48	76.92	21.94		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	х	3.64	71.70	18.62	3.01	150.0	± 9.6 %
		Y	3.56	73.30	19.69		150.0	
		Ζ	3.60	72.26	18.98		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	3,15	69.73	19.01	3.01	150.0	± 9.6 %
		Y	3.00	70.06	19.51		150.0	
		Ζ	3.08	69.90	19.22		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	х	4.60	76.65	21.77	3.01	150.0	± 9.6 %
		Y	4.55	78.49	22.93		150.0	
		Ζ	4.65	77.69	22.36		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	х	3.72	72.15	18.90	3.01	150.0	±9.6 %
		Y	3.65	73.76	19.97		150.0	
		Ζ	3.69	72.74	19.28		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	х	4.52	66.58	16.02	0.00	150.0	±9.6 %
		Y	4.45	66.79	16.05		150.0	
		Z	4.48	66.63	16.03		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	х	4.70	66.91	16.15	0.00	150.0	± 9.6 %
		Y	4.60	67.08	16.18		150.0	
		Ζ	4.65	66.95	16.16		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.74	66.94	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.11	16.20		150.0	
		Ζ	4.69	66.98	16.18		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.53	66.65	16.05	0.00	150.0	±9.6 %
		Y	4.44	66.83	16.06		150.0	
		Z	4.48	66.69	16.05		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.72	66.93	16.16	0.00	150.0	± 9.6 %
		Y	4.62	67.10	16.19		150.0	
		Z	4.66	66.97	16.17		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.75	66.96	16.18	0.00	150.0	± 9.6 %
		Y	4.64	67.13	16.21		150.0	
		Z	4.69	67.00	16.19	1	150.0	ļ
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	Х	4.48	66.66	16.00	0.00	150.0	± 9.6 %
		Y	4.39	66.84	16.01		150.0	
		Z	4.43	66.70	16.00		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.71	66.91	16.16	0.00	150.0	± 9.6 %
		Y	4.61	67.06	16.18		150.0	
		Z	4.66	66.94	16.16		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.76	66.89	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.06	16.20		150.0	
		Z	4.70	66.93	16.18		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.08	67.11	16.29	0.00	150.0	± 9.6 %
		Y	5.00	67.21	16.33	1	150.0	
1	1							

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.40	67.34	16.44	0.00	150.0	± 9.6 %
		Y	5.30	67.47	16.48		150.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.35	67.37	16.45	<u> </u>	150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.12	67.22	16.27	0.00	150.0	± 9.6 %
		Y	5.04	67.32	16.31		150.0	
		Z	5.08	67.23	16.28		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.77	65.87	15.07	0.00	150.0	± 9.6 %
		Y	2.71	66.11	14.95		150.0	
10000		Z	2.73	65.95	15.01		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	×	40.90	111.69	32.33	6.02	65.0	±9.6 %
		Y	100.00	131.74	37.97		65.0	
40007		Z	76.08	124.13	35.71		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	32.04	105.79	30.14	6.02	65.0	± 9.6 %
	····	Y	100.00	129.20	36.63		65.0	
10228-		Z	56.03	116.66	33.17		65.0	
CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	32.49	113.40	34.73	6.02	65.0	± 9.6 %
		Y	63.93	131.79	40.55		65.0	
40000		Z	42.68	120.45	36.94		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	37.48	109.96	31.78	6.02	65.0	± 9.6 %
		Y	100.00	131.51	37.84	********	65.0	
10230-		Z	66.68	121.54	34.97		65.0	
CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	29.78	104.42	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.07	36.54		65.0	
40004		Z	50.21	114.61	32.57		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	30.12	111.79	34.20	6.02	65.0	± 9.6 %
		Y	57.30	129.38	39.87		65.0	
40000		Z	38.78	118.39	36.30		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	37.48	109.97	31.78	6.02	65.0	±9.6 %
		Y	100.00	131.53	37.84		65.0	
10000		Z	66.72	121.56	34.98		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	29.77	104.42	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.09	36.55		65.0	
10001		Z	50.19	114.62	32.57		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	28.05	110.17	33.63	6.02	65.0	± 9.6 %
		Y	51.99	127.09	39.16		65.0	
10005		Z	35.54	116.41	35.65		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	37.64	110.05	31.80	6.02	65.0	±9.6 %
		Y	100.00	131,54	37.84		65.0	,
10236-		Z	67.18	121.70	35.01		65.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	30.09	104.58	29.72	6.02	65.0	± 9.6 %
		Y	100.00	129.03	36.52		65.0	
10237-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z X	50.96 30.42	114.84 112.00	<u>32.62</u> 34.26	6.02	65.0 65.0	± 9.6 %
CAD	QPSK)		<u> </u>	400.00				
*****		Y	58.39	129.80	39.98		65.0	
10220		Z	39.25	118.66	36.38		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	37.48	109.98	31.78	6.02	65.0	±9.6 %
••••••••••••••••••••••••••••••••••••••		Y	100.00	131.54	37,84		65.0	
		Z	66.77	121.59	34.98		65.0	

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	х	29.75	104.43	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.11	36.55		65.0	
		Ζ	50.17	114.63	32.57		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	30.30	111.94	34.24	6.02	65.0	± 9.6 %
		Y	58.14	129.72	39.96		65.0	
		Z	39.09	118.59	36.36		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	11.80	86.80	27.35	6.98	65.0	±9.6 %
		Y	13.67	92.53	29.81		65.0	
		Z	12.27	88.56	28.08		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	10.15	83.59	26.03	6.98	65.0	± 9.6 %
		Y	12.26	90.20	28.90		65.0	
		Z	10.49	85.23	26.75	0.00	65.0	1000
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	8.15	80.45	25.67	6.98	65.0	± 9.6 %
		Y	9.07	85.16	28.03		65.0	
		Z	8.20	81.43	26.18	0.00	65.0	100%
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	8.77	79.58	20.12	3.98	65.0	± 9.6 %
		Y	8.68	79.98	19.73		65.0	
		Z	8.93	80.10	20.07		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	8.56	78.94	19.83	3.98	65.0	± 9.6 %
		Y	8,27	79.00	19.30		65.0	
	······	Z	8.60	79.28	19.71		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	9.05	82.96	21.42	3.98	65.0	±9.6 %
		Y	8.67	82.79	20.89		65.0	
		Z	9.07	83.18	21.25		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.31	77.47	20.01	3.98	65.0	± 9.6 %
		Y	6,88	77.10	19.42		65.0	
	······································	Z	7.16	77.42	19,78		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.23	76.85	19.75	3.98	65.0	± 9.6 %
		Y	6.75	76.40	19.13		65.0	
		Z	7.04	76.72	19.48		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.55	85.88	23.24	3.98	65.0	±9.6 %
		Υ	11.23	87.71	23.62		65.0	
		Z	11.08	87.02	23.49		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.37	79.97	22.44	3.98	65.0	± 9.6 %
		Y	8.25	80.64	22.58		65.0	
		Z	8.37	80.40	22.54		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.79	77.55	21.17	3.98	65.0	± 9.6 %
		Y	7.62	78.12	21.26		65.0	
		Z	7.71	77.78	21.18		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.26	85.03	23.77	3.98	65.0	± 9.6 %
		Y	11.07	87.53	24.67		65.0	
		Z	10.72	86.30	24.20		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.69	76.53	21.09	3.98	65.0	± 9.6 %
		Y	7.57	77.22	21.35		65.0	
		Z	7,61	76.75	21.15		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.11	77.42	21.76	3.98	65.0	±9.6 %
-		Y	7.99	78.11	22.01		65.0	
Į		Z	8.04	77.70	21.84	1	65.0	

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.87	80.90	22.51	3.98	65.0	± 9.6 %
		Y	9.18	82.66	23.26		65.0	1
		Z	9.01	81.69	22.82		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	7.19	76.04	17.83	3.98	65.0	± 9.6 %
		Y	6.37	74.72	16.60		65.0	
		Z	6.91	75.63	17.34		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	6.95	75.20	17.41	3.98	65.0	± 9.6 %
		Y	6.01	73.59	16.03		65.0	
40050		Z	6.60	74.62	16.84		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.08	78.57	19.08	3.98	65.0	± 9.6 %
	······································	Y	5.96	76.36	17.58		65.0	
10259-		Z	6.63	77.70	18.41		65.0	
CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.72	78.37	20.87	3.98	65.0	± 9.6 %
		Y	7.43	78.48	20.58		65.0	
40000		Z	7.64	78.54	20.77		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.71	78.04	20.75	3.98	65.0	± 9.6 %
		Y	7.37	78.04	20.41		65.0	
10004		Z	7.60	78.14	20.63		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.91	84.71	23.20	3.98	65.0	± 9.6 %
		Y	10.51	86.66	23.72		65.0	
40000		Ζ	10.31	85.78	23.47		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.35	79.91	22.40	3.98	65.0	± 9.6 %
		Y	8.23	80.57	22.53		65.0	
		Z	8.35	80.33	22.49		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.78	77.53	21.17	3.98	65.0	± 9.6 %
		Y	7.61	78.09	21.25		65.0	
		Z	7.70	77.76	21.18		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.16	84.83	23.68	3.98	65.0	± 9.6 %
		Y	10.94	87.30	24.57		65.0	
		Z	10.60	86.08	24.10		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.89	77.12	21.33	3.98	65.0	± 9.6 %
		Y	7.75	77.78	21.62		65.0	
		Z	7.80	77.33	21.40		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.32	78.04	22.05	3.98	65.0	± 9.6 %
		Y	8.20	78.75	22.36		65.0	
105		Z	8.26	78.33	22.16		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.19	81.29	22.44	3.98	65.0	± 9.6 %
		Y	9.53	83.07	23.22		65.0	
1000-		Z	9.36	82.10	22.77		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.37	76.65	21.54	3.98	65.0	± 9.6 %
		Y	8.20	77.22	21.85		65.0	
1000-		Z	8.27	76.83	21.63		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.29	76.22	21.43	3.98	65.0	± 9.6 %
		Y	8.13	76.76	21.72		65.0	
		Z	8.20	76.38	21.51		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.55	78.25	21.44	3.98	65.0	±9.6 %
		Y	8.58	79.32	21.98		65.0	
		Z	8.56	78.72	21.66		65.0	<u>†</u>

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	х	2.53	66.08	14.88	0.00	150.0	± 9.6 %
		Y	2.52	66.54	14.91		150.0	
		z	2.51	66.24	14.87		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	×	1.51	66.90	14.72	0.00	150.0	± 9.6 %
		Y	1.52	67.44	14.98		150.0	
		Z	1.50	67.06	14.77		150.0	
10277- CAA	PHS (QPSK)	х	4.49	67.07	11.86	9.03	50.0	± 9.6 %
		Y	3.76	65.67	10.51		50.0	
		Z	4.09	66.15	11.03		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	×	8.37	78.55	19.37	9.03	50.0	± 9.6 %
		Y	7.19	76.56	17.89		50.0	
		Z	7.75	77.39	18.52		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.51	78.75	19.47	9.03	50.0	± 9.6 %
		Y	7.31	76.76	18.01		50.0	
		Ζ	7.88	77.58	18.63		50.0	0.0.0/
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.28	66.85	12.83	0.00	150.0	±9.6 %
		Y	1.15	66.36	12.07		150.0	
		Ζ	1.21	66.57	12.40		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	0.73	64.15	11.20	0.00	150.0	±9.6 %
		Y	0.69	64.04	10.71		150.0	
		Z	0.69	63.98	10.82		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.85	66.79	12.92	0.00	150.0	±9.6 %
		Y	0.83	67.15	12.67		150.0	
		Z	0.82	66.81	12.63		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	1.14	70.77	15.25	0.00	150.0	± 9.6 %
		Y	1.22	72.07	15.35		150.0	
		Z	1.16	71.38	15.20		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.92	86.64	24.71	9.03	50.0	± 9.6 %
		Y	15.63	91.98	26.09		50.0	
		Z	13.21	88.61	25,13		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.66	69.01	16.01	0.00	150.0	± 9.6 %
		Y	2.60	69.22	16.21		150.0	
		Z	2.62	69.08	16.08		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.46	66.51	13.33	0.00	150.0	± 9.6 %
		Y	1.32	65.99	12.56		150.0	
		Z	1.39	66.26	12.94		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.70	69.70	14.37	0.00	150.0	± 9.6 %
		Y	2.67	70.31	14.00		150.0	
		Z	2.72	70.11	14.27	ļ.,	150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.09	65.56	11.69	0.00	150.0	± 9.6 %
		Y	1.84	65.02	10.77		150.0	
		Z	1.98	65.35	11.29		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.46	67.87	18.50	4.17	80.0	±9.6 %
		Y	5.32	68.03	18.43		80.0	
		Z	5.39	67. 9 4	18.48		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.85	67.98	18.95	4.96	80.0	±9.6 %
		Y	5.80	68.69	19.24		80.0	
	····	Z	5.75	67.96	18.88	1	80.0	1

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.66	67.92	18.92	4.96	80.0	± 9.6 %
		Y	5.61	68.61	19.19		80.0	<u> </u>
		Z	5.56	67.86	18.83		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.35	67.35	18.18	4.17	80.0	± 9.6 %
		Y	5.30	68.04	18.43		80.0	
	······································	Z	5.26	67.36	18.12		80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.05	76.99	23.82	6.02	50.0	± 9.6 %
		Y	7.19	78.32	24.16		50.0	
		Z	6.80	76.50	23.43	·····	50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.82	69.84	20.43	6.02	50.0	± 9.6 %
		Y	5.84	70.99	20.86	· · · · · · · · · · · · · · · · · · ·	50.0	
		Z	6.02	71.90	21.62		50.0	<u> </u>
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.31	73.07	22.13	6.02	50.0	± 9.6 %
		Y	5.83	71.38	20.88		50.0	
		Z	6.11	72.72	21.84		50.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.39	73.64	22.41	6.02	50.0	± 9.6 %
	······	Y	5.90	71.88	21.13		50.0	
		Z	6.20	73.31	22.13		50.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.91	70.12	20.60	6.02	50.0	± 9.6 %
		Y	5.91	71.23	21.02		50.0	
		Z	6.11	72.19	21.79		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.22	72.50	21.95	6.02	50.0	± 9.6 %
		Y	5.84	71.19	20.88		50.0	
		Z	6.05	72.25	21.70		50.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.00	68.33	15.71	0.00	150.0	± 9.6 %
		Y	2.96	68.52	15.89		150.0	
		Z	2.97	68.38	15.77		150.0	
10313- AAA	IDEN 1:3	X	6.99	77.76	18.02	6.99	70.0	± 9.6 %
		Y	8.29	81.34	19.42		70.0	
		Z	7.24	78.54	18.23		70.0	
10314- AAA	iDEN 1:6	X	10.49	86.54	23.63	10.00	30.0	± 9.6 %
		Y	12.83	91.81	25.63		30.0	
		Z	11.85	89.04	24.41		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	Х	1.08	63.85	14.84	0.17	150.0	± 9.6 %
		Y	1.11	64.19	15.04		150.0	
		Z	1.08	63.97	14.91		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.62	66.77	16.25	0.17	150.0	± 9.6 %
	·······	Y	4.54	66.97	16.29		150.0	
		Z	4.57	66.82	16.26		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.62	66.77	16.25	0.17	150.0	± 9.6 %
		Y	4.54	66.97	16.29		150.0	
		Z	4.57	66,82	16.26		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.70	66,97	16.15	0.00	150.0	± 9.6 %
	·	Y	4.59	67.15	16.19		150.0	
		Z	4.64	67.01	16.16		150.0	······
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.41	67.24	16.37	0.00	150.0	± 9.6 %
		Y	5.32	67.38	16.42		150.0	

10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	х	5.66	67.55	16.37	0.00	150.0	± 9.6 %
AAD	99pc duty cycle)	Y	5.56	67 50	16.37		150.0	
		Y Z		67.58 67.52	16.37		150.0	
40.400		X	5.60 1.28	66.85	12.83	0.00	115.0	± 9.6 %
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)					0.00		1 0.0 %
		Y	1.15	66.36	12.07		115.0	
		Ζ	1.21	66.57	12.40		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.28	66.85	12.83	0.00	115.0	±9.6 %
		Y	1.15	66.36	12.07		115.0	
		Ζ	1.21	66.57	12.40		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	31.97	105.65	26.52	0.00	100.0	±9.6 %
		Y	100.00	119.11	28.78		100.0	
		Z	100.00	120.25	29.60		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	100.00	119.16	29.68	3.23	80.0	±9.6 %
		Y	100.00	122.81	30.98		80.0	
		Ζ	100.00	120.19	29.97		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.96	62.46	13.98	0.00	150.0	±9.6 %
<u></u>		Y	0.99	62.90	14.23		150.0	
		Ż	0.95	62.59	14.06		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	X	4.53	66.62	16.09	0.00	150.0	±9.6 %
AAA	OFDM, 6 Mbps, 99pc duty cycle)		1100	0000				
		Y	4.45	66.83	16.13		150.0	
		Z	4.48	66.68	16.10		150.0	
10417-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	X	4.53	66.62	16.09	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)	Y	4.45	66.83	16.13		150.0	
		Z	4.48	66.68	16.10		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.51	66.76	16.09	0.00	150.0	± 9.6 %
		Y	4.44	67.00	16.16		150.0	1
		Z	4.47	66.83	16.12		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.54	66.72	16.10	0.00	150.0	± 9.6 %
		Y	4.46	66.94	16.15		150.0	1
		Z	4.49	66.78	16.12	1	150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.66	66.73	16.13	0.00	150.0	± 9.6 %
		Y	4.57	66.94	16.17	-	150.0	
		Ż	4.61	66.79	16.14	1	150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.83	67.07	16.25	0.00	150.0	± 9.6 %
		Y	4.72	67.22	16.28	1	150.0	
		Z	4.77	67.10	16.25		150.0	1
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.75	67.01	16.22	0,00	150.0	± 9.6 %
		Y	4.64	67.18	16.25		150.0	
		Z	4.69	67.05	16.23		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.37	67.43	16.45	0.00	150.0	± 9.6 %
		Y	5.26	67.46	16.45		150.0	
		Z	5.32	67.43	16.46		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.37	67.44	16.46	0.00	150.0	± 9.6 %
		Y	5.28	67.55	16.49	1	150.0	
		4 4	,					

10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.38	67.41	16.44	0.00	150.0	± 9.6 %
		Y	5.27	67.46	16.44		150.0	
		Z	5.33	67.43	16.45		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.17	70.27	17.81	0.00	150.0	± 9.6 %
		Y	4.03	70.48	17.58		150.0	
40404		Z	4.14	70.57	17.85		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.21	67.11	16.05	0.00	150.0	± 9.6 %
		Y	4.09	67.33	16.03		150.0	
10432-		Z	4.15	67.18	16.04		150.0	
AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.51	67.03	16.15	0.00	150.0	± 9.6 %
		Y	4.40	67.23	16.17		150.0	
10433-	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Z	4.46	67.08	16.15		150.0	
AAB		X	4.76	67.04	16.24	0.00	150.0	± 9.6 %
		Y	4.66	67.21	16.27		150.0	
10434-	W-CDMA (BS Test Model 1, 64 DPCH)	Z	4.71	67.08	16.24		150.0	
AAA	W-CDWA (BS Test Wodel 1, 64 DPCH)	X	4.23	70.97	17.72	0.00	150.0	± 9,6 %
····		Y	4.07	71.14	17.40		150.0	
10435-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	Z	4.21	71.31	17.74		150.0	
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.98	29.60	3.23	80.0	± 9.6 %
		Y	100.00	122.59	30.87		80.0	
10447-		Z	100.00	119.99	29.88		80.0	
AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.49	66.99	15.32	0.00	150.0	± 9.6 %
		Y	3.34	67.16	15.09		150.0	
40440		Ζ	3.41	67.04	15.22		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.04	66.88	15.90	0.00	150.0	± 9.6 %
		Y	3.94	67.12	15.89		150.0	
		Z	3.99	66.95	15.89		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.32	66.84	16.03	0.00	150.0	±9.6 %
		Y	4.23	67.04	16.06		150.0	
10.100		Ζ	4.27	66.90	16.04		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.51	66.79	16.08	0.00	150.0	±9.6 %
		Y	4.44	66.97	16.11		150.0	
40454		Z	4.47	66.83	16.09		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.37	67.12	14.92	0.00	150.0	±9.6 %
		Y	3.19	67.13	14.54		150.0	
10150		Ζ	3.28	67.11	14.76		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.23	67.99	16.62	0.00	150.0	± 9.6 %
·····		Y	6.17	68.10	16.67		150.0	
40457		Z	6.19	67.99	16.63		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	Х	3.77	65.25	15.79	0.00	150.0	± 9.6 %
		Y	3.75	65.50	15.83		150.0	
10450		Z	3.75	65.32	15.80		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.87	70.16	17.10	0.00	150.0	± 9.6 %
		Y	3.71	70.34	16.66		150.0	
10175		Ζ	3.84	70.49	17.05		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	х	5.00	67.94	17.87	0.00	150.0	± 9.6 %
		Y	4.81	68.13	17.56		150.0	
		Z	4.96	68.23	17.89		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	Х	0.79	66.34	14.61	0.00	150.0	±9.6 %
AAA		Y	0.84	67.16	15.15		150.0	
		Z	0.84	66.65	14.76		150.0	
10461-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	100.00	122.59	31.33	3.29	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)							
		Y	100.00	128.70	33.71		80.0	
		Ζ	100.00	124.88	32.17		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	21.46	90.49	19.92	3.23	80.0	± 9.6 %
		Y	100.00	107.87	23.85		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 5.25	106.49 74.65	23.49 14.70	3.23	80.0 80.0	±9.6 %
AAA	04-QAW, OL Sabirane-2,3,4,7,0,3)	Y	19.71	88.51	18.38		80.0	
		Z	7.19	78.06	15.56		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.34	30.14	3.23	80.0	± 9.6 %
/001		Y	100.00	126.35	32.46		80.0	
		Z	100.00	122.50	30.92		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	11.73	83.97	18.05	3.23	80.0	± 9.6 %
		Y	100.00	107.24	23.55		80.0	
		Z	41.80	97.17	21.26		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.09	72.04	13.74	3.23	80.0	± 9.6 %
		Y	8.97	80.87	16.24		80.0	
		Z	4.77	73.97	14.19		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.57	30.24	3.23	80.0	±9.6 %
		Y	100.00	126.64	32.58		80.0	ļ
		Z	100.00	122.76	31.03		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	13.52	85.52	18.51	3.23	80.0	± 9.6 %
		Y	100.00	107.47	23.65		80.0	
		Z	60.78	101.09	22.20		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.11	72.11	13.77	3.23	80.0	± 9.6 %
		<u>Y</u>	9.29	81.22	16.33		80.0	
		Z	.4.83	74.11	14.24	2.02	80.0	+06%
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.59	30.24	3.23	80.0	± 9.6 %
·····		Y	100.00	126.67	32.59		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 13.37	122.78 85.38	31.03 18.46	3.23	80.0 80.0	± 9.6 %
		Y	100.00	107.40	23.62	1	80.0	1
······································		Z	59.33	100.79	22.11		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.08	72.03	13.72	3.23	80.0	± 9.6 %
		Y	9.15	81.05	16.27		80.0	
		Z	4.78	73.98	14.18		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120,56	30.23	3.23	80.0	± 9.6 %
		Y	100.00	126.64	32.58		80.0	
		Z	100.00	122.75	31.02		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	13.19	85.24	18.42	3.23	80.0	± 9.6 %
		Y	100.00	107.40	23.61		80.0	
		Z	57.55	100.49	22.04		80.0	<u> </u>
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.06	71.97	13.71	3.23	80.0	± 9.6 %
		Y	8.99	80.90	16.23		80.0	
1		Z	4.73	73.90	14.15		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	11.86	84.06	18.05	3.23	80.0	± 9.6 %
L		Y	100.00	107.19	23.51		80.0	
40.470		Ζ	43.65	97.56	21.32		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.02	71.87	13.66	3.23	80.0	± 9.6 %
		<u>Y</u>	8.76	80.61	16.13		80.0	
40470		Z	4.66	73.74	14.09		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	14.17	93.60	25.28	3.23	80.0	± 9.6 %
		Y	63.86	118.32	31.85		80.0	
10480-	LTE TOD (CO EDMA FOR DE 4 ANT)	Z	30.71	105.97	28.68		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.48	86.47	21.39	3.23	80.0	± 9.6 %
*******		<u> Y</u>	53.06	106.13	26.31		80.0	
10481-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	23.73	95.20	23.69		80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.79	82.49	19.78	3.23	80.0	± 9.6 %
		Y	26.62	95.88	23.20	·	80.0	
10482-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	15.46	88.60	21.40		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	4.76	76.35	18.33	2.23	80.0	±9.6 %
	······	Y	4.38	75.77	17.66		80.0	
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	4.74	76.54	18.16		80.0	
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.86	78.09	18.71	2.23	80.0	± 9.6 %
		Y	7.58	79.80	18,72		80.0	
10484-	ITE TOD (SC EDMA 500/ DD 2 MIL	Z	7.91	80.19	19.17		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	6.29	76.73	18.22	2.23	80.0	± 9.6 %
		Y	6.51	77.64	17.97		80.0	
10485-		Z	6.95	78.27	18.51		80.0	
AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.21	77.92	19.79	2.23	80.0	± 9.6 %
		Y	5.14	78.56	1 9 .82		80.0	
40400		Z	5.34	78.68	19.95		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.30	72.12	17.19	2.23	80.0	± 9.6 %
		Y	4.02	71.85	16.65		80.0	
40407		Z	4.23	72.22	17.03		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.25	71.63	16.98	2.23	80.0	± 9.6 %
		Y	3.95	71.26	16.39		80.0	
40.400		Z	4.16	71.66	16.79		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.17	76.41	19.90	2.23	80.0	± 9.6 %
	<u> </u>	Y	5.01	76.93	20.15		80.0	
10/00		Z	5.17	76.91	20.10		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.47	71.61	18.14	2.23	80.0	±9.6 %
····-		Y	4.30	71.84	18.12		80.0	
10400		Z	4.42	71.84	18.19		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.53	71.33	18.05	2.23	80.0	± 9.6 %
		Y	4.36	71.56	18.01		80.0	
40404		Z	4.48	71.55	18.09		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.06	74.04	19.16	2.23	80.0	± 9.6 %
		Y	4.88	74.37	19.37		80.0	
10102		Ζ	5.01	74.33	19.30		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.71	70.55	18.02	2.23	80.0	± 9.6 %
		Y	4.54	70.71	18.05		80.0	
		Z	4.64	70.68	18.06		80.0	

40400		хT	4.76	70.36	17.96	2.23	80.0	± 9.6 %
10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)		4.70	70.30		2.23		1 3.0 %
		Y	4.58	70,52	17.98		80.0	
		Z	4.69	70.49	18.00		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.60	75.75	19.64	2.23	80.0	± 9.6 %
		Y	5.37	76.02	19.87		80.0	
		Z	5.56	76.06	19.81		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	х	4.78	71.03	18.23	2.23	80.0	±9.6 %
······		Y	4.59	71.11	18.27		[`] 80.0	
		Z	4.71	71.14	18,28		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.83	70.65	18.12	2.23	80.0	± 9.6 %
		Y	4.64	70.74	18.15		80.0	
		Z	4.75	70.76	18.17		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3,37	71.45	15.57	2,23	80.0	± 9.6 %
		Y	2.72	69.17	13.95		80.0	
		Z	3.09	70.50	14.83		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	2.40	64.81	11.76	2.23	80.0	± 9.6 %
		Y	1.75	62.03	9.60		80.0	
		Z	2.07	63.39	10.68		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	2.32	64.18	11.33	2.23	80.0	± 9.6 %
		Y	1.68	61.41	9.14		80.0	
		Z	1.99	62.76	10.23		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.05	76.85	19.69	2.23	80.0	± 9.6 %
		Y	4.98	77.59	19.85		80.0	
		Z	5.12	77,53	19.88		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.38	71.91	17.55	2.23	80.0	±9.6 %
		Y	4.19	72.01	17.27	<u>]</u>	80.0	
		Z	4.33	72.13	17.50		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.41	71.66	17.40	2.23	80.0	± 9.6 %
		Υ	4.21	71,71	17.09		80.0	
		Z	4.36	71.85	17.33		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.10	76.19	19.80	2.23	80.0	± 9.6 %
		Y	4.94	76.71	20.05		80.0	
	·······	Z	5.10	76.67	19.99		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.44	71.51	18.08	2.23	80.0	± 9.6 %
		Y	4.28	71.74	18.06		80.0	
		Z	4.39	71.73	18.13	1	80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.51	71.23	18.00	2.23	80.0	± 9.6 %
		Y	4.34	71.46	17.96	1	80.0	1
		Z	4.45	71.44	18.03		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.55	75.59	19.57	2.23	80.0	± 9.6 %
		Y	5.33	75.87	19.80		80.0	
		Z	5.51	75.90	19.73		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	X	4.76	70.96	18.19	2.23	80.0	± 9.6 %
,,,,,	Subframe=2.3.4.7.8.9)					1	1	1
	Subframe=2,3,4,7,8,9)	Y	4.57	71.05	18.23		80.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.81	70.58	18.08	2.23	80.0	± 9.6 %
		Y	4.62	70.68	18.11		80.0	
		Z	4.73	70.68	18.12		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.59	73.58	18.84	2.23	80.0	± 9.6 %
		Y	5.39	73.76	19.02		80.0	
10210		Z	5.53	73.76	18.95		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.20	70.42	18.08	2.23	80.0	± 9.6 %
		Y	4.99	70.43	18.12		80.0	
40544		Z	5.11	70.45	18.12		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.22	70.10	18.00	2.23	80.0	± 9.6 %
		Y	5.03	70.13	18.04		80.0	
40540		Z	5.14	70.14	18.03		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.02	75.44	19.39	2.23	80.0	± 9.6 %
		Y	5.78	75.56	19.57		80.0	
10513-		Z	5.97	75.65	19.51		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe≃2,3,4,7,8,9)	X	5.12	70.82	18.23	2.23	80.0	± 9.6 %
		Y	4.91	70.75	18.25		80.0	
10514-	LTC TOD (00 COMA 400% DD 00	Z	5.03	70.83	18.26		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.09	70.31	18.08	2.23	80.0	± 9.6 %
		Y	4.90	70.27	18.11		80.0	
10548		Z	5.01	70.33	18.11		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.92	62.60	13.99	0.00	150.0	± 9.6 %
		<u> </u>	0.95	63.05	14.27		150.0	
10516-		Z	0.91	62.72	14.07		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.48	67.26	14.71	0.00	150.0	±9.6 %
		Y Z	0.54	68.48	15.75		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	0.49	67.82 64.05	15.05	0.00	150.0	
AAA	Mbps, 99pc duty cycle)	Y	0.75	64.60	14.24 14.65	0.00	150.0	± 9.6 %
		Z	0.75	64.23	14.05		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.52	66.69	16.06	0.00	150.0	± 9.6 %
		Y	4,44	66.90	16.10		150.0	
		Z	4.47	66.75	16.07		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.71	66.95	16.20	0.00	150.0	± 9.6 %
		Y	4.60	67.11	16.21		150.0	
40500		Z	4.65	66.98	16.20		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.56	66.90	16.11	0.00	150.0	± 9.6 %
		Y	4.46	67.05	16.12		150.0	
10521- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	<u>4.50</u> 4.49	66.93 66.89	16.11 16.09	0.00	150.0 150.0	± 9.6 %
		Y	4.39	67.03	16.11		150.0	
		Z	4.44	66.91	16.09		150.0	
10522- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.55	66.96	16.17	0.00	150.0	± 9.6 %
		Υ	4.45	67.16	16.21		150.0	
		Z	4.50	67.02	16.19		150.0	

40500	IFFF 000 44-15 MIFE F OLD OFDM 49	X	4,43	66.81	16.00	0.00	150.0	± 9.6 %
10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)		4,40	00.01	10.00	0.00	150.0	± 3.0 /u
		Y	4.35	67.05	16.07		150.0	
		Z	4.38	66.88	16.02		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.50	66.89	16,14	0.00	150.0	± 9.6 %
		Y	4.39	67.08	16.18		150.0	
		Z	4.44	66.94	16.15		150.0	
10525- AAB	IEEE 802.11ac WIFI (20MHz, MCS0, 99pc duty cycle)	X	4.47	65.92	15.72	0.00	150.0	± 9.6 %
		Y	4.40	66.15	15.78		150.0	
		Z	4.43	65.98 66.29	15.74 15.87	0.00	150.0 150.0	± 9.6 %
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.65	66.47	15.91	0.00	150.0	1 3.0 %
		Y Z	<u>4.55</u> 4.59	66.34	15.91		150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	4.57	66.25	15.81	0.00	150.0	±9.6 %
AAB	99pc duty cycle)	Y	4.57	66.43	15.85	0.00	150.0	20.0 //
		Z	4.47	66.29	15.82		150.0	
10528- AAB	IEEE 802.11ac WIFi (20MHz, MCS3, 99pc duty cycle)	X	4.58	66.27	15.84	0.00	150.0	± 9.6 %
10163		Y	4.49	66.45	15.88		150.0	
		Z	4.53	66.31	15.85		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	Х	4.58	66.27	15.84	0.00	150.0	±9.6 %
		Y	4.49	66.45	15.88		150.0	
		Z	4.53	66.31	15.85		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.58	66.38	15.85	0.00	150.0	± 9.6 %
		Y	4.46	66.51	15.87		150.0	
		Z	4.52	66.40	15.86		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.44	66.22	15.78	0.00	150.0	± 9.6 %
		Y	4.33	66.36	15.80		150.0	
10533-	IEEE 802.11ac WiFi (20MHz, MCS8,	Z X	4.38 4.59	66.25 66.30	15.78 15.83	0.00	150.0 150.0	± 9.6 %
AAB	99pc duty cycle)	Y	4.49	66.51	15.88		150.0	
		Z	4.54	66.36	15.84		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.13	66.43	15.94	0.00	150.0	±9.6 %
		Y	5.04	66.54	15.97		150.0	
		Z	5.08	66.45	15.95		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.20	66.61	16.01	0.00	150.0	± 9.6 %
		Y	5.10	66.71	16.05		150,0	<u> </u>
		Z	5.15	66.64	16.04	0.00	150.0	+0.0.9/
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.06	66.54	15.96	0.00	150.0	± 9.6 %
		Y	4.98	66.67	16.01 15.98	<u> </u>	150.0 150.0	
10507		Z	5.01 5.12	66.57 66.52	15.98	0.00	150.0	± 9.6 %
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)			66.63	15.95	0.00	150.0	2 0.0 70
		Z	5.03 5.07	66.54	15.99		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.07	66.56	16.02	0.00	150.0	± 9.6 %
ערעי		Y	5.11	66.64	16.04	1	150.0	-
		Z	5.16	66.56	16.02	1	150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.14	66.57	16.03	0.00	150.0	± 9.6 %
		Y	5.04	66.62	16.05		150.0	
		Z	5.10	66.60	16.05		150.0	

10541- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.11	66.43	15.96	0.00	150.0	±9.6 %
		Y	5.02	66.51	15.98		150.0	
		Ż	5.07	66.45	15.97		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.27	66.51	16.02	0.00	150.0	± 9.6 %
		Y	5.18	66.61	16.04		150.0	
		Z	5.22	66.53	16.03		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.36	66.57	16.06	0.00	150.0	± 9.6 %
		Y	5.24	66.63	16.08		150.0	
10544-		Z	5.30	66.57	16.07		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.43	66.55	15.94	0.00	150.0	± 9.6 %
		Y	5.37	66.65	15.97	<u> </u>	150.0	ļ
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	Z	5.40	66.56	15.95		150.0	
AAB	99pc duty cycle)	X Y	5.64	67.00	16.11	0.00	150.0	± 9.6 %
			5.55	67.08	16.15		150.0	· · ·····
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	Z	5.60	67.02	16.13	<u> </u>	150.0	
AAB	99pc duty cycle)	X	5.50	66.78	16.02	0.00	150.0	±9.6 %
		Y	5.41	66.80	16.02		150.0	L
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z X	5.46	66.76	16.01	0.00	150.0	
AAB	99pc duty cycle)		5.58	66.83	16.03	0.00	150.0	±9.6 %
		Y	5.49	66.87	16.05		150.0	
10548-	IEEE 802.11ac WiFi (80MHz, MCS4,	z X	5.53	66.81	16.03	<u> </u>	150.0	
AAB	99pc duty cycle)		5.89	67.94	16.56	0.00	150.0	±9.6 %
		Y	5.69	67.68	16.43		150.0	
10550-	IEEE 802.11ac WiFi (80MHz, MCS6,	ZX	5.80	67.83	16.51		150.0	
AAB	99pc duty cycle)		5.53	66.79	16.03	0.00	150.0	±9.6 %
		Y	5.46	66.91	16.08		150.0	
10551-	IEEE 802.11ac WiFi (80MHz, MCS7,	Z	5.49	66.81	16.05	0.00	150.0	
AAB	99pc duty cycle)	X	5.53	66.82	16.01	0.00	150.0	±9.6 %
······		Y	5.44	66.85	16.02		150.0	
10552-	1666 802 44 co) 4/161 (80 MU - MOOD	Z	5.49	66.83	16.02		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X Y	5.44	66.61	15.91	0.00	150.0	± 9.6 %
	····		5.38	66.72	15.95		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	Z X	<u>5.40</u> 5.53	66.62 66.66	15.92 15.96	0.00	150.0 150.0	± 9.6 %
	······································	Y	5.45	66.72	15.99	L	150.0	······
		Z	5.48	66.65	15.97		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.84	66.93	16.04	0.00	150.0	± 9.6 %
		Y	5.78	67.01	16.06		150.0	
		Z	5.81	66.94	16.05		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.98	67.25	16.17	0.00	150.0	±9.6 %
		Y	5.90	67.29	16.19		150.0	
40555		Z	5.94	67.25	16.18		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.00	67.29	16.19	0.00	150.0	±9.6 %
		Y	5.93	67.35	16.21		150.0	
(000		Z	5.96	67.30	16.20		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.96	67.20	16.16	0.00	150.0	±9.6 %
		Y	5.88	67.23	16.17		150.0	
		Z	5.92	67.18	16.16		150.0	

10558-	IEEE 802.11ac WiFi (160MHz, MCS4,	X	6.01	67.37	16.26	0.00	150,0	± 9.6 %
AAC	99pc duty cycle)		0.01	07.57	10.20	0.00	100.0	1 0.0 70
		Y	5.92	67.38	16.26		150.0	
······		Z	5.97	67.35	16.26		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	Х	6.01	67.21	16.22	0.00	150.0	± 9.6 %
		Y	5.92	67.24	16.23		150.0	
		Z	5.96	67.19	16.22		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.93	67.18	16.25	0.00	150.0	± 9.6 %
		Y	5.85	67.23	16.26		150.0	
		Z	5.89	67.18	16.25		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.07	67.61	16.46	0.00	150.0	±9.6 %
		Y	5.94	67.50	16.40		150.0	
		Z	6.01	67.54	16.43		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.39	68.16	16.69	0.00	150.0	±9.6 %
		Y	6.02	67.41	16.31		150.0	
		Z	6.19	67.71	16.48		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	Х	4.86	66.83	16.26	0.46	150.0	±9.6 %
		Y	4.78	67.03	16.31		150.0	
		Z	4.81	66.87	16.27		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.09	67.28	16.58	0.46	150.0	± 9.6 %
		Y	4.98	67.43	16.60		150.0	
		Z	5.03	67.31	16.59		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.93	67,13	16.40	0.46	150.0	±9.6 %
<u> </u>		Y	4.82	67.27	16.42		150.0	
		Z	4.87	67.15	16.40		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.95	67.50	16.74	0.46	150.0	±9.6 %
		Y	4.84	67.61	16.74		150.0	
		Z	4.90	67.52	16.74		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.85	66.93	16.19	0.46	150.0	± 9.6 %
		Y	4.74	67.12	16.24		150.0	
		Z	4.79	66.97	16.19	1	150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.91	67.57	16.79	0.46	150.0	± 9.6 %
		Y	4.82	67.76	16.84		150.0	
		Z	4.86	67.64	16.82		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.94	67.43	16.73	0.46	150.0	± 9.6 %
		Υ	4.84	67.60	16.77		150.0	
		Z	4.89	67.48	16.75		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.25	65.19	15.53	0.46	130.0	± 9.6 %
		Y	1.27	65.45	15.71		130.0	
		Z	1.24	65.29	15.60		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.27	65.79	15.87	0.46	130.0	± 9.6 %
		Υ	1.28	66.03	16.05		130.0	
		Z	1.26	65.90	15.96		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.61	85.52	21.81	0.46	130.0	± 9.6 %
		Y	2.97	88.51	23.34		130.0	
		Z	3.01	88.05	22.71	[130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.44	71.64	18.59	0.46	130.0	± 9.6 %
		Y	1.44	71.68	18.74		130.0	
•		Z	1.45	72.00	18.80	+	130.0	1

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.68	66.71	16.37	0.46	130.0	± 9.6 %
AAA	OFDM, 6 Mbps, 90pc duty cycle)	<u> </u>						
		Y	4.59	66.91	16.41		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.63	66.76	16.38		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)	X	4.70	66.86	16.43	0.46	130.0	±9.6 %
	······································	Y	4.61	67.07	16.47		130.0	
10577-		Z	4.65	66.92	16.44		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.91	67.16	16.60	0.46	130.0	± 9.6 %
		<u>Y</u>	4.79	67.31	16.62		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.85	67.20	16.60		130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)	X	4.81	67.32	16.69	0.46	130.0	± 9.6 %
		Y	4.69	67.44	16.70		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.75	67.35	16.70		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)	X	4.58	66.65	16.03	0.46	130.0	± 9.6 %
	······································	Y	4.47	66.80	16.06		130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.52	66.66	16.02		130.0	
AAA	OFDM, 36 Mbps, 90pc duty cycle)		4.63	66.68	16.05	0.46	130.0	± 9.6 %
		Y	4.52	66.87	16.11		130.0	
10581-		Z	4.57	66.71	16.05		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.71	67.36	16.64	0.46	130.0	± 9.6 %
		Y	4.60	67.52	16.66		130.0	
10582-		Z	4.65	67.41	16.65		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	66.42	15.83	0.46	130.0	± 9.6 %
		Y	4.41	66.60	15.88		130.0	
10500		Z	4.46	66.43	15.82		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.68	66.71	16.37	0.46	130.0	± 9.6 %
		Y	4.59	66.91	16.41		130.0	
		Z	4.63	66.76	16.38		130,0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.70	66.86	16.43	0.46	130.0	± 9.6 %
		Y	4.61	67.07	16.47		130.0	
		Z	4.65	66.92	16.44		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.91	67.16	16.60	0.46	130.0	± 9.6 %
		Y	4.79	67.31	16.62		130.0	
		Z	4.85	67.20	16.60		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.81	67.32	16.69	0.46	130.0	± 9.6 %
		Y	4.69	67.44	16.70		130.0	
		Ζ	4.75	67.35	16.70		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.58	66.65	16.03	0.46	130.0	± 9.6 %
	······································	Y	4.47	66.80	16.06		130.0	
		Ζ	4.52	66.66	16.02	····	130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.63	66.68	16.05	0.46	130.0	± 9.6 %
		Y	4.52	66.87	16.11		130.0	
10000		Z	4.57	66.71	16.05		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.71	67.36	16.64	0.46	130.0	±9.6 %
		Y	4.60	67.52	16.66		130.0	
••••••		Z	4.65	67.41	16.65		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	66.42	15.83	0.46	130.0	± 9.6 %
		Y	4.41	66.60	15.88		400.0	····-
		1 1 1	4,41	00,00 1	10.00		130.0	

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.83	66.77	16.47	0.46	130.0	±9.6 %
	mood, oope daty byolog	Y	4.74	66.96	16.50		130.0	
		Z	4.78	66.82	16.48		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.98	67.10	16.60	0.46	130.0	±9.6 %
	Moot, cope addy cyclor	Y	4.87	67.27	16.63		130.0	
		Z	4.93	67.14	16.61		130.0	
10593- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.91	67.02	16.48	0.46	130.0	± 9.6 %
7010		Y	4.80	67.17	16.51		130.0	
		Z	4.85	67.05	16.49		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.96	67.18	16.63	0.46	130.0	± 9.6 %
		Y	4.85	67.33	16.66		130.0	
		Z	4.90	67.22	16.64		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.93	67.14	16.53	0.46	130.0	±9.6 %
		Y	4.82	67.31	16.57		130.0	
		Z	4.87	67.18	16.54		130.0	
10596- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.87	67.14	16.54	0.46	130.0	±9.6 %
		Y	4.76	67.30	16.57		130.0	
		Z	4.81	67.18	16.54		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.82	67.05	16.42	0.46	130.0	± 9.6 %
		Y	4.71	67.19	16.44		130.0	
		Z	4.76	67.07	16.42		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.80	67.28	16.68	0.46	130.0	± 9.6 %
70.0		Y	4.69	67.37	16.67		130.0	
		Z	4.74	67.29	16.67		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	Х	5.50	67.33	16.69	0.46	130.0	± 9.6 %
		Y	5.40	67.43	16.72		130.0	
		Z	5.46	67.38	16.72		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.67	67,87	16.93	0.46	130.0	±9.6 %
		Y	5.53	67.86	16.92		130.0	
		Z	5.61	67.87	16.94		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.54	67.56	16.79	0.46	130.0	± 9.6 %
		Y	5.42	67.61	16.80		130.0	
		Z	5.48	67.56	16.80		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.63	67.58	16.72	0.46	130.0	± 9.6 %
		Y	5.55	67.79	16.82		130.0	
	······································	Z	5.59	67.64	16.76		130.0	<u> </u>
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	Х	5.71	67.86	16.99	0.46	130.0	± 9.6 %
		Y	5.61	68.00	17.05		130.0	1
		Z	5.65	67.89	17.01		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.50	67.29	16.70	0.46	130.0	± 9.6 %
		Y	5.49	67.68	16.88		130.0	
		Z	5.47	67.39	16.75		130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.63	67.69	16.90	0.46	130.0	± 9.6 %
		Y	5.53	67.80	16.94		130.0	
		Z	5.59	67.74	16.92		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.39	67.07	16.45	0,46	130.0	± 9.6 %
		Y	5.27	67.10	16.45		130.0	
		Z	5.31	66.99	16.41		130.0	

10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.65	66.04	16.07	0.46	130.0	± 9.6 %
·····		Y	4.58	66.26	16.12		130.0	
		Z	4.61	66.10	16.08		130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.85	66.45	16.23	0.46	130.0	± 9.6 %
		Y	4.74	66.63	16.28		130.0	
		Z	4.79	66.50	16.25		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.74	66.30	16.07	0.46	130.0	± 9.6 %
		Y	4.63	66.48	16.11		130.0	
10610-		Z	4.68	66.35	16.08		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.79	66.46	16.23	0.46	130.0	± 9.6 %
		Y	4.68	66.63	16.27		130.0	
10611-	IEEE 802.11ac WiFi (20MHz, MCS4,	Z	4.73	66.50	16.25		130.0	
AAB	90pc duty cycle)	X	4.70	66.28	16.09	0.46	130.0	± 9.6 %
·····		Y	4.60	66.45	16.12		130.0	
10612-	IEEE 802.11ac WiFi (20MHz, MCS5,	Z	4.65	66.31	16.10		130.0	
AAB	90pc duty cycle)	X	4.72	66.43	16.13	0.46	130.0	± 9.6 %
		Y	4.60	66.61	16.18	ļ	130.0	
10613-	IEEE 802.11ac WiFi (20MHz, MCS6,	Z	4.66	66.47	16.14		130.0	
AAB	90pc duty cycle)	X	4.72	66.33	16.02	0.46	130.0	± 9.6 %
		Y	4.60	66.47	16.05		130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	Z X	4.66	66.35 66.50	16.02 16.24	0.46	130.0 130.0	± 9.6 %
1010		Y	4 55	66.60	40.05		400.0	
			<u>4.55</u> 4.60	66.62	16.25		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.71	66.53 66.12	16.25 15.87	0.46	130.0 130.0	± 9.6 %
		Y	4.60	66.33	15.93		130.0	
		Z	4.65	66.16	15.88		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.31	66.56	16.28	0.46	130.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.21	66.65	16.31		130.0	
		Z	5.26	66.57	16.29		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.38	66.74	16.35	0.46	130.0	± 9.6 %
		Y	5.29	66.86	16.39		130.0	
		Z	5.34	66.79	16.37		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.26	66.74	16.36	0.46	130.0	± 9.6 %
		Y	5.18	66.87	16.40		130.0	
		Z	5.22	66.77	16.38		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.29	66.59	16.22	0.46	130.0	±9.6 %
		Y	5.19	66.67	16.25		130,0	
100		Z	5.23	66.58	16.22		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.38	66.62	16.29	0.46	130.0	±9.6 %
		Y	5.27	66.70	16.31		130.0	
10001		Z	5.32	66.62	16.29		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.37	66.71	16.45	0.46	130.0	± 9.6 %
w		Y	5.27	66.80	16.47		130.0	
1000-		Z	5.32	66.74	16.47		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.39	66.89	16.53	0.46	130.0	± 9.6 %
		Y	5.29	66.97	16.55		130.0	
		Z	5.34	66.92	16.55		130.0	

ES3DV3-SN:3347

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.26	66.41	16.17	0.46	130.0	±9.6 %
		Y	5,16	66.51	16.20		130.0	
		Z	5.21	66.44	16.19		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.45	66.63	16.34	0.46	130.0	± 9.6 %
		Y	5,35	66.71	16.36		130.0	
		Z	5.40	66.64	16.35		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.87	67.75	16.95	0.46	130.0	±9.6 %
		Y	5.59	67.32	16.72		130.0	
		Z	5.77	67.62	16.89		130.0	
	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.59	66.61	16.24	0.46	130.0	±9.6 %
		Y	5.53	66.71	16.27		130.0	
		Z	5.56	66.63	16.25		130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.86	67.23	16.51	0.46	130.0	±9.6 %
		Y	5.77	67.31	16.54		130.0	
		Z	5.82	67.26	16.53		130.0	
AAB 90	IEEE 802.11ac WIFi (80MHz, MCS2, 90pc duty cycle)	X	5.64	66.75	16.20	0.46	130.0	± 9.6 %
		Y	5.54	66.76	16.20		130.0	
		Z	5.59	66.73	16.20		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	Х	5.74	66.86	16.25	0.46	130.0	± 9.6 %
		Y	5.63	66.85	16.25		130.0	
		Z	5.67	66.78	16.22		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.27	68.62	17.13	0.46	130.0	± 9.6 %
		Y	5.98	68.12	16.89		130.0	
		Z	6.16	68.44	17.05		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.08	68.18	17.10	0.46	130.0	± 9.6 %
		Y	5.89	67.92	16.96		130.0	
		Z	6.00	68.07	17.05		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.81	67.25	16.65	0.46	130.0	± 9.6 %
		Y	5.73	67.36	16.70		130.0	
		Z	5.78	67.29	16.68		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.70	66.88	16.30	0.46	130.0	±9.6 %
		Y	5.61	66.94	16.32		130.0	
		Z	5.64	66.86	16.29		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.68	66.90	16.36	0.46	130.0	± 9.6 %
		Y	5.59	66.94	16.37		130.0	
		Z	5.63	66.89	16.36		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.57	66.28	15.80	0.46	130.0	± 9.6 %
		Y	5.47	66.33	15.83		130.0	
		Z	5.52	66.25	15.79		130.0	1
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.01	67.00	16.34	0.46	130.0	± 9.6 %
		Y	5.95	67.08	16.37		130.0	[
		Z	5.98	67.00	16.35		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.18	67.41	16.53	0.46	130.0	± 9.6 %
·····		Y	6.10	67.45	16.54		130.0	
		Z	6.14	67.41	16.54		130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.18	67.38	16.49	0.46	130.0	± 9.6 %
		Y	6.10	67.42	16.51		130.0	

ES3DV3-SN:3347

March 27, 2018

10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6,15	67.32	16.51	0.46	130.0	± 9.6 %
		Y	6.07	67.34	16.50	<u> </u>	130.0	<u> </u>
		Z	6.11	67.30	16.50	ŀ	130.0	
10640- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.17	67.36	16.47	0.46	130.0	± 9.6 %
		Y	6.07	67.36	16.47		130.0	
		Z	6.11	67.32	16.45		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.20	67.22	16.42	0.46	130.0	± 9.6 %
		Y	6.14	67.34	16.48		130.0	
40040		Z	6.17	67.26	16.44		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.24	67.47	16.71	0.46	130.0	± 9.6 %
· · · ·	······································	Y	6.15	67.50	16.71		130.0	
10643-		Z	6.19	67.46	16.71		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.08	67.18	16.46	0.46	130.0	± 9.6 %
·····		Y	6.01	67.25	16.50		130.0	
10644-		Z	6.04	67.18	16.47		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.27	67.76	16.77	0.46	130.0	± 9.6 %
		Y	6.11	67.57	16.67		130.0	
10645-		Z	6.19	67.64	16.72		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.75	68.75	17.22	0.46	130.0	± 9.6 %
·····		<u>Y</u>	6.24	67.62	16.66		130.0	
10646-		Z	6.47	68.11	16.92		130.0	
	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	46.96	124.69	40.77	9.30	60.0	± 9.6 %
		Y	100.00	148.37	48.20		60.0	
40047		Z	67.01	134.85	43.85		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	46.42	125.36	41.11	9.30	60.0	± 9.6 %
		Y	100.00	149.72	48.78		60.0	
10010		Z	63.71	134.73	44.00		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.63	62.54	9.79	0.00	150.0	± 9.6 %
		Y	0.58	62.24	9.19		150.0	
		Z	0.59	62.30	9.35		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.19	68.34	17.06	2.23	80.0	± 9.6 %
		Y	4.08	68.62	17.03		80.0	
40050		Z	4.14	68.48	17.06		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.68	67.61	17.18	2.23	80.0	±9.6 %
		Y	4.56	67.77	17.19		80.0	
10054		Z	4.62	67.66	17.19		80,0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.63	67.27	17.19	2.23	80.0	± 9.6 %
		Y	4.54	67.39	17.21		80.0	
10005		Z	4.58	67.31	17.20		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.69	67.27	17.23	2.23	80.0	± 9.6 %
		Y	4.60	67.35	17.25		80.0	
10050		Z	4.64	67.28	17.23		80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	X	19.17	92.59	24.24	10.00	50.0	± 9.6 %
		Y	41.94	104.68	27.26		50.0	
40000		Z	24.50	96.17	24.98		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	100.00	114.36	28.32	6.99	60.0	± 9.6 %
		Y	100.00	114.20	27.89		60.0	
	1	Z	100.00	113.56	27.75		60.0	

,

ES3DV3-- SN:3347

10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	111.43	25.50	3.98	80.0	± 9.6 %
		Y	100.00	112.46	25.73		80.0	
		Z	100.00	110.79	25.07		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	110.47	23.74	2.22	100.0	± 9.6 %
		Y	100.00	113.22	24.78		100.0	
		Z	100.00	109.90	23.38		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	Х	100.00	107.83	20.92	0.97	120.0	± 9.6 %
		Y	100.00	115.39	23.98		120.0	
		Z	100.00	107.00	20.48		120.0	

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

.

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

BC-MRA



S Schweizerischer Kalibrierdienst

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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Client PC Test

Certificate No: EX3-7406_May18

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7406	
Calibration procedure(s)	QA CAL-01.v9, QA CAL-12.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes	
		BN
Calibration date:	May 22, 2018	06-25-2011
	ents the traceability to national standards, which realize the physical units of measurements (SI). tainties with confidence probability are given on the following pages and are part of the certificate.	
All calibrations have been conduc	ted 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	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature	
Calibrated by:	Jeton Kastrati	Laboratory Technician	1-11-	
			FU-	
Approved by:	Katja Pokovic	Technical Manager	20101	•
			AL AF	
			Issued: May 22, 2018	
This calibration certificate	e shall not be reproduced except in ful	l without written approval of the lab	oratory.	

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



S Schweizerischer Kalibrierdienst

- C Service suisse d'étalonnage
 - 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
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
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).

Probe EX3DV4

SN:7406

Manufactured: Calibrated:

November 24, 2015 May 22, 2018

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.47	0.43	0.46	± 10.1 %
DCP (mV) ⁸	98.8	100.2	97.1	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Unc [±] (k=2)
0	cw	X	0.0	0.0	1.0	0.00	159.0	±3.3 %
		Y	0.0	0.0	1.0		176.8	
		Z	0.0	0.0	1.0		172.1	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V ¹	T1 ms.V ⁻²	T2 ms.V⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	Т6
Х	40.51	308.1	36.65	8.462	0.498	5.057	0.000	0.453	1.008
Y	20,79	155.9	36.07	8.177	0.281	5.026	0.312	0.202	1.000
Z	39.96	308.6	37.72	7.122	0.556	5.056	0.094	0.485	1.007

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

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

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

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
30	55.0	0.75	16.52	16.52	16.52	0.00	1.00	± 13.3 %
750	41.9	0.89	10.09	10.09	10.09	0.48	0.90	± 12.0 %
835	41.5	0.90	9.70	9.70	9.70	0.43	0.91	± 12.0 %
1750	40.1	1.37	8.58	8.58	8,58	0.35	0.80	± 12.0 %
1900	40.0	1.40	8.22	8.22	8.22	0.39	0.84	± 12.0 %
2300	39.5	1.67	7.95	7.95	7.95	0.30	0.84	± 12.0 %
2450	39.2	1.80	7.54	7.54	7.54	0.31	0.87	± 12.0 %
2600	39.0	1.96	7.40	7.40	7.40	0.25	0.95	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

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

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

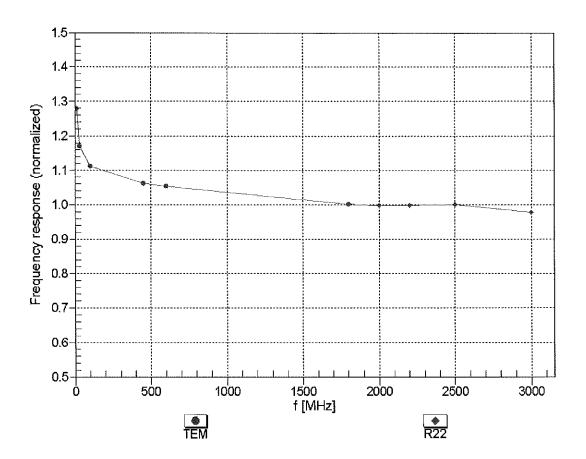
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	9.91	9.91	9.91	0.52	0.80	± 12.0 %
835	55.2	0.97	9.61	9.61	9.61	0.52	0.80	± 12.0 %
1750	53.4	1.49	8.04	8.04	8.04	0.43	0.84	± 12.0 %
1900	53.3	1.52	7.74	7.74	7.74	0.39	0.84	± 12.0 %
2300	52.9	1.81	7.46	7.46	7.46	0.41	0.86	± 12.0 %
2450	52.7	1.95	7.30	7.30	7.30	0.43	0.88	± 12.0 %
2600	52.5	2.16	7.27	7.27	7.27	0.33	0.98	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

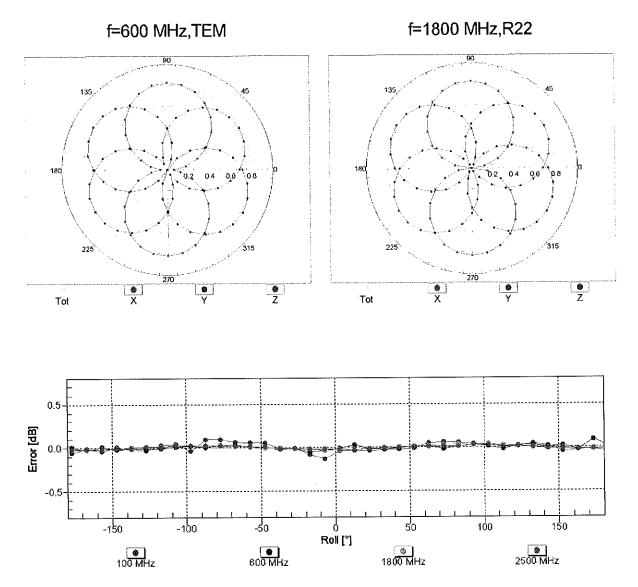
validity can be extended to \pm 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



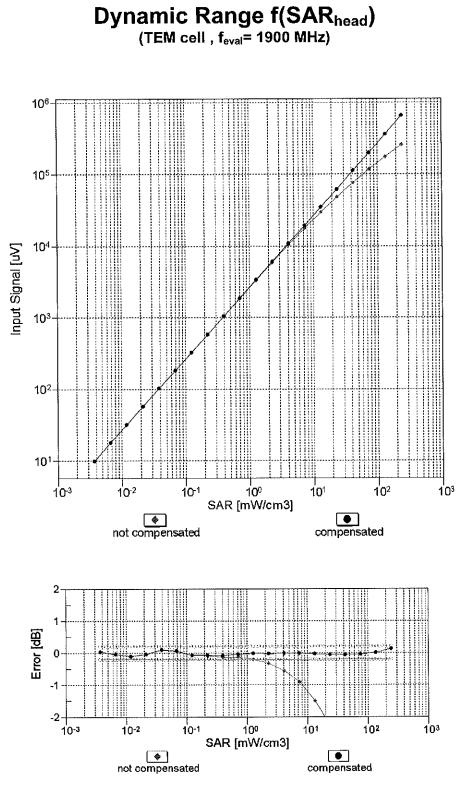
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

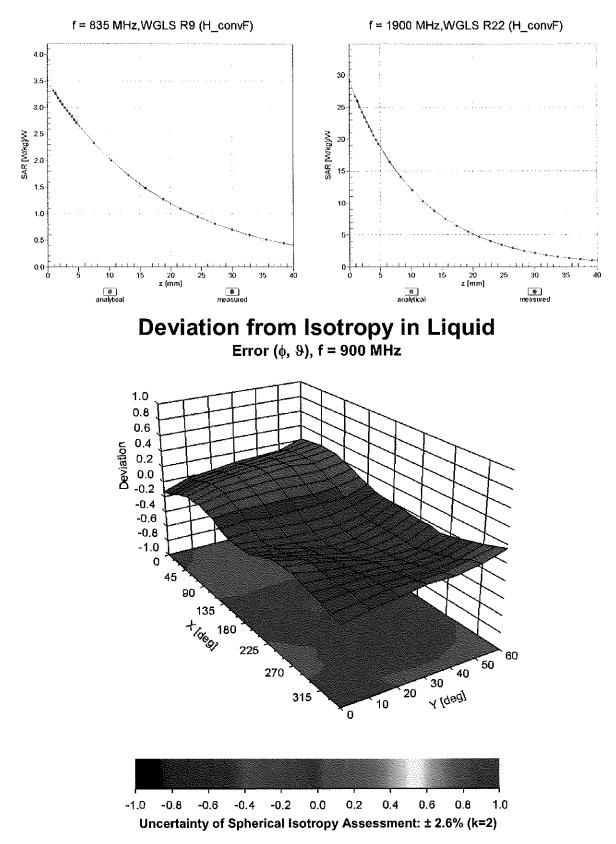


Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

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



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



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	2.9
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k≕2)
0	CW	X	0.00	0.00	1.00	0.00	159.0	± 3.3 %
		Y	0.00	0.00	1.00		176.8	· · · · · · · · · · · · · · · · · · ·
10010-	SAR Validation (Square, 100ms, 10ms)	Z X	0.00 2.08	0.00 64.96	1.00 9.67	10.00	172.1 20.0	± 9.6 %
CAA	or a validation (oquale, rooms, roms)		2.00	04.30	3.07	10.00	20.0	1 3.0 78
		Y	1.53	62.37	7.61		20.0	
		Z	1.91	63.93	9.02		20.0	
10011- CAB	UMTS-FDD (WCDMA)	×	0,84	64.72	13.20	0.00	150.0	± 9.6 %
		Y	2.29	84.03	21.49		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	0.87 1.07	65.77 62.64	13.83 14.17	0.41	<u>150.0</u> 150.0	± 9.6 %
CAB	Mbps)					0.41		19.0 %
		Y Z	1.16 1.05	66.58 62.95	16.90 14.54		150.0 150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.71	66.44	16.84	1.46	150.0	± 9.6 %
CAB	OFDM, 6 Mbps)					110		10.0 /0
		Y	4.37	67.68	17.36		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z X	4.70 100.00	66,50	16.96	0.20	150.0	+0.6.0/
DAC	GSM-FDD (TDMA, GMSK)		100.00	111.67	26.02	9.39	50.0	± 9.6 %
		Y Z	100.00	105.88 110.56	22.91 25.48		50.0 50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	111.18	25.86	9.57	50.0	± 9.6 %
DAC		Y	100.00	104.93	22.52		50.0	
		Z	100.00	110.10	25.33		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	110.92	24.51	6.56	60.0	± 9.6 %
		Y	100.00	104.17	21.07		60.0	
		Z	100.00	109.40	23.71		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	3.97	69.08	25.47	12.57	50.0	± 9.6 %
		Υ Υ	6.34	86.82	35.22		50.0	
10026-	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Z X	3.66 6.82	66.66 85.96	24.05 30.56	9.56	50.0 60.0	± 9.6 %
DAC	EDGE-FDD (TDMA, OPSK, TN 0-1)					9,50		± 9.0 %
		Y Z	6.90 6.52	89.59 85.14	32.84 30.29		60.0 60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	111.11	23.76	4.80	80.0	± 9.6 %
0/10		ΤY	100.00	105.05	20.71		80.0	
		Z	100.00	108.99	22.68		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	111.34	23.14	3.55	100.0	± 9.6 %
		Y	100.00	107.81	21.20		100.0	
		Z	100.00	108.15	21.58		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	×	4.51	76.74	25.54	7.80	80.0	± 9.6 %
		Y	4.44	78.91	27.21		80.0	ļ
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	4.34 100.00	76.19 108.75	25.41 23.04	5.30	80.0 70.0	± 9.6 %
UNA	·····	Y	100.00	100.28	18.89		70.0	
		Z	100.00	106.90	22.09		70.0	1
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	99.67	17.08	1.88	100.0	±9.6 %
	·····	Y	50.08	84.31	11.26		100.0	
		Z	0.35	62.17	5.86		100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	28.56	85.45	12.04	1.17	100.0	±9.6 %
		Y	0.15	60.00	3.24		100.0	
		Z	0.16	60.00	3.46		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	8.12	89.17	23.19	5.30	70.0	±9.6 %
		Y	5.53	78.60	16.12		70.0	
		Z	8.77	90.41	23.45		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	1.89	71.18	14.91	1.88	100.0	±9.6 %
		Y	0.70	61.17	6.54		100.0	
		Z	1.94	71.91	15.07		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	1.33	67.78	13.07	1.17	100.0	±9.6 %
		Y	0.50	60.00	5.45		100.0	
(0000		Z	1.34	68.27	13.15		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	11.58	94.76	24.99	5.30	70.0	± 9.6 %
		Y	7.92	82.80	17.55		70.0	
10037-	IEEE 902 45 4 Divelocth (0 DDDV(DVD)	Z	13.45	97.05	25.53	1	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	1.76	70.41	14.56	1.88	100.0	± 9.6 %
		Y	0.67	60.87	6.38		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	1.78	71.00	14.68		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	1.33	68.01	13.29	1.17	100.0	± 9.6 %
·		Y	0.50	60.00	5.57		100.0	
40000		Z	1.35	68.60	13.42		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.09	65.82	11.60	0.00	150.0	± 9.6 %
		Y	0.33	60.00	4.54		150.0	
		Z	1.10	66.30	11.64		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	107.41	23.26	7.78	50.0	±9.6 %
		Y	57.23	96.27	18.96		50.0	
		Z	100.00	105.97	22.54		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.03	118.97	9.94	0.00	150.0	± 9.6 %
		Y	0.05	129.23	11.15		150.0	
		Z	0.09	122.00	10.41		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	21.95	89.61	21.44	13.80	25.0	± 9.6 %
		Y	5.10	70.47	13.72		25.0	
10049-	DECT (TDD, TDMA/FDM, GFSK, Double	Z	12.15	81.59	18.87		25.0	
							400	±9.6%
CAA	Slot, 12)	X	43.64	100.12	23.34	10.79	40.0	± 9.0 %
		Y	5.90	74.58	14.22	10.79	40.0	1 9.0 %
	Slot, 12)	Y Z	5.90 17.31	74.58 88.39	14.22 19.94		40.0 40.0	
10056- CAA		Y Z X	5.90 17.31 25.07	74.58 88.39 100.73	14.22 19.94 26.75	9.03	40.0 40.0 50.0	± 9.6 %
10056-	Slot, 12)	Y Z X Y	5.90 17.31 25.07 12.75	74.58 88.39 100.73 86.31	14.22 19.94 26.75 19.79		40.0 40.0 50.0 50.0	
10056- CAA	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Y Z X Y Z	5.90 17.31 25.07 12.75 22.08	74.58 88.39 100.73 86.31 98.32	14.22 19.94 26.75 19.79 25.86	9.03	40.0 40.0 50.0 50.0 50.0	±9.6 %
10056-	Slot, 12)	Y Z X Y Z X	5.90 17.31 25.07 12.75 22.08 3.64	74.58 88.39 100.73 86.31 98.32 72.69	14.22 19.94 26.75 19.79 25.86 22.94		40.0 40.0 50.0 50.0 50.0 100.0	
10056- CAA 10058-	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Y Z X Y Z X Y	5.90 17.31 25.07 12.75 22.08 3.64 3.58	74.58 88.39 100.73 86.31 98.32 72.69 74.51	14.22 19.94 26.75 19.79 25.86 22.94 24.46	9.03	40.0 40.0 50.0 50.0 50.0 100.0 100.0	±9.6 %
10056- CAA 10058- DAC 10059-	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps) EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	Y Z X Y Z X	5.90 17.31 25.07 12.75 22.08 3.64	74.58 88.39 100.73 86.31 98.32 72.69	14.22 19.94 26.75 19.79 25.86 22.94	9.03	40.0 40.0 50.0 50.0 50.0 100.0	±9.6 %
10056- CAA 10058- DAC	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps) EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Y Z X Y Z X Y Z X	5.90 17.31 25.07 12.75 22.08 3.64 3.58 3.51 1.08	74.58 88.39 100.73 86.31 98.32 72.69 74.51 72.30 63.42	14.22 19.94 26.75 19.79 25.86 22.94 24.46 22.90 14.64	9.03	40.0 40.0 50.0 50.0 50.0 100.0 100.0 100.0 110.0	± 9.6 %
10056- CAA 10058- DAC 10059-	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps) EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) IEEE 802.11b WiFi 2.4 GHz (DSSS, 2	Y Z X Y Z X Y Z X Y	5.90 17.31 25.07 12.75 22.08 3.64 3.58 3.51 1.08 1.21	74.58 88.39 100.73 86.31 98.32 72.69 74.51 72.30 63.42 68.14	14.22 19.94 26.75 19.79 25.86 22.94 24.46 22.90 14.64 17.70	9.03	40.0 40.0 50.0 50.0 100.0 100.0 100.0 110.0 110.0	± 9.6 %
10056- CAA 10058- DAC 10059- CAB 10060-	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps) EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	Y Z X Y Z X Y Z X	5.90 17.31 25.07 12.75 22.08 3.64 3.58 3.51 1.08	74.58 88.39 100.73 86.31 98.32 72.69 74.51 72.30 63.42	14.22 19.94 26.75 19.79 25.86 22.94 24.46 22.90 14.64	9.03	40.0 40.0 50.0 50.0 50.0 100.0 100.0 100.0 110.0	± 9.6 %
10056- CAA 10058- DAC 10059- CAB	Slot, 12) UMTS-TDD (TD-SCDMA, 1.28 Mcps) EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Y Z X Y Z X Y Z X Y Z Z	5.90 17.31 25.07 12.75 22.08 3.64 3.58 3.51 1.08 1.21 1.06	74.58 88.39 100.73 86.31 98.32 72.69 74.51 72.30 63.42 68.14 63.79	14.22 19.94 26.75 19.79 25.86 22.94 24.46 22.90 14.64 17.70 15.05	9.03 6.55 0.61	40.0 40.0 50.0 50.0 100.0 100.0 100.0 110.0 110.0 110.0	± 9.6 %

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.89	74.28	19.62	2.04	110.0	± 9.6 %
		Y	6.72	99.45	28.86		110.0	
		Ż	1.98	76.00	20.54		110.0	·····
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.50	66,38	16.23	0.49	100.0	± 9.6 %
		Y	4.17	67.64	16.77		100.0	
		Z	4.49	66.45	16.37		100.0	
10063- CAC	IEEE 802.11a/h WiFl 5 GHz (OFDM, 9 Mbps)	X	4.52	66.46	16.33	0.72	100.0	± 9.6 %
		Y	4.19	67.78	16.90		100.0	
		Z	4.51	66.54	16.46		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.78	66.72	16.56	0.86	100.0	± 9.6 %
		Y	4.37	67.91	17.05		100.0	
10005		Z	4.77	66.78	16.69		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.65	66.59	16.65	1.21	100.0	± 9.6 %
		Y	4.25	67.66	17.08		100.0	
10000		Z	4.64	66.65	16.78		100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.67	66.60	16.82	1.46	100.0	±9.6 %
		Y	4.25	67.56	17.16		100.0	
		Z	4.65	66.66	16.94		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	4.96	66.87	17.31	2.04	100.0	±9.6 %
		Y	4.45	67.61	17.49		100.0	
		Z	4.95	66.92	17.43		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.00	66.83	17.50	2.55	100.0	± 9.6 %
		Y	4.58	67.92	17.91		100.0	
		Z	4.98	66.87	17.60		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.07	66.86	17.70	2.67	100.0	± 9.6 %
		Y	4.58	67.73	17.95		100.0	
	**************************************	Z	5.05	66.90	17.80		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.80	66.52	17.15	1.99	100.0	± 9.6 %
		Y	4.47	67.76	17.67		100.0	
		Z	4.79	66.57	17.27		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.77	66.78	17.34	2.30	100.0	± 9.6 %
		Y	4.40	67.85	17.80		100.0	
		Z	4.75	66.83	17.46		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.82	66.94	17.68	2.83	100.0	± 9.6 %
		Y	4.48	68.17	18.22		100.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.81	66.99	17.79		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.82	66.85	17.82	3.30	100.0	± 9.6 %
		Y	4.56	68.39	18.51		100.0	
		Z	4.80	66.90	17.93		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.84	66.90	18,10	3.82	90.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.62	68.53	18.81		90.0	
		Z	4.82	66.93	18.20		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.87	66.75	18.26	4.15	90.0	± 9.6 %
		Y	4.66	68.36	18.96		90.0	
		Z	4.85	66.78	18.35		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.90	66.83	18.36	4.30	90.0	± 9.6 %
		Y	4.70	68.52	19.13		90.0	
		Z	4.88	66.86	18.46		90.0	

40004	ODMAGOOD (4 DTT DOG)		0.57	00.40	0.40	0.00	450.0	
10081- CAB	CDMA2000 (1xRTT, RC3)	X	0.57	62.19	9.13	0.00	150.0	± 9.6 %
		Y	27.42	131.24	12.30		150.0	
		Z	0.55	62.22	8.90		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	5.02	67.53	6.38	4.77	80.0	±9.6 %
****		Y	1.48	62.15	3.83		80.0	
		Z	0.60	60.00	3.69		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	110.99	24.56	6.56	60.0	±9.6%
		Υ	100.00	104.24	21.12		60.0	
		Z	100.00	109.50	23.78		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.62	66.19	14.37	0.00	150.0	±9.6 %
		Y	2.77	77.65	18.43		150.0	
	······································	Z	1.66	66.92	14.80		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.59	66.12	14.32	0.00	150.0	± 9.6 %
		Y	2.75	77.82	18.53		150.0	
		Z	1.63	66.85	14.76		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	6.86	86.10	30.61	9.56	60.0	± 9.6 %
		Y	6.96	89.80	32.91		60.0	
		Z	6.57	85.27	30.34		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	×	2.79	68.67	15.73	0.00	150.0	± 9.6 %
		<u>Y</u>	3.01	72.73	18.31		150.0	
		Z	2.85	69.21	16.10		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.03	66.63	15.32	0.00	150.0	± 9.6 %
		Y	2.95	68.63	16.67		150.0	
		Z	3.05	66.87	15.55		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	×	3.14	66.68	15.45	0.00	150.0	± 9.6 %
		Y	3.05	68.65	16.75		150.0	
		Z	3.16	66.90	15.67		150.0	1
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	5.48	74.24	19.94	3.98	65.0	± 9.6 %
		Y	5.83	78.05	21.80		65.0	
		Z	5.16	73.46	19.72		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	5.43	71.87	19.65	3.98	65.0	± 9.6 %
		Y	5.15	73.23	20.29		65.0	
		Z	5.30	71.66	19.65		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.28	71.13	19.61	3.98	65.0	± 9.6 %
		Y	5.09	72.76	20.36		65.0	
		Z	5.27	71.32	19.81		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.42	67.95	15.52	0.00	150.0	± 9.6 %
		Υ	2.65	73.21	18.48		150.0	
		Z	2.47	68.55	15.91		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.67	66.43	15.11	0.00	150.0	± 9.6 %
		Y	2.65	69.54	16.65		150.0	
		Z	2.69	66.74	15.37		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	×	1.92	66.97	14.92	0.00	150.0	± 9.6 %
		Y	2.27	74.05	18.03		150.0	
		Z	1.96	67.64	15.34		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.36	67.07	15.14	0.00	150.0	± 9.6 %
	···	Y	2.72	73.04	17.01	-	150.0	
		Z	2.39	67.59	15.47		150.0	1

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.80	66.52	15.22	0.00	150.0	± 9,6 %
	······································	Y	2.78	69.65	16.71		150.0	
		Z	2.82	66.81	15.47		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.51	67.31	15.33	0.00	150.0	± 9.6 %
		Y	2.80	72.79	16.92		150.0	
		Z	2.54	67.82	15.65		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	×	4.96	66.85	16.19	0.00	150.0	± 9.6 %
		Y	4.63	67.53	16.79		150.0	
10115		Z	4.96	66.92	16.33		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.22	66.93	16.24	0.00	150.0	± 9.6 %
		Y	4.88	67.74	16.83		150.0	
10116-		Z	5.22	67.01	16.38		150.0	
CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.05	67.03	16.21	0.00	150.0	± 9.6 %
		Y	4.70	67.78	16.83		150.0	
40447		Z	5.05	67.12	16.36		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	4.94	66.75	16.16	0.00	150.0	± 9.6 %
		Y	4.61	67.43	16.76		150.0	
40440		Z	4.95	66.84	16.31		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.30	67.13	16.35	0.00	150.0	± 9.6 %
		Y	4.86	67.63	16.79		150.0	
40440		Z	5.31	67.24	16.51		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.04	67.00	16.20	0.00	150.0	± 9.6 %
		Y	4.69	67.70	16.79		150.0	
		Z	5.05	67.10	16.36		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	×	3.17	66.68	15.36	0.00	150.0	± 9.6 %
		Y	3.04	68.72	16.64		150.0	
		Z	3.18	66.91	15.58		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.30	66.85	15.57	0.00	150.0	± 9.6 %
		Y	3.18	69.04	16.88		150.0	
		Z	3.31	67.07	15.79		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	×	1.67	66.60	14.19	0.00	150.0	±9.6 %
		Y	1.87	72.33	15.40		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	1.70	67.34	14.60		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.12	67.16	14.28	0.00	150.0	± 9.6 %
		Y	1.56	66.54	11.72		150.0	
		Z	2.16	67,74	14.58		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	×	1.92	65.03	12.70	0.00	150.0	± 9.6 %
		Y	1.13	62.33	8.88		150.0	
1011-		Z	1.92	65.29	12.82		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	0.84	61.53	8.53	0.00	150.0	± 9.6 %
		Y	0.42	60.00	3.23		150.0	
10410		Z	0.80	61.27	8.17		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.25	62.09	8.49	0.00	150.0	± 9.6 %
		Y	15.63	136.67	2.52	ļ	150.0	L
		Z	1.18	61.53	7.92		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	1.33	62.76	8.97	0.00	150.0	± 9.6 %
		Y	175.53	59.57	0.91		150.0	
		Z	1.25	62.05	8.31		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.68	66.49	15.16	0.00	150.0	± 9.6 %
		Y	2.67	69.66	16.73		150.0	1
······		Z	2.70	66.80	15.42		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.81	66.57	15.26	0.00	150.0	± 9.6 %
		Y	2.79	69.76	16.78		150.0	
		Z	2.82	66.87	15.51		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	5.57	76.26	20.83	3.98	65.0	± 9.6 %
		Y	6.54	82.28	23.19		65.0	
		Z	5.47	76.32	20.97		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	4.95	71.73	19.22	3.98	65.0	± 9.6 %
		Y	4.69	73.27	19.41		65.0	
		Z	4.83	71.56	19.23		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	5.31	72.79	20.07	3.98	65.0	± 9.6 %
		Y	5.16	74.91	20.53		65.0	ł
		Z	5.19	72.65	20.11		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	1.96	67.30	15.14	0.00	150.0	± 9.6 %
		Y	2.37	74.79	18.39		150.0	
		Z	2.00	68.02	15.59		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.36	67.10	15.16	0.00	150.0	± 9.6 %
		Y	2.75	73.23	17.11		150.0	
		Z	2.39	67.62	15.50		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1,48	66.22	13.61	0.00	150.0	± 9.6 %
		Y	1.17	67.13	11.92		150.0	
		Z	1.51	66.95	13.98		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	1.71	65.06	12.34	0.00	150.0	±9.6 %
		Y	0.82	60.69	7.08		150.0	
		Z	1.71	65.33	12.43		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.51	67.38	15.38	0.00	150.0	± 9.6 %
		Y	2.84	73.04	17,05		150.0	
		Z	2,55	67.90	15.71		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.79	65.38	12.55	0.00	150.0	± 9.6 %
		Y	0.84	60.64	7.05		150.0	
		Z	1.79	65.65	12.65		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2,49	67.50	15.47	0.00	150.0	± 9.6 %
		Y	2.56	71.83	17.66		150.0	
		Ż	2.54	68.10	15.86		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.70	66.49	15.13	0.00	150.0	± 9.6 %
		Y	2.68	69.90	16.49		150,0	
		Z	2.71	66.81	15.39		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.81	66.70	15.28	0.00	150.0	± 9.6 %
		Y	2.80	70.26	16.67		150.0	
		Z	2.82	67.03	15.53		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.24	68.52	18.59	3.01	150.0	± 9.6 %
		Y	2.46	67.16	18.36		150.0	
		Z	3.27	68.87	18.81		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.78	70.80	18.80	3.01	150.0	± 9.6 %
		+		·				
		Y	2.65	69.44	18.59		150.0	

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.22	73.24	20.28	3.01	150.0	± 9.6 %
		Y	2.98	72.19	20.36		150.0	
		Z	4.38	74.05	20.65		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.60	66.96	17.88	3.01	150.0	±9.6 %
		Y	2.17	66.08	17.74		150.0	
		Z	2.64	67.39	18.13		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.25	71.58	19.84	3.01	150.0	± 9.6 %
		Y	2.55	70.69	19.84		150.0	
		Z	3.42	72.54	20.26		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.73	68.00	17.17	3.01	150.0	± 9.6 %
		Y	2.14	67.11	17.01		150.0	
		Z	2.83	68.55	17.41		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.83	82.25	25.65	6.02	65.0	± 9.6 %
		Y	3.25	78.99	24.66		65.0	
		Z	4.17	79.62	24.62		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	7.80	88.67	26.11	6.02	65.0	± 9.6 %
		Y	4.97	85.33	24.86		65.0	
		Z	8.07	89.25	26.21		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	6.67	84,99	24.27	6.02	65.0	± 9.6 %
		Y	3.85	80.27	22.34		65.0	
		Z	5.89	82.90	23.46		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.57	66.69	17.64	3.01	150.0	± 9.6 %
		Y	2.15	65.85	17.52		150.0	
		Z	2.61	67.10	17.88		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.26	71.60	19.85	3.01	150.0	± 9.6 %
		Y	2.56	70.71	19.85		150.0	
		Z	3.43	72.56	20.27		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.59	66.81	17.73	3.01	150.0	± 9.6 %
		Y	2.16	65.91	17.56		150.0	
		Z	2.63	67.23	17.97		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	3.23	71.44	19.75	3.01	150.0	± 9.6 %
		Y	2.55	70.64	19.81		150.0	
		Z	3.40	72.38	20.17		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	2.96	69.67	18.37	3.01	150.0	± 9.6 %
		Y	2.32	68.83	18.31		150.0	
		Z	3.09	70.38	18.68		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	2.73	67.95	17.14	3.01	150.0	± 9.6 %
		Y	2.14	67.11	17.00		150.0	
		Z	2.82	68.50	17.37		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.59	66.80	17.72	3.01	150.0	± 9.6 %
		Y	2.15	65.90	17.56		150.0	
		Z	2.63	67.21	17.96		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.23	71.42	19.74	3.01	150.0	± 9.6 %
		Y	2.55	70.62	19.79		150.0	
		Z	3.40	72.36	20.16		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.73	67.93	17.12	3.01	150.0	± 9.6 %
		Y	2.14	67.09	16.99		150.0	
		Z	2.82	68.48	17.36	1	150.0	· · · · · · · · · · · · · · · · · · ·

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.60	66.84	17.74	3.01	150.0	± 9.6 %
CAD	UPSK)	Y	0.40	05.00	47.57		450.0	[
		Z	2.16	65.93	17.57		150.0	[
10185-			2.64	67.25	17.98	0.04	150.0	1000
CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	3.24	71.49	19.78	3.01	150.0	±9.6 %
		Y	2.56	70.68	19.83	l	150.0	
		Z	3.41	72.43	20.20		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	2.74	67.99	17.16	3.01	150.0	± 9.6 %
		Y	2.14	67.14	17.02		150.0	
		Z	2.83	68.54	17.39		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	×	2.60	66.90	17.81	3.01	150.0	± 9.6 %
		Y	2.17	66.04	17.68		150.0	
		Z	2.65	67.32	18.06		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.33	72.04	20.13	3.01	150.0	± 9.6 %
		Y	2.61	71.14	20.14		150.0	
		Z	3.51	73.05	20.58		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	2.79	68.33	17.41	3.01	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.18	67.45	17.26		150.0	····
		Ż	2.89	68.91	17.66		150.0	
10193-	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X	4.35	66.32	15.83	0,00	150.0	± 9.6 %
CAC	BPSK)	Y	4.08	67.94	16.57		150.0	- 0.0 /0
		Z	4.35	66.41				
10194-	IEEE 802.11n (HT Greenfield, 39 Mbps,	X	4.50		15.97		150.0	
CAC	16-QAM)			66.59	15.97	0.00	150.0	± 9.6 %
		Y	4.17	67.97	16.67		150.0	
40405		Z	4.50	66.68	16.11		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.54	66.63	15.99	0.00	150.0	± 9.6 %
		Y	4.18	67.89	16.64		150.0	
		Ζ	4.54	66.71	16.13		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.34	66.34	15.84	0.00	150.0	± 9.6 %
		Y	4.05	67.87	16.52		150.0	
		Z	4.34	66.43	15.98		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.52	66.61	15.98	0.00	150.0	± 9.6 %
		Y	4.17	67.97	16.68		150.0	
		Z	4.51	66.70	16.12		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.54	66.63	16.00	0.00	150.0	± 9.6 %
		Y	4.17	67.88	16.63		150.0	
		Z	4.53	66.72	16.14		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.29	66.36	15.79	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.02	68.01	16.56		150.0	
		Z	4.29	66.45	15.94		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.51	66.57	15.97	0.00	150.0	± 9.6 %
070		Y	4.17	67.92	16.66		150.0	
				1 00 00	16.11		150.0	
		Ζ	4.50	66.66			100.0	L I
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)		<u>4.50</u> 4.55	66.66	15.99	0.00	150.0	±9.6 %
10221-		Ζ				0.00		± 9.6 %
10221- CAC		Z X	4.55	66.57	15.99 16.64	0.00	150.0 150.0	± 9.6 %
10221- CAC 10222-	QAM) IEEE 802.11n (HT Mixed, 15 Mbps,	Z X Y	4.55	66.57 67.87	15.99	0.00	150.0	± 9.6 %
10221- CAC	QAM)	Z X Y Z	4.55 4.19 4.55	66.57 67.87 66.66	15.99 16.64 16.13		150.0 150.0 150.0	

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.20	66.98	16.29	0.00	150.0	± 9.6 %
	Sec siriy	Y	4.78	67.52	16.75		150.0	**
	······································	Z	5.21	67.07	16.44		150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	4.95	66.84	16.12	0.00	150.0	± 9.6 %
0,10	Garting	Y	4.64	67.65	16.77		150.0	
		z	4.95	66.92	16.26		150.0	
10225-	UMTS-FDD (HSPA+)	X	2.60	65.43	14.52	0.00	150.0	± 9.6 %
CAB		Y	2.31	67.01	13.92	0,00	150.0	10.0 /0
		Z	2.60	65.66	14.70		150.0	
10226-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	8.30	89.91	26.63	6.02	65.0	± 9.6 %
CAA	16-QAM)	Y	5.39	86.92	25.51	0.02	65,0	1 3.0 %
		Z	8.64	90.59	25.51		65.0	
10227-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	8.42	88.94	25.65	6.02	65.0	± 9.6 %
CAA	64-QAM)					0.02		± 9.0 %
		Y	4.82	84.03	23.72	 	65.0	
10228-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z	8.66	89.39	25.69	6.00	65.0	+0.0 %
10228- CAA	QPSK)	X	5.33	84.56	26.61	6.02	65.0	± 9.6 %
		Y	3.51	80.74	25.42	<u> </u>	65.0	
40000		Z	5.37	85.04	26.79	0.00	65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	7.86	88.78	26.15	6.02	65.0	± 9.6 %
		Y	5.00	85.42	24.89		65.0	
		Z	8.13	89.36	26.26		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	7.90	87.76	25.18	6.02	65.0	± 9.6 %
		Y	4.45	82.60	23.15	L	65.0	
		Z	8.08	88.11	25.19	Ĺ	65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	5.13	83.76	26.22	6.02	65.0	± 9.6 %
		Y	3.36	79.77	24.94		65.0	
		Z	5.16	84.16	26.37		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	7.85	88.76	26.15	6.02	65.0	± 9.6 %
		Y	4.99	85.41	24.89		65.0	
		Z	8,11	89.34	26.25		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	7.87	87.73	25.17	6.02	65.0	± 9.6 %
		Y	4.44	82.56	23.14		65.0	
		Z	8.06	88.08	25.18		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	4.98	83.08	25.85	6.02	65.0	± 9.6 %
		Y	3.27	79.15	24.57		65.0	
		Ζ	5.00	83.43	25.98		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	7.85	88.79	26.16	6.02	65.0	± 9.6 %
		Y	5.00	85.44	24.91		65.0	
		Z	8.12	89.37	26.27		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.96	87.89	25.21	6.02	65.0	± 9.6 %
		Y	4.49	82.70	23.18		65.0	
		Z	8,15	88.24	25.23		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	5.13	83.78	26.24	6.02	65.0	± 9.6 %
		Y	3.35	79.76	24.95		65.0	Γ
		Z	5.16	84.20	26.39		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	7.83	88.73	26.14	6.02	65.0	± 9.6 %
		Y	4.99	85.40	24.89	<u> </u>	65.0	1
		1 1 1	4.77	00.40	1 24.02		00.0	1

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	7.84	87.68	25.15	6.02	65.0	± 9.6 %
		Y	4.43	82.52	23.13	 	65.0	
		Z	8.03	88.04	25.17		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	5.12	83.75	26.22	6,02	65.0	± 9.6 %
		Y	3.35	79.78	24.95		65.0	1
		Z	5.14	84.16	26.38		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	6.74	78.78	24.52	6.98	65.0	± 9.6 %
		Y	5.69	81.27	25.87		65.0	
		Z	6.76	79.00	24.59		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	×	6.37	77.64	23.95	6.98	65.0	± 9.6 %
		Y	5.22	79.69	25.18		65.0	
		Z	6.58	78.48	24.29		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.29	74.44	23.43	6.98	65.0	± 9.6 %
		Y	4.45	76.12	24.64		65.0	
		Z	4.96	73.24	22.88		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.30	71.80	16.21	3.98	65.0	± 9.6 %
		Y	1.55	60.92	7.03		65.0	
		Z	4.03	70.91	15.66		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	4.18	71.11	15.84	3.98	65.0	± 9.6 %
		Y	1.55	60.79	6.91		65.0	
		Z	3.92	70.24	15.30		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	3.86	73.77	17.33	3.98	65.0	± 9.6 %
	····	Y	1.55	63.11	9.15		65.0	
		Z	3.72	73.55	17.17		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	3.97	70.99	16.82	3.98	65,0	± 9.6 %
		Y	2.28	64.64	10.82		65.0	
·		Z	3.84	70.75	16.69		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	3.96	70.43	16.55	3.98	65.0	± 9.6 %
		Y	2.25	64.13	10.55		65.0	
		Z	3.83	70.16	16.40		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	5.06	78.16	20.28	3.98	65.0	± 9.6 %
		Y	3.58	73.72	16.05		65.0	
		Z	5.04	78.50	20.42		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	4.92	73.99	20.11	3.98	65.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	4.91	76.06	19.61		65.0	
		Z	4.82	73.98	20.18		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	4.70	71.93	18.79	3.98	65.0	± 9.6 %
	······································	Y	4.06	71.69	17.17		65.0	
		Z	4.58	71.78	18.78		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	5.51	78.57	21.66	3.98	65.0	± 9.6 %
		Y	7.63	86.68	23.81		65.0	
		Z	5.47	78.89	21.88		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	4.88	71.33	18.98	3.98	65,0	± 9.6 %
		Y	4.55	72,63	18.75		65.0	
		Z	4.76	71,16	18.98		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	5.20	72.27	19.72	3.98	65.0	± 9.6 %
		Y	4.94	73.95	19.64		65.0	1
		Z	5.08	72.13	19.74		65.0	

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	5.31	75.57	20.73	3.98	65.0	± 9.6 %
		Y	6.09	81.09	22.63		65.0	
		Z	5.22	75.61	20.85		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.08	67.09	12.82	3.98	65.0	± 9.6 %
		Y	1.10	59.01	4.61		65.0	
		Z	2,85	66.14	12.16		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.00	66.43	12.39	3.98	65.0	± 9.6 %
		Y	1.10	58,89	4.44		65.0	
40050		Z	2.79	65.56	11.75		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	2.70	68.34	13.85	3.98	65.0	± 9.6 %
		Y	1.08	60.00	5.96		65.0	
10259-		Z	2.52	67.66	13.41	0.00	65.0	1000
CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	4.36	72.23	18.07	3.98	65.0	± 9.6 %
		Y	3.05	68.29	13.76		65.0	
10060		Z	4.25	72.11	18.03	0.00	65.0	1000
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	4.39	71.97	17.95	3.98	65.0	± 9.6 %
		Y	3.03	67.89	13.54		65.0	
10064		Z	4.27	71.82	17.89		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	5.00	77.54	20.53	3.98	65.0	± 9.6 %
		Y	4.86	78.27	18.84		65.0	
40000		Z	4.96	77.83	20.69		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	4.91	73.93	20.06	3.98	65.0	± 9.6 %
		Y	4.87	75.90	19.51		65.0	
		Z	4.80	73.90	20.13		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	4.69	71.90	18.78	3.98	65.0	± 9.6 %
		Y	4.05	71.68	17.17		65.0	
		Z	4.57	71.76	18.77		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	5.45	78.36	21.55	3.98	65.0	± 9.6 %
		Y	7.43	86.19	23.60		65.0	
		Z	5.41	78.66	21.76		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	4.95	71.73	19.22	3.98	65.0	± 9.6 %
		Y	4.69	73.28	19.42		65.0	
		Z	4.83	71.56	19.24		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	5.30	72.77	20.06	3.98	65.0	± 9.6 %
		Y	5.16	74.89	20.52		65.0	
		Z	5.18	72.63	20.09		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	5.56	76.21	20.81	3.98	65.0	± 9.6 %
		Υ	6.50	82.16	23.14		65.0	
	·····	Z	5.46	76.27	20.95		65.0	.l
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	×	5.60	71.84	19.73	3.98	65.0	± 9.6 %
		Y	5.34	73.47	20.38		65.0	
		Z	5.47	71.64	19.74	ļ	65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	5.61	71.49	19.61	3.98	65.0	± 9.6 %
		Y	5.38	73.21	20.25		65.0	
		Z	5.48	71.28	19.61		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	5.61	73.88	19.99	3.98	65.0	± 9.6 %
		Y	5.96	77.92	21.88		65.0	
		Z	5.49	73.78	20.05	1	65.0	1

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.40	65.75	14.40	0.00	150.0	± 9.6 %
		Y	2.28	68.52	14.52	 	150.0	
		Z	2.41	66.07	14.63		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.37	65.89	14.00	0.00	150.0	± 9.6 %
		Y	2.24	77.18	18.60		150.0	
		Z	1.41	66.69	14.48		150.0	
10277- CAA	PHS (QPSK)	X	1.83	60.56	6.14	9.03	50.0	± 9.6 %
		Y	1.18	58.25	3.31		50.0	
		Z	1.78	60.31	5.89		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	3.52	68.49	13.06	9.03	50.0	± 9.6 %
		Y	1,90	61.19	6.81		50.0	
		Z	3.28	67.42	12.39		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	3.63	68.79	13.26	9.03	50.0	± 9.6 %
		Y	1.93	61.26	6.89		50.0	l
10290-		Z	3.38	67.71	12.59		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	0.93	64.00	10.40	0.00	150.0	± 9.6 %
		Y	0.33	60.00	4.23		150.0	
10291-	CDMA2000, RC3, SO55, Full Rate	Z X	0.92	64,13	10.27	0.00	150.0	
AAB	CDMA2000, RC3, SO35, Full Rate		0.56	62.08	9.05	0.00	150.0	± 9.6 %
		Y Z	0.25	60.00	3.73		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.54 0.64	62.09 64.04	8.81 10.45	0.00	150.0 150.0	± 9.6 %
		Y	0.23	60.00	3.99		150.0	
		Ż	0.63	64.48	10.42		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	0.84	67.30	12.52	0.00	150.0	± 9.6 %
		Y	0.24	60.00	4.44		150.0	
		Z	0.95	69.16	13.11		150.0	[
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.34	87.79	23.91	9.03	50.0	± 9.6 %
		Y	100.00	106.64	24.70		50.0	
		Z	13.04	89.56	24.26		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.43	68.04	15.58	0.00	150.0	± 9.6 %
		Y	2.68	73.41	18.60		150.0	
	·	Z	2.48	68.65	15.99		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.13	64.13	11.23	0.00	150.0	± 9.6 %
		Υ	0.47	60.00	5.40		150.0	
		Z	1.12	64.36	11.24		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.79	65.44	11.45	0.00	150.0	± 9.6 %
		Y	0.62	60.00	4.41		150.0	
10000		Z	1.72	64.98	11.00		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.44	62.46	9.17	0.00	150.0	±9.6 %
		Y	0.61	60.00	3.80		150.0	
10204		Z	1.39	62.14	8.79		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.49	65.00	16.96	4.17	50.0	± 9.6 %
		Y	4.09	66,69	17.12		50.0	
10202		Z	4.52	65.33	17.21		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	4.99	65.68	17.71	4.96	50.0	± 9.6 %
		Υ	4.49	66.84	17.65		50.0	
		Z	4.97	65.74	17.79		50.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.74	65.30	17.51	4.96	50.0	± 9.6 %
		Y	4.42	67.46	17.88		50.0	
		Z	4.72	65.36	17.59		50.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.55	65.18	17.01	4.17	50.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.17	66.84	17.11		50.0	<u> </u>
		Z	4.53	65.26	17.11		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.22	67.24	18.89	6.02	35.0	± 9.6 %
		Y	3.80	67.97	17.01		35.0	
		Z	4.24	67.52	19.03		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.53	66.32	18.64	6.02	35.0	± 9.6 %
		Y	4.12	67.69	17.81		35.0	
		Z	4.53	66.50	18.76		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.42	66.39	18.56	6.02	35.0	± 9.6 %
		Y	4.01	67.62	17.64		35.0	
		Z	4.42	66.59	18.68		35.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.40	66.60	18.70	6.02	35.0	± 9.6 %
		Y	4.05	68.08	17.93		35.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.40	66.81	18.83		35.0	[
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.57	66.46	18.76	6.02	35.0	± 9.6 %
		Y	4.15	67.86	18.00		35.0	
		Z	4.57	66.64	18.88		35.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.48	66.38	18.62	6.02	35.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.11	67.92	17.93		35.0	
		Z	4.48	66.57	18.74		35.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.77	67,40	15.33	0.00	150.0	± 9.6 %
		Y	2.94	71.44	17.85		150.0	
		Z	2.83	67.92	15.69		150.0	
10313- AAA	IDEN 1:3	X	2.63	70.72	15.17	6.99	70.0	± 9.6 %
		Y	4.78	79.70	18.53		70.0	
		Z	2.45	70.15	14.87		70.0	
10314- AAA	iDEN 1:6	X	4.23	78.95	21.28	10.00	30.0	± 9.6 %
		Y	21.13	105.84	29.54		30.0	f
		Z	4.50	79.98	21.54		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.98	62.52	14.02	0.17	150.0	± 9.6 %
		Y	1.09	67.04	17.16		150.0	
		Z	0.97	62.89	14.44		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.40	66.34	15.98	0.17	150.0	± 9.6 %
		Y	4.07	67.64	16.55		150.0	
		Z	4.39	66.42	16.11	[150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.40	66.34	15.98	0.17	150.0	± 9.6 %
		Y	4.07	67.64	16.55		150.0	
		Z	4.39	66.42	16.11		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.48	66.62	15.95	0.00	150.0	± 9.6 %
		Y	4.04	67.65	16.49		150.0	
		Z	4.47	66.71	16.10		150.0	
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.21	66.82	16.17	0.00	150.0	± 9.6 %
				+	·	f		
		Υ	4.85	67.54	16.72		150.0	

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.47	67.11	16.20	0.00	150.0	± 9.6 %
		Y	5.17	67.73	16.77		150.0	
		Z	5.47	67.15	16.32		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	×	0.93	64.00	10.40	0.00	115.0	± 9.6 %
		Y	0.33	60.00	4.23		115.0	
		Z	0.92	64.13	10.27		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	0.93	64.00	10,40	0.00	115.0	± 9.6 %
		Y	0.33	60.00	4.23		115.0	
		Z	0.92	64.13	10.27		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	16.67	98.68	24.47	0.00	100.0	± 9.6 %
		Y	7.21	81.11	14.31		100.0	
		Z	37.53	107.95	26.47		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	24.48	107.00	27.24	3,23	80.0	± 9.6 %
		Y	15.52	100.17	23.54		80.0	
		Z	35.49	111.31	27.96		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.93	61.94	13.54	0.00	150.0	± 9,6 %
		Y	1.01	66.17	16.61		150.0	
		Z	0.92	62.29	13,95		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.35	66.34	15.91	0.00	150.0	±9.6 %
		Y	4.05	67.74	16.57		150.0	
		Z	4.35	66.43	16.05		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.35	66.34	15.91	0.00	150.0	± 9.6 %
		Y	4.05	67.74	16.57		150.0	
		Z	4.35	66.43	16.05	*******	150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.34	66.51	15.94	0.00	150.0	± 9.6 %
		Y	4.03	68.00	16.69		150.0	
		Z	4.34	66.61	16.09		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.36	66.46	15.94	0.00	150.0	± 9.6 %
	· · ·	Y	4.05	67.90	16.64		150.0	
		Z	4.36	66.55	16.08		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4,47	66.46	15.96	0.00	150.0	± 9.6 %
		Y	4.14	67.79	16.63		150.0	
		Z	4,47	66.54	16.10		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.61	66.73	16.06	0.00	150.0	± 9.6 %
		Y	4.22	68.01	16.69		150.0	
		Z	4.61	66.82	16.20		150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.54	66.68	16.03	0.00	150.0	± 9.6 %
		Y	4.16	67.92	16.66		150.0	
		Z	4.53	66.77	16.18		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.17	66.99	16.27	0.00	150.0	± 9.6 %
		Y	4.80	67,69	16.83		150.0	l
		Z	5.17	67.08	16.41		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.19	67.07	16.30	0.00	150.0	± 9.6 %
		Y	4.84	67.85	16.90		150.0	
	1	Z	5.20	67.19	16.47		150.0	

10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.17	66.95	16.24	0.00	150.0	± 9.6 %
		Y	4.81	67.67	16.81		150.0	
		Z	5.17	67.02	16.38		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.04	70.70	17.69	0.00	150.0	± 9.6 %
		Y	5.18	78.06	19.24		150.0	
		Z	4.12	71.34	18.06		150.0	·····
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.97	66.79	15.75	0.00	150,0	± 9.6 %
		Y	3.59	68.58	16.14		150.0	
		Z	3.97	66.94	15.91		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.30	66.71	15.93	0.00	150.0	± 9.6 %
		Y	3.93	68.25	16.56		150.0	
		Z	4,29	66.83	16.08		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.56	66.71	16.05	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.18	67.98	16.70		150.0	
		Z	4.55	66.80	16.19		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.08	71.35	17.45	0.00	150.0	± 9.6 %
		Y	4.19	74.65	16.76		150.0	
		Z	4.19	72.07	17.82		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	22.01	105.36	26.76	3.23	80.0	± 9.6 %
		Y	12.26	97.11	22.67		80.0	
		Z	30.46	109.05	27.35		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.20	66.45	14.65	0.00	150.0	± 9.6 %
		Y	2.49	66.31	12,90		150.0	
		Z	3.20	66.65	14.79		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	3.83	66.57	15.61	0.00	150.0	± 9.6 %
		Y	3.50	68.44	16.07		150.0	
		Z	3.83	66.72	15.77		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.13	66.53	15.82	0.00	150.0	± 9.6 %
,		Y	3.82	68.12	16.50		150.0	
		Z	4.12	66.65	15.98		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.34	66.47	15.89	0.00	150.0	±9.6 %
		Y	4.03	67.78	16.58		150.0	
		Z	4.33	66.57	16.04		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.02	66.30	14.00	0.00	150.0	± 9.6 %
		Y	1.96	63.95	10.66		150.0	
		Z	3.02	66.48	14.10		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.11	67.70	16.53	0.00	150.0	± 9.6 %
		Y	6.19	69.21	17.55		150.0	
		Z	6.14	67.81	16.68		150.0	L
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.68	65,04	15.61	0.00	150.0	± 9.6 %
		Y	3.54	66.84	16.42		150.0	
		Z	3.67	65.12	15.76		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.62	70.05	16.39	0.00	150.0	± 9.6 %
		Y	1.73	62.72	9.51	1	150.0	[
		Z	3.68	70.56	16.64		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.87	68.53	17.80	0.00	150.0	± 9.6 %
		Y	3.66	66.63	14.39		150.0	
		Z	4.93	68.95	18.05		150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	0.72	64.98	13.65	0.00	150.0	± 9.6 %
		Y	8.89	109.57	29.93		150.0	Ì
		Z	0.75	66.41	14.51		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	13.94	101.67	26.79	3.29	80.0	±9.6 %
		Y	100.00	127.12	30.86		80.0	
		Z	40.31	115.94	29.98		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.11	63.17	10.06	3.23	80.0	± 9.6 %
		Y	0.26	55,58	3.51		80.0	
		Z	0.94	61.56	9.02		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	7.90	3.23	80.0	± 9.6 %
		Y	1.89	63.59	6.01		80.0	
		Z	0.81	60.00	7.64		80.0	
10464- 	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	10.27	95.95	24.48	3.23	80.0	± 9.6 %
		Y	10.37	95.51	22,29		80.0	
		Z	21.85	105.27	26.52		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	62.26	9.56	3.23	80.0	± 9.6 %
		Y	0.26	55.51	3.41		80.0	
		Z	0.88	60.92	8.64		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	7.85	3.23	80.0	± 9.6 %
		Y	2.94	64.67	6.15		80.0	
		Z	0.81	60.00	7.59		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	12.26	98.51	25.22	3.23	80.0	±9.6 %
		Y	17.71	102.01	24.01		80.0	
		Z	30.02	109.65	27.64		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.04	62.52	9.70	3.23	80.0	±9.6 %
		Y	0.26	55.56	3.48		80.0	
	····	Z	0.90	61.11	8.75		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	7.85	3.23	80.0	± 9.6 %
•.•		Y	0.90	60.91	5.15		80.0	
		Z	0.81	60.00	7.59		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	12.39	98.68	25.27	3.23	80.0	± 9.6 %
		Y	18.66	102.62	24.14		80.0	
		Z	30.74	109.98	27.71		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.03	62.46	9.66	3.23	80.0	±9.6 %
		Y	0.26	55.54	3.46		80.0	
40476		Z	0.89	61.06	8.72		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	0.81	60.00	7.83	3.23	80.0	± 9.6 %
		Y	1.83	63.55	6.01		80.0	
40.0-0		Z	0.81	60.00	7.57		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	12.30	98.56	25.23	3.23	80.0	± 9.6 %
		Y	17.97	102.17	24.03		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	Z X	30.28 1.02	109.75 62.43	27.65 9.65	3.23	80.0 80.0	± 9.6 %
AAC	QAM, UL Subframe=2,3,4,7,8,9)							
		Y	0.26	55.54	3.45		80.0	
		Ζ	0.89	61.04	8.70		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	7.83	3.23	80.0	± 9.6 %
		Y	3.14	65.15	6.35		80.0	
		Ζ	0.81	60.00	7.57		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.00	62.22	9.52	3.23	80.0	± 9.6 %
		Y	0.26	55.50	3.40		80.0	
		Z	0.88	60.88	8.60		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.81	60.00	7.82	3.23	80.0	± 9.6 %
		Y	3.81	65.69	6.44		80.0	
40470		Z	0.81	60.00	7.56		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.59	85.50	22.56	3.23	80,0	± 9.6 %
		Y Z	100.00 8.59	124.45 89.42	30.64 23.62		80.0 80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4,79	76.18	17.27	3.23	80.0	± 9.6 %
		Y	0.79	60.53	7.96		80.0	
		Z	4.72	75.80	16.90		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.50	71.72	15.20	3.23	80.0	± 9.6 %
		Y	0.75	60.00	7.10		80.0	
10482-		Z	3.26	70.74	14.59	0.00	80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.78	66.01	13.40	2.23	80.0	± 9.6 %
		Y Z	0.80	60.00 66.49	6.87	<u> </u>	80.0 80.0	
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	$\frac{2}{X}$	2.59	67.30	13.54 13.51	2.23	80.0	± 9.6 %
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	Ŷ	1.09	60.00	5.52	2.23	80.0	19.0 %
		z	2.37	66.27	12.85		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.46	66.44	13.12	2.23	80.0	± 9.6 %
		Y	1.12	60.00	5.52		80.0	
		Z	2.26	65.46	12.48		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2,31	69.06	16.01	2.23	80.0	± 9.6 %
		Y	2.52	71.75	14.63		80.0	
		Z	2.43	70.26	16.55		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.35	65.93	13.92	2.23	80.0	± 9.6 %
		Y	1.10	60.00	7.99		80.0	
		Z	2.35	66.25	14.03		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.36	65.64	13.75	2.23	80.0	± 9.6 %
		Y	1.13	60.00	7.94		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	2.36 2.76	65.89 69.44	13.84 17.18	2.23	80.0 80.0	± 9.6 %
		Y	4.34	80.02	20.91		80.0	İ
		Z	2.84	70.33	17.68		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.91	67.08	16.06	2.23	80.0	± 9.6 %
		Y	3.28	71.79	16.98		80.0	
40400		Z	2.93	67.51	16.34	0.00	80.0	100%
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.00	67.01	16.04	2.23	80.0	± 9.6 %
		Y Z	3.19 3.01	70.91 67.40	16.56 16.29		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.01	67.40	16.29	2.23	80.0 80.0	± 9.6 %
		Y	3.62	74.69	19.64		80.0	1
		z	3.15	69.19	17.41		80.0	1
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.31	66.73	16.33	2.23	80.0	± 9.6 %
		Y	3.42	70.36	17.49		80.0	
		Z	3.30	66.98	16.55		80.0	

10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	3.37	66.65	16.30	2.23	80.0	± 9.6 %
AAC	64-QAM, UL Subframe=2,3,4,7,8,9)				10.00	2.20		
		Y	3.42	69.99	17.28		80.0	
		Z	3.37	66.89	16.51		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.29	69.76	17.41	2.23	80.0	± 9.6 %
		Y	3.96	76.26	20.40		80.0	
		Z	3.36	70.43	17.82		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.32	66.99	16.51	2.23	80.0	± 9.6 %
		Y	3.45	70.58	17.96		80.0	
40.400		Z	3.32	67.26	16.75		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.41	66.83	16.48	2.23	80.0	± 9.6 %
		Y	3.49	70.20	17.79		80.0	
10107		Z	3.41	67.07	16.70		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.18	61.39	9.87	2.23	80.0	± 9.6 %
		Y	0.42	53.98	1.19		80.0	
40400		Z	1.11	61.01	9.51		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.22	60.00	7.98	2.23	80.0	± 9.6 %
		Y	99.99	258.49	1.69		80.0	
		Z	1.20	60.00	7.80		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.24	60.00	7.83	2.23	80.0	± 9.6 %
		Y	99.95	273.67	5.17		80.0	
		Z	1.21	60.00	7.64		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.48	69.15	16.47	2.23	80.0	± 9.6 %
		Y	4.15	78.35	18.23		80.0	
		Z	2.59	70.22	16.99		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.62	66.65	14.86	2.23	80.0	± 9.6 %
		Y	1.65	63.40	10.90		80.0	
		Z	2.64	67.08	15.07		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.66	66.53	14.74	2.23	80.0	± 9.6 %
		Y	1.59	62.74	10.46		80.0	
		Z	2.68	66.92	14.92		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.73	69.26	17.09	2.23	80.0	± 9.6 %
		Y	4.21	79.52	20.70		80.0	[
40504		Z	2.81	70.13	17.57		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.89	66.99	16.00	2,23	80.0	± 9.6 %
		Y	3.22	71.53	16.84	L	80.0	
10505		Z	2.91	67.41	16.27		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.98	66.92	15.98	2.23	80.0	± 9.6 %
		Y	3.15	70.69	16.45		80.0	
40500		Z	3.00	67.30	16.23		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.27	69.63	17.34	2.23	80.0	± 9.6 %
		Y	3.91	76.02	20.28		80.0	
40507		Z	3.33	70.28	17.74		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10	X	3.31	66.93	16.47	2.23	80.0	± 9.6 %
AAC	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)							
AAC	Subframe=2,3,4,7,8,9)	Y	3.43	70.48	17.90		80.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.40	66.77	16.43	2.23	80.0	± 9.6 %
		Y	3.47	70.07	17.72	·····	80.0	
		Z	3.40	67.00	16.65		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.71	68.99	17.10	2.23	80.0	± 9.6 %
•·····		Y	3.93	72.91	19.23		80.0	
	····	Z	3.74	69.39	17.40		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.81	66.87	16.61	2.23	80.0	± 9.6 %
		Υ	3.70	69.03	17.73		80.0	
40544		Z	3.80	67.02	16.79		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.88	66.72	16.58	2.23	80.0	± 9.6 %
		Y	3.77	68.83	17.64		80.0	
40545		Z	3.87	66.85	16.75		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.76	70.05	17.41	2.23	80.0	±9.6 %
		Y	4.13	74.35	19.72		80.0	
10513-		Z	3.82	70.57	17.75	0.00	80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.69	66.99	16.66	2.23	80.0	± 9.6 %
Andanite		Y	3.62	69.07	17.83		80.0	
10511		Z	3.68	67.16	16.86		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.74	66.70	16.58	2.23	80.0	± 9.6 %
		Y	3.66	68.68	17.67		80.0	
		Z	3.72	66.84	16.77		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.89	62.04	13.53	0.00	150.0	± 9.6 %
		Y	0.99	66.72	16.88		150.0	
10510		Z	0.88	62.43	13.97		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.42	65.22	13.44	0.00	150.0	± 9.6 %
		Y	100.00	170.44	46.50		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z	0.47	67.93	14.90		150.0	1000
AAA	Mbps, 99pc duty cycle)	X	0.71	63.10	13.56	0.00	150.0	± 9.6 %
		Y Z	<u>0.99</u> 0.71	72.70 63.90	19.61		150.0	
10518- AAB	IEEE 802.11a/h WIFI 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.34	66.42	14.21 15.89	0.00	150.0 150.0	± 9.6 %
		Y	4.04	67.95	16.62		150.0	
		Z	4.34	66.52	16.03		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.50	66.62	16.00	0.00	150.0	±9.6 %
		Y	4.14	68.05	16.67		150.0	
40500		Z	4.49	66.71	16.14		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X Y	4.35	66.54	15.90	0.00	150.0	± 9.6 %
		Z Y	4.01	67.95 66.64	16.60 16.05		150.0 150.0	
10521- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.35	66.51	15.88	0.00	150.0	± 9.6 %
		Y	3.94	67.81	16.52		150.0	
		Ż	4.28	66.61	16.02		150.0	
10522- AAB	IEEE 802.11a/h WiFl 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.34	66.65	15.98	0.00	150.0	± 9.6 %
		Y	3.95	67.80	16.52		150.0	
		Z	4.34	66.75	16.13		150.0	

10500			4.05	00.50	45.05	~ ~ ~ ~	450.0	
10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.25	66.56	15.85	0.00	150.0	± 9.6 %
AAD		Y	3.96	68.17	16.68		150.0	
		Z	4.25	66.67	16.01		150.0	
10524-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.29	66.57	15.95	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)		4.20	00.07	10.00	0.00	100.0	10.0 %
70.0		Y	3.92	67.94	16.65		150.0	
		z	4.28	66.68	16.11		150.0	
10525-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.30	65.65	15.56	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)						,	
		Y	4.04	67.23	16.37		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.30	65.76	15.72		150.0	
10526-	IEEE 802.11ac WIFI (20MHz, MCS1,	X	4,44	65.96	15.69	0.00	150.0	±9.6 %
AAB	99pc duty cycle)							
		Y	4.10	67.36	16.43		150.0	
		Z	4.44	66.06	15.84		150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	4.36	65.91	15.62	0.00	150.0	±9.6 %
AAB	99pc duty cycle)							
		Y	4.06	67.43	16.42		150.0	
		Z	4.36	66.02	15.78		150.0	
10528-	IEEE 802.11ac WiFi (20MHz, MCS3,	X	4.38	65.93	15.65	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)			L				
		Y	4.05	67.35	16.40		150.0	
		Z	4.38	66.04	15.81		150.0	
10529-	IEEE 802.11ac WiFi (20MHz, MCS4,	X	4.38	65.93	15.65	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)				10.10			
		<u>Y</u>	4.05	67.35	16.40		150.0	
		Z	4.38	66.04	15.81		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.35	65.97	15.64	0.00	150.0	± 9.6 %
		Y	4.01	67.35	16.37		150.0	
		Ż	4.35	66.08	15.79		150.0	
10532-	IEEE 802.11ac WiFi (20MHz, MCS7,	Ī	4.23	65.82	15.56	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)							
	······································	Y	3.93	67.27	16.33		150.0	
		Z	4.23	65.93	15.72		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.39	65.99	15.65	0.00	150.0	± 9.6 %
		Y	4.07	67.57	16.46		150.0	
		Z	4.39	66.11	15.81		150.0	1
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.94	66.05	15.78	0.00	150.0	± 9.6 %
1010		Y	4.64	66.91	16.43		150.0	
		Z	4.95	66.13	15.92		150.0	
10535-	IEEE 802.11ac WiFi (40MHz, MCS1,	X	5.00	66.21	15.85	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)							
		Y	4.65	66.98	16.47		150.0	
		Z	5.00	66.29	16.00		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.88	66.17	15.81	0.00	150.0	± 9.6 %
		Y	4.56	66.99	16.45		150.0	1
		Z	4.88	66.26	15.96	[150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.93	66.14	15.80	0.00	150.0	± 9.6 %
		Υ	4.65	67.13	16.53		150.0	
		Z	4.94	66.23	15.95		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.01	66.14	15.84	0.00	150.0	± 9.6 %
		Y	4.66	66.91	16.44		150.0	
		Z	5.02	66.22	15.99	1	150.0	
		X	4.94	66.12	15.84	0.00	150.0	± 9.6 %
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)		7.07	00.12				
10540- AAB	99pc duty cycle)	Y	4.60	66.83	16.43		150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	4.92	66.01	15.78	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)		4.32	00.01	10.76	0.00	100.0	± 9.0 %
		Y	4.61	66.86	16.41		150,0	
		Z	4.92	66.07	15.91		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.08	66.12	15.85	0.00	150.0	± 9.6 %
		Y	4.74	66.92	16.46		150.0	
		Z	5.08	66.19	15.99		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.14	66.15	15.90	0.00	150.0	± 9.6 %
		Y	4.79	66.97	16.52		150.0	
	······	Z	5,15	66.24	16.04		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.28	66.17	15.79	0.00	150.0	± 9.6 %
		Y	5.02	66.72	16.34		150.0	
		Z	5.29	66.22	15.92		150.0	
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	×	5.46	66.60	15.97	0.00	150.0	± 9.6 %
		Y	5.15	67.11	16.50		150.0	
	······································	Z	5.48	66.70	16.12		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	×	5.32	66.30	15.83	0.00	150.0	± 9.6 %
		Y	5.04	66.80	16.35		150.0	
		Z	5.32	66.36	15.96		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	×	5.39	66.39	15.87	0.00	150.0	± 9.6 %
		Y	5.17	67.18	16.54		150.0	
		Z	5.41	66.46	16.01		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.58	67.13	16.21	0.00	150.0	± 9.6 %
		Y	5.08	67.06	16.46		150.0	
		Z	5.61	67.28	16.39		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.37	66.44	15.91	0.00	150.0	± 9.6 %
		Y	5.20	67.46	16.69		150.0	
		Z	5.39	66.55	16.06		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.33	66.33	15.82	0.00	150.0	± 9.6 %
		Y	5.00	66.73	16.30		150.0	<u>.</u>
		Z	5.34	66.38	15.94		150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.29	66.25	15.78	0.00	150.0	±9.6 %
		Y	5.03	66.95	16.40		150.0	
		Z	5.29	66.30	15.90		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.35	66.24	15.81	0.00	150.0	± 9.6 %
		Y	5.04	66.77	16.32		150.0	
		Z	5.35	66.28	15.93		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	×	5.70	66.53	15.89	0.00	150.0	± 9.6 %
		Y	5.48	66.93	16.36		150.0	
		Z	5.71	66.58	16.01		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.81	66.79	16.00	0.00	150.0	± 9.6 %
		Y	5.55	67.14	16.45		150.0	
1		Z	5.82	66.86	16.13		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.84	66.87	16.04	0.00	150.0	±9.6 %
		Y	5.59	67.27	16.51		150.0	
		Z	5.85	66.94	16.17		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	×	5.79	66.74	15.99	0.00	150.0	± 9.6 %
		Y	5.53	67.10	16.44		150.0	
	1	Z	5.80	66.79	16.11		150.0	

10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	x	5.83	66.87	16.07	0.00	150,0	± 9.6 %
		Y	5.48	66.99	16.40		150.0	
		Z	5.83	66.91	16.19		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.83	66.75	16.05	0.00	150.0	± 9.6 %
		Y	5.52	66.99	16.43		150.0	
		Z	5.84	66.79	16.17		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.76	66.74	16.07	0.00	150.0	± 9.6 %
		Y	5.46	66.95	16.44		150.0	
		Z	5.77	66.80	16.20		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.83	66.96	16.19	0.00	150.0	± 9.6 %
		Y	5.52	67.16	16.55		150.0	
40500		Z	5.84	67.00	16.31		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.92	66.88	16.11	0.00	150.0	±9.6 %
		Y	5.81	67.79	16.83		150.0	
10801		Z	5.94	66.97	16.26		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.67	66.49	16.06	0.46	150.0	± 9.6 %
		<u>Y</u>	4.32	67.73	16.66		150.0	
40505		Z	4.66	66.56	16.18		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	4.87	66.92	16.38	0.46	150.0	± 9.6 %
		Y	4.49	68.17	17.00		150.0	
40200		Z	4.86	67.00	16.52		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.71	66.74	16.18	0.46	150.0	± 9.6 %
		Y	4.33	67.89	16.77		150.0	
		Z	4.70	66.81	16.31		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.74	67.14	16.55	0.46	150.0	± 9.6 %
		Y	4.39	68.40	17.22		150.0	
		Z	4.73	67.23	16.70		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.61	66.49	15.93	0.46	150.0	± 9.6 %
		Y	4.16	67.29	16.29		150.0	
		Z	4.60	66.56	16.05		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.71	67.30	16.65	0.46	150.0	± 9.6 %
		Y	4.41	68.83	17.49		150.0	
		Z	4.71	67.41	16.81		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.73	67.11	16.56	0.46	150.0	± 9.6 %
		<u>Y</u>	4.35	68.37	17.24		150.0	
40574		Z	4.72	67.21	16.71		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.04	62.89	14.28	0.46	130.0	± 9.6 %
		Y	1.15	67.27	17.22	L	130.0	1
405-0		Z	1.02	63.22	14.67		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.04	63.32	14.57	0.46	130.0	± 9.6 %
		Y	1.18	68.30	17.83	ļ	130.0	
10555		Z	1.03	63.72	15.00	1	130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	0.83	71.63	16.92	0.46	130.0	± 9.6 %
		Y	100.00	162.55	44.35		130.0	
10.00		Z	1.07	76.86	19.24		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.02	67.14	16.57	0,46	130.0	±9.6 %
		Y	1.91	82.76	24.56		130.0	[
		Z	1.05	68.53	17.52		130.0	

EX3DV4- SN:7406

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.45	66.27	16.09	0.46	130.0	± 9.6 %
		Y	4.10	67.49	16.61		130.0	······
		Z	4.44	66.34	16.22		130.0	· · · · · · · · · · · · · · · · · · ·
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.47	66.45	16.16	0.46	130.0	± 9.6 %
		Y	4.15	67.84	16.79		130.0	
		Z	4.47	66.53	16.30	1	130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.65	66.71	16.33	0.46	130.0	±9.6 %
		Y	4.27	68.02	16.91		130.0	
10578-		Z	4.64	66.79	16.46		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.55	66.84	16.42	0.46	130.0	± 9.6 %
		Y	4.20	68.23	17.08		130.0	
10579-		Z	4.54	66.94	16.56		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.31	66.05	15.67	0.46	130.0	± 9.6 %
		Y	3.90	66.98	16.06		130.0	
10500		Z	4.30	66.11	15.79		130.0	
10580- 	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.35	66.12	15.70	0.46	130.0	± 9.6 %
		Y	3.88	66.84	15.95		130.0	
40504		Z	4.34	66.18	15.83		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.45	66.88	16.36	0.46	130.0	± 9.6 %
•		Y	4.14	68.42	17.13		130.0	
		Z	4.44	66.99	16.52		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.24	65.81	15.45	0.46	130.0	± 9.6 %
		Y	3.79	66.65	15.78		130.0	
		Z	4.23	65.87	15.57		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	Х	4.45	66.27	16.09	0.46	130.0	± 9.6 %
		Y	4.10	67.49	16.61		130.0	
		Z	4.44	66.34	16.22		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.47	66.45	16.16	0.46	130.0	± 9.6 %
		Y	4.15	67.84	16.79		130.0	
		Z	4.47	66.53	16.30		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.65	66.71	16.33	0.46	130.0	± 9.6 %
		Y	4.27	68.02	16.91		130.0	
	······································	Z	4.64	66.79	16.46		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.55	66.84	16.42	0.46	130.0	± 9.6 %
		Y	4.20	68.23	17.08		130.0	
		Z	4.54	66.94	16.56		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.31	66.05	15.67	0.46	130.0	± 9.6 %
		Y	3.90	66.98	16.06		130.0	
		Z	4.30	66.11	15.79		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.35	66.12	15.70	0.46	130.0	± 9.6 %
		Y	3.88	66.84	15.95		130.0	
		Z	4.34	66.18	15.83		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.45	66.88	16.36	0.46	130.0	± 9.6 %
		Y	4.14	68.42	17.13		130.0	
		Z	4.44	66.99	16.52		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.24	65.81	15.45	0.46	130.0	± 9.6 %
		Y	3.79	66.65	15.78		130.0	
		Z	4.23	65.87	15.57		130.0	

EX3DV4- SN:7406

· •			1.01	00.00	40.00	0.40	400.0	1000
10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.61	66.36	16.22	0.46	130.0	±9.6 %
		Y	4.27	67.61	16.79		130.0	
		Z	4.60	66.43	16.35		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.73	66.67	16.34	0.46	130.0	±9.6 %
		Y	4.33	67.81	16.89		130.0	
		Z	4.72	66.74	16.48		130.0	
10593- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.65	66.54	16.20	0.46	130.0	±9.6 %
		Y	4.27	67.73	16.75		130.0	······································
		Z	4.64	66.61	16.33		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.71	66.72	16.37	0.46	130.0	±9.6 %
		Y	4.31	67.86	16.91		130.0	
		Z	4.70	66.80	16.50		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.67	66.68	16.26	0.46	130.0	± 9.6 %
		Y	4.27	67.85	16.83		130.0	
		Z	4.66	66.76	16.40		130.0	
10596- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	×	4.60	66.65	16.25	0.46	130.0	±9.6 %
		Y	4.18	67.67	16.75		130.0	
		Z	4.59	66.73	16.39		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	×	4.55	66.52	16.11	0.46	130.0	± 9.6 %
		Y	4.16	67.60	16.61		130.0	
		Z	4.54	66.60	16.24	- /-	130.0	0.04
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	х	4.54	66.75	16.38	0.46	130.0	± 9.6 %
		Y	4.21	68.06	17.02		130.0	
		Z	4.53	66.84	16.52		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.29	66.89	16.48	0.46	130.0	± 9.6 %
		Y	5.11	68.25	17.34		130.0	
		Z	5.30	66.99	16.63		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.40	67.29	16.65	0.46	130.0	± 9.6 %
		Y	5.01	67.95	17.16		130.0	
		Z	5.43	67.45	16.83		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.30	67.04	16.55	0.46	130.0	± 9.6 %
		Y	4.95	67.81	17.11		130.0	
		Z	5.31	67.16	16.70		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.43	67.22	16.56	0.46	130.0	± 9.6 %
		Y	4.98	67.69	16.96		130.0	
		<u>Z</u>	5.44	67.31	16.70		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.50	67.52	16.84	0.46	130.0	± 9.6 %
		Y	5.00	67.82	17.18		130.0	
		Z	5.52	67.67	17.02	<u> </u>	130.0	L
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.38	67.17	16.65	0.46	130.0	± 9.6 %
		Y	4.97	67.66	17.06	<u> </u>	130.0	
		Z	5.40	67.31	16.82	<u> </u>	130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.40	67.20	16.66	0.46	130.0	± 9.6 %
		Y	4.93	67.56	17.02		130.0	
		Z	5.42	67.33	16.82		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.15	66.52	16.17	0.46	130.0	± 9.6 %
		Y	4.95	67.77	16.96		130.0	
		Z	5.16	66.62	16.32		130.0	

EX3DV4-- SN:7406

10607-	IEEE 802.11ac WIFI (20MHz, MCS0,	X	4.44	65.66	15.83	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)							
	-	Y	4.14	67.09	16.52		130.0	
10608-		Z	4,44	65.75	15.97		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	×	4.60	66.02	15.98	0.46	130.0	± 9.6 %
		Y	4.22	67.28	16.62		130.0	
		Z	4.59	66.11	16.13		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.49	65.84	15.80	0.46	130.0	± 9.6 %
······		Y	4.13	67.14	16.44		130.0	
10010		Z	4.48	65.93	15.94		130.0	
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	×	4.54	66.01	15.97	0.46	130.0	± 9.6 %
		Y	4.18	67.30	16.61		130.0	
40044		Z	4.53	66.10	16.12		130.0	
10611- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.45	65.81	15.81	0.46	130.0	± 9.6 %
		Y	4.09	67.07	16.44		130.0	
10015		Z	4.45	65.90	15.96		130.0	
10612- AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	×	4.45	65.93	15.85	0.46	130.0	± 9.6 %
		Y	4.03	67.00	16.38		130.0	
100.10		Z	4.44	66.03	15.99		130.0	
10613- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	×	4.44	65.77	15.70	0.46	130.0	± 9.6 %
		Y	4.05	66.88	16.24		130.0	
10011		Z	4.44	65.85	15.84		130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.41	65.98	15.95	0.46	130.0	±9.6 %
		Y	4.08	67.31	16.62		130.0	
		Z	4.40	66.08	16.10		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.45	65.64	15.58	0.46	130.0	± 9.6 %
		Y	4.06	66.87	16.16		130.0	
		Z	4.44	65.72	15.71		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.09	66.09	16.06	0.46	130.0	±9.6 %
		Y	4.76	66.84	16.63		130.0	
		Z	5.10	66.16	16.20		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.16	66.28	16.13	0.46	130.0	± 9.6 %
		Y	4.76	66.87	16.63		130.0	
		Z	5.16	66.37	16.28		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.05	66.30	16.16	0.46	130.0	± 9.6 %
······	······	Y	4.69	66.97	16.69		130.0	
		Z	5.06	66.39	16.30		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.06	66.08	15.98	0.46	130.0	± 9.6 %
		Y	4.75	66.94	16.61		130.0	
		Z	5.07	66.17	16.13		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.14	66.12	16.05	0.46	130.0	± 9.6 %
		Y	4.76	66.75	16.54		130.0	
100-1		Z	5.15	66.20	16.19		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.15	66.26	16.24	0.46	130.0	± 9.6 %
		Y	4.80	66.94	16.78		130.0	
		Z	5.16	66.33	16.38		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.15	66.36	16.29	0.46	130.0	±9.6 %
		Y	4.77	66.96	16.79		130.0	
		Z	5,15	66.43	16.42		130.0	

EX3DV4-SN:7406

10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.03	65.89	15.92	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)							
		Y	4.69	66.61	16.45		130.0	
		Z	5.03	65.94	16.04		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.23	66.15	16.11	0.46	130.0	± 9.6 %
		Y	4.85	66.81	16.62		130.0	
		Z	5.23	66.22	16.25		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.41	66.58	16.39	0.46	130.0	±9.6 %
		Y	4.98	67.17	16.88		130.0	
40000		Z	5.39	66.59	16.50		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.42	66.17	16.04	0.46	130.0	± 9.6 %
		Y	5.14	66.64	16.52		130.0	
10627-		Z	5.42	66.21	16.16	0.40	130.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.65	66.77	16.32	0.46	130.0	± 9.6 %
		Y	5.31	67.18	16.77		130.0	
10628-		Z	5.68	66.90	16.48	0.40	130.0	1000
AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.42	66.16	15.94	0.46	130.0	± 9.6 %
		Y	5.11	66.54	16.37		130.0	
10629-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z	<u>5.42</u> 5.51	66.21	16.06	0.40	130.0	
AAB	90pc duty cycle)			66.29	16.00	0.46	130.0	± 9.6 %
		Y	5.29	67.09	16.65		130.0	
10630-		Z	5.53	66.38	16.14	0.40	130.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)		5.82	67.43	16.57	0.46	130.0	± 9.6 %
		Y	5.21	66.99	16.61		130.0	
40004		Z	5.87	67.63	16.77		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.76	67.37	16.74	0.46	130.0	±9.6 %
		Y	5.33	67.57	17.10		130.0	
40000		Z	5.78	67.47	16.89		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.64	66.89	16.52	0.46	130.0	± 9.6 %
		Y	5.50	68.05	17.35		130.0	
10000		Z	5.67	67.03	16.69		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.49	66.38	16.08	0.46	130.0	± 9.6 %
	····	Y	5.12	66.68	16.49		130.0	
1000 (5.49	66.42	16.20		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.47	66.40	16.15	0.46	130.0	± 9.6 %
		<u> </u>	5.20	67.06	16.73		130.0	
40005		Z	5.47	66.45	16.27		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.34	65.69	15.52	0.46	130.0	± 9.6 %
		Y	4.98	66.00	15.88		130.0	
10000		Z	5.34	65.71	15.62	0.40	130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.85	66.55	16.15	0.46	130.0	± 9.6 %
		Y	5.60	66.87	16.55		130.0	
40007		Z	5.86	66.59	16.27		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.99	66.90	16.31	0.46	130.0	±9.6 %
		Y	5.71	67.22	16.72		130.0	
40600		Z	6.00	66.97	16.44	<u> </u>	130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.99	66.89	16.28	0.46	130.0	± 9.6 %
		Y	5.74	67.30	16.74		130.0	
		Z	6.01	66.96	16.42		130.0	

EX3DV4-- SN:7406

10639- AAC	IEEE 802.11ac WIFi (160MHz, MCS3, 90pc duty cycle)	x	5.96	66.80	16.28	0.46	130.0	± 9.6 %
		Y	5.67	67.08	16.67		130.0	
		Z	5.97	66.85	16.40	1	130.0	
10640- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.95	66.77	16.21	0.46	130.0	± 9.6 %
		Y	5.56	66.76	16.45	1	130.0	1
10011		Z	5.95	66.81	16.32		130.0	
10641- AAC	IEEE 802.11ac WiFI (160MHz, MCS5, 90pc duty cycle)	X	6.02	66,79	16.24	0.46	130.0	± 9.6 %
		Y	5.69	66.96	16.57		130.0	
40040		Z	6.04	66.86	16.37		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.05	66.99	16.51	0.46	130.0	± 9.6 %
		Y	5.71	67.14	16.83		130.0	
10643-		Z	6.06	67.04	16.63	<u> </u>	130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.89	66.69	16.25	0.46	130.0	± 9.6 %
		Y	5.55	66.75	16.51		130.0	
10644		Z	5.91	66.75	16.38		130.0	
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.98	66.95	16.40	0.46	130.0	± 9.6 %
		Y	5.64	67.07	16.70		130.0	
40045		Z	5.98	66.98	16.51		130.0	
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.12	67.04	16.41	0.46	130.0	±9.6 %
		Y	6.04	68.05	17.16		130.0	
40040		Z	6.18	67.23	16.60		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	9.30	96.04	33.28	9.30	60.0	± 9.6 %
		Y	4.72	85.46	29.98		60.0	
		Z	9.03	95.55	33.06		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	8.21	93.71	32.60	9.30	60.0	± 9.6 %
		Y	4.16	82.96	29.11		60.0	
(00.00		Z	7.96	93.24	32.39		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.48	60.73	7.74	0.00	150.0	± 9.6 %
		Y	0.28	60.00	2.97		150.0	
		Z	0.45	60.55	7.36		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.22	65.68	15.68	2.23	80.0	± 9.6 %
		Y	3.30	69.14	16.34		80.0	
40050		Z	3.22	65.91	15.87		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.80	65.29	16.06	2.23	80.0	± 9.6 %
		Y	3.72	67.55	16.85		80.0	
10654-		Z	3.78	65.38	16.21		80.0	
AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.81	64.97	16.11	2.23	80.0	± 9.6 %
		Y	3.74	66.80	16.91		80.0	
10655-		Z	3.80	65.03	16.25		80.0	
AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.89	64.93	16.16	2.23	80.0	±9.6 %
		Y	3.83	66.43	16.92		80.0	
10658-		Z	3.87	64.98	16.29		80.0	
AAA	Pulse Waveform (200Hz, 10%)	X	14.05	86.04	19.08	10.00	50.0	± 9.6 %
		Y	3.58	69.28	11.90		50.0	
10659-		Z	8.33	79.49	16.82		50.0	
AAA	Pulse Waveform (200Hz, 20%)	X	100.00	106.74	22.89	6.99	60.0	± 9.6 %
		Y	3.69	71.79	11.78		60.0	
		Z	100.00	105.40	22.19		60.0	

EX3DV4-- SN:7406

May 22, 2018

10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	104.23	20.43	3.98	80.0	± 9.6 %
		Y	100.00	95.42	16.30		80.0	
		Z	100.00	101.41	19.06		80.0	
10661- Pulse Waveform AAA	Pulse Waveform (200Hz, 60%)	X	100.00	99.34	17.30	2.22	100.0	± 9.6 %
		Y	100.00	88.65	12.65		100.0	
		Z	15.45	82.53	12.34		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	0.16	60.00	3.79	0.97	120.0	± 9.6 %
		Y	0.01	60.00	22597. 33		120.0	
		Z	27.38	213.45	12.35		120.0	

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

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





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

Accreditation No.: SCS 0108

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

Client PC Test

Certificate No: ES3-3319_Mar18

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3319
Calibration procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	March 13, 2018
	uments the traceability to national standards, which realize the physical units of measurements (SI). Incertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been cor	ducted 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	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	-1-10
			e ge
Approved by:	Katja Pokovic	Technical Manager	alite
			10000
			Issued: March 15, 2018

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

Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kalibrierdienst S

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- 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, v.z: Assessed for E-field polarization $\vartheta = 0$ (f ≤ 900 MHz in TEM-cell: f > 1800 MHz: R22 waveguide). NORMx, v,z are only intermediate values, i.e., the uncertainties of NORMx, v,z does not affect the 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, v,z; DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax, y, z; Bx, y, z; Cx, y, z; Dx, y, z; VRx, y, z; A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \le 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).

Probe ES3DV3

SN:3319

Manufactured: Calibrated: January 10, 2012 March 13, 2018

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.08	1.05	1.12	± 10.1 %
DCP (mV) ^B	104.0	103.0	104.0	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	197.9	±3.8 %
		Y	0.0	0.0	1.0		198.2	
		Z	0.0	0.0	1.0		200.6	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V ⁻¹	ms.V⁻²	ms.V ^{~1}	ms	V⁻²	V ⁻¹	
Х	60.52	430.8	35.08	29.64	3.011	5.10	0.615	0.538	1.010
Y	55.79	400.8	35.48	29.01	2.492	5.10	0.600	0.518	1.009
Z	63.98	455.3	34.93	29.72	3.442	5.10	0.679	0.571	1.011

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

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

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

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.70	6.70	6.70	0.80	1.21	± 12.0 %
835	41.5	0.90	6.44	6.44	6.44	0.80	1.17	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.65	1.43	± 12.0 %
1900	40.0	1.40	5.29	5.29	5.29	0.76	1.30	± 12.0 %
2300	39.5	1.67	5.06	5.06	5.06	0.72	1.29	± 12.0 %
2450	39.2	1.80	4.71	4.71	4.71	0.77	1.30	± 12.0 %
2600	39.0	1.96	4.55	4.55	4.55	0.80	1.31	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

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

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

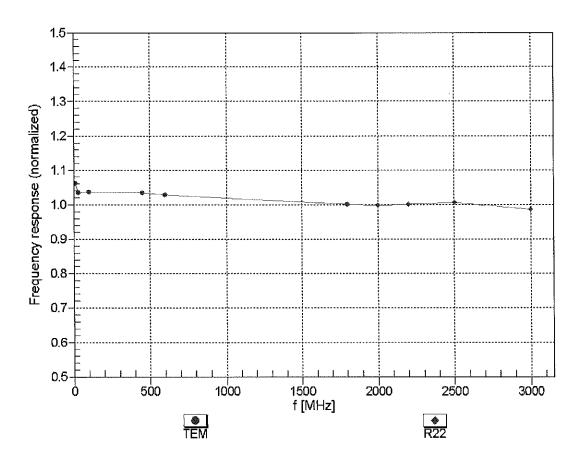
			-					
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.32	6.32	6.32	0.65	1.26	± 12.0 %
835	55.2	0.97	6.20	6.20	6.20	0.80	1.14	± 12.0 %
1750	53.4	1.49	5.05	5.05	5.05	0.76	1.27	± 12.0 %
1900	53.3	1.52	4.84	4.84	4.84	0.55	1.56	± 12.0 %
2300	52.9	1.81	4.63	4.63	4.63	0.80	1.30	± 12.0 %
2450	52.7	1.95	4.51	4.51	4.51	0.80	1.25	± 12.0 %
2600	52.5	2.16	4.33	4.33	4.33	0.80	1.20	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

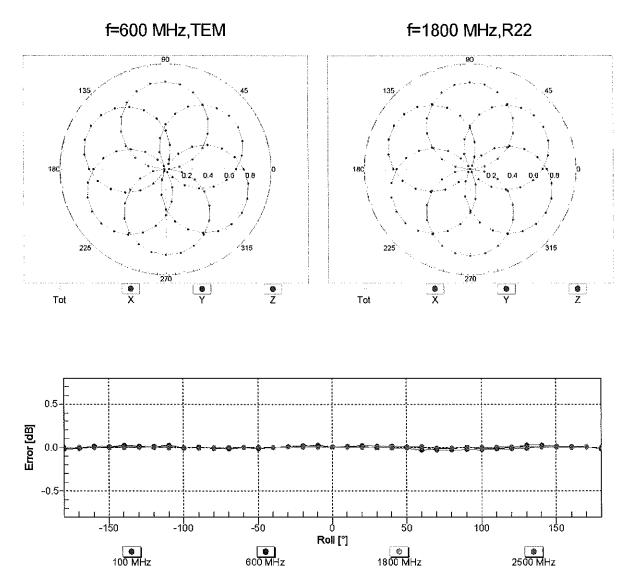
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF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

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



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

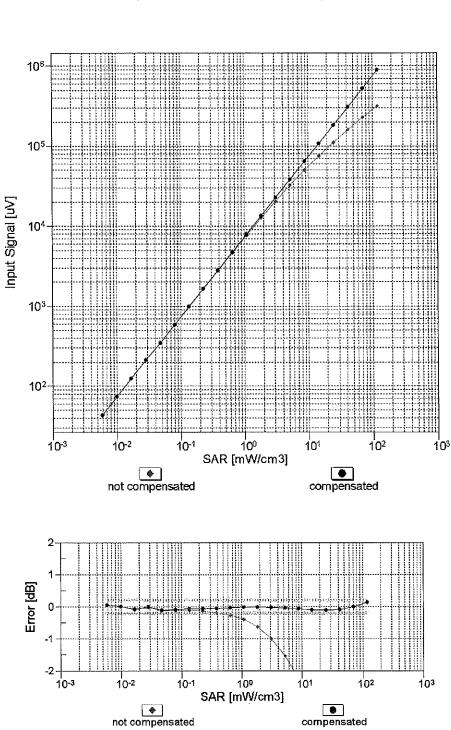
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



Receiving Pattern (φ), θ = 0°

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

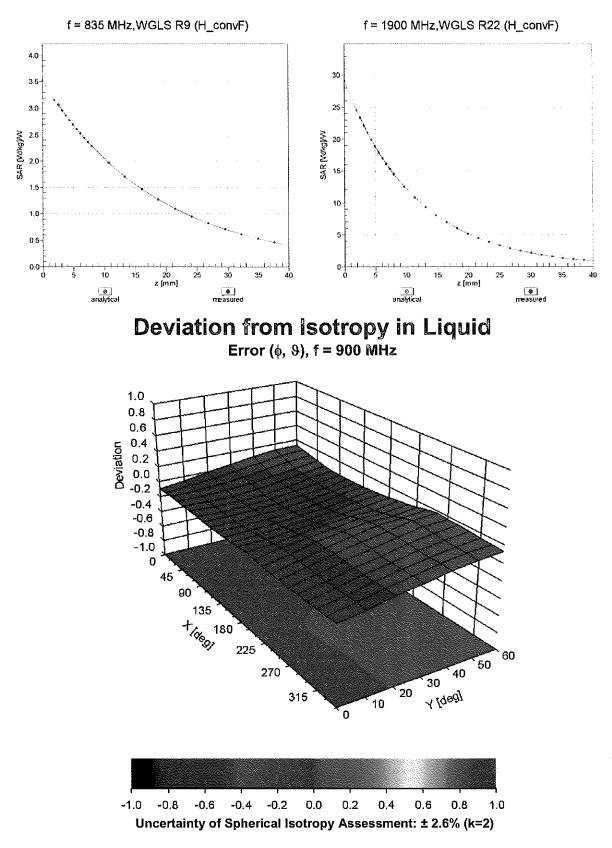
March 13, 2018



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

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

.



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	60.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	197.9	± 3.8 %
		Y	0.00	0.00	1.00		198.2	·····
10010-	SAR Validation (Square, 100ms, 10ms)	Z X	0.00 9.56	0.00 81.28	1.00	10.00	200.6	
CAA	Office validation (oquare, rooms, roms)		9.00	01.20	19.98	10.00	25.0	± 9.6 %
		Y	8.09	78.70	18.35		25.0	
		Z	8.70	79.52	19.57		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.34	72.37	18.08	0.00	150.0	± 9.6 %
		Y	0.99	67.12	14.82		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	1.12 1.37	68.87 66.58	16.00 17.00	0,41	150.0 150.0	± 9.6 %
CAB	Mbps)		1.01	00.50	17.00	0,41	100.0	1 9.0 %
·		Y	1.25	64.92	15.59		150.0	
		Z	1.32	65.58	16.11		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.18	67.48	17.64	1.46	150.0	±9.6 %
		<u>Y</u>	5.08	67.20	17.36		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z X	5.20 20.40	67.32	17.47	0.00	150.0	
DAC		^ Y	20.40	95.52 101.11	26.57 27.60	9.39	50.0	± 9.6 %
		Z	14.66	89.52	24.83		50.0 50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	18.37	93.61	26.02	9.57	50.0	± 9.6 %
		Y	24.41	97.95	26.72		50.0	
		Z	13.84	88.39	24.49		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.56	31.31	6.56	60.0	± 9.6 %
		Y	100.00	117.39	29.93		60.0	
10025-		Z	47.21	108.31	28.71	10.55	60.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X Y	21.09 17.11	108.48	41.18 38.82	12.57	50.0 50.0	± 9.6 %
		Z	18.44	102.80	38.97		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.59	105.09	36.25	9.56	60.0	±9.6 %
		Y	18.95	102.20	35.03		60.0	
		Z	18.49	100.22	34.38		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.49	29.83	4.80	80.0	± 9.6 %
		<u> Y</u>	100.00	115.83	28.28		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	118.30 118.84	29.89 29.14	3.55	80.0 100.0	± 9.6 %
2/10		Y	100.00	115.36	27.25		100.0	
		z	100.00	118.10	28.92		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	15.08	97.16	32.49	7.80	80.0	± 9.6 %
		Y	12.90	93.80	31.06		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.60 100.00	93.82 118.11	31.09 30.01	5.30	80.0 70.0	± 9.6 %
		Y	100.00	115.58	28.50		70.0	
		Z	100.00	118.16	30.20		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	121.01	28.44	1.88	100.0	± 9.6 %
		Y	100.00	114.03	25.11		100.0	
		Z	100.00	118.73	27.54		100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	127.26	29.88	1.17	100.0	± 9.6 %
		Y	100.00	114.89	24.38		100.0	
		Ż	100.00	122.11	27.79		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	21.21	99.84	27.91	5.30	70.0	± 9.6 %
		Y	19.09	97.43	26.61		70.0	
		Ζ	13.98	92.26	25.56		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	14.93	98.23	25.94	1.88	100.0	± 9.6 %
		Y	7.46	86.71	21.62		100.0	
		Ζ	7.45	87.10	22.42		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	7.98	90,77	23.49	1.17	100.0	±9.6 %
		Y	3.97	79.58	18.90		100.0	
10000		Ζ	4.48	81.52	20.27		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	26,12	103.52	29.04	5.30	70.0	± 9.6 %
		Y	24.16	101.42	27.84		70.0	
40007		Z	15.99	94.67	26.38	4.00	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	14.25	97.55	25.70	1.88	100.0	± 9.6 %
		Y	7.04	85.92	21.32		100.0	
40000		Z	7.24	86.72	22.25		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	8.53	92.07	23.99	1.17	100.0	± 9.6 %
		Y	4.13	80.37	19.27		100.0	
10000		Z	4.65	82.31	20.62		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	2.96	79.09	19.43	0.00	150.0	± 9.6 %
		Y	1.75	71.10	15.36		150.0	
		Z	2.10	73.23	16.92		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	53.77	109.05	28.70	7.78	50.0	± 9.6 %
		Y	79.10	112.95	28.86		50.0	
		Z	23.46	96.42	25.41		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	123.18	1.26	0.00	150.0	± 9.6 %
		Y	0.02	127.84	0.07		150.0	
1		Z	0.00	110.77	4.52		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	11.41	83.11	24.20	13.80	25.0	± 9.6 %
		Y	12.66	85.48	24.49		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	10.45 13.41	80.79 87.55	23.56 24.40	10.79	25.0 40.0	± 9.6 %
		Y	15.25	89.77	24.55		40.0	ł
		Ż	11.61	84.53	23.55		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	13.37	87.98	25.03	9.03	50.0	± 9.6 %
		Y	13.72	88.51	24.74		50.0	
		Z	11.72	85.02	24.05		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	11.14	91,28	29.72	6.55	100.0	± 9,6 %
		Y	9.52	87.98	28.26		100.0	
		Z	10.41	88.91	28.62		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.60	69.38	18.31	0.61	110.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.43	67.15	16.67		110.0	
		Z	1.53	67.97	17.25		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	133.15	34.60	1.30	110.0	± 9.6 %
		Y	100.00	128.63	32.36	1	110.0	1
		Z	100.00	130.16	33.31		110.0	1

10061- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 11 Mbps)	X	24.68	111.64	31.63	2.04	110.0	± 9.6 %
	E-1	Y	11.26	97.49	27.04		110.0	
	· · · · · · · · · · · · · · · · · · ·	Z	10.95	96.57	26.98		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	Х	4.90	67.24	16.94	0.49	100.0	± 9.6 %
		Y	4.79	66.94	16.63		100.0	
40000		Z	4.90	67.05	16.74		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.95	67.42	17.09	0.72	100.0	± 9.6 %
		Y	4.84	67.10	16.77		100.0	
10064-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	Z X	4.95	67.23	16.89	0.00	100.0	
CAC	Mbps)	Y	5.28	67.75	17.35	0.86	100.0	± 9.6 %
		Z	5.30	67.43 67.59	17.04 17.17		100.0 100.0	
10065-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18	X	5.19	67.81	17.53	1.21	100.0	± 9.6 %
CAC	Mbps)	Y	5.07	67.47	17.22	1.21	100.0	19.0 %
	·····	z	5.21	67.65	17.35		100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.25	67.95	17.76	1.46	100.0	± 9.6 %
		Y	5.12	67.61	17.44	[100.0	
		Z	5.27	67.80	17.59		100.0	·
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	5.57	68.10	18.21	2.04	100.0	± 9.6 %
		Υ	5.44	67.80	17.92		100.0	
		Z	5.60	67.97	18.05		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	5.73	68.50	18.60	2.55	100.0	± 9.6 %
		Y	5.58	68.13	18.28		100.0	
40000		Z	5.77	68.41	18.46		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.81	68.43	18.78	2.67	100.0	±9.6 %
		Y	5.66	68.09	18.46		100.0	
40074		Z	5.84	68.33	18.64		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.34	67.73	18.04	1.99	100.0	± 9.6 %
		Y	5.22	67.44	17.75		100.0	
10072-		Z	5.35	67.60	17.87		100.0	
CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.42	68.35	18.39	2.30	100.0	± 9.6 %
		Y	5.29	68.00	18.07		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.44 5.57	68.21 68.74	18.22 18.83	2.83	100.0	± 9.6 %
		Y	5.42	68.36	18.50		100.0	
		Z	5.60	68.62	18.66		100.0	
10074- САВ	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.61	68.84	19.10	3.30	100.0	± 9.6 %
		Y	5.46	68.44	18.75		100.0	
		Ζ	5.65	68.74	18.95		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.79	69.40	19.63	3.82	90.0	±9.6 %
		Y	5.61	68.91	19.24		90.0	
40070		Z	5.85	69.35	19.51		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.80	69.20	19.75	4.15	90.0	± 9.6 %
		Y	5.64	68.73	19.37		90.0	1
40077		Z	5.86	69.15	19.63		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.84	69.30	19.86	4.30	90.0	± 9.6 %
		Y	5.68	68.82	19.47		90.0	
		Z	5.90	69.25	19.74	L	90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	1.29	72.14	16.36	0.00	150.0	±9.6 %
		Y	0.81	65,51	12.24		150.0	
		Ż	0.99	67.68	14.05		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.36	64.73	9.48	4.77	80.0	± 9.6 %
		Y	1.97	63.15	8.18		80.0	
		Z	2.45	64.78	9.67		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.65	31.37	6.56	60.0	± 9.6 %
		Y	100.00	117.49	29.99		60.0	
40007		Z	45.52	107.81	28.61		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.00	69.44	16.95	0.00	150.0	± 9.6 %
•••		Y	1.78	67.32	15.42		150.0	
10098-		Z X	1.87	67.93	15.97	0.00	150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)		1.97	69.46	16,95	0.00	150.0	± 9.6 %
		Y	1.74	67.28	15.38		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.84 21.45	67.91	15.95	0.50	150.0	+0.0.0/
DAC	EDGE-FDD (TDIWA, OPSK, TN 0-4)			104.88	36.18	9.56	60.0	± 9.6 %
		Y Z	18.89	102.07	34.98		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20		18.39	100.05	34.32	0.00	60.0	
CAD	MHz, QPSK)	X	3.55	72.46	17.74	0.00	150.0	± 9.6 %
····		Y	3.14	70.29	16.48		150.0	
40404		Z	3.35	71.19	16.95		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.45	68.62	16.57	0.00	150.0	± 9.6 %
		Y	3.26	67.61	15.85		150.0	
40400		Z	3.39	68.08	16.14		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	×	3.54	68.46	16.61	0.00	150.0	± 9.6 %
		Y	3.37	67.56	15.95		150.0	
10100		Z	3.49	67.97	16.20		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.98	78.82	21.57	3.98	65.0	± 9.6 %
		Y	8.50	78.15	21.17		65.0	·
		Z	8.60	77.58	20.95		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.85	77.44	21.89	3.98	65.0	± 9.6 %
		Y	8.45	76.83	21.49		65.0	
10105		Z	8.72	76.72	21.48		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.33	76.23	21.66	3.98	65.0	±9.6 %
		Y	7.79	75.22	21.09		65.0	
40400		Z	7.71	74.28	20.69		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	×	3.11	71.64	17.59	0.00	150.0	± 9.6 %
		Y	2.75	69.54	16.32		150.0	
40400		Z	2.95	70.37	16.78		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.12	68.50	16.56	0.00	150.0	± 9.6 %
		Y	2.92	67.41	15.75		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Z X	3.06 2.56	67.87 70.84	16.07 17.38	0.00	150.0 150.0	± 9.6 %
		Y	2.04	60.04	15.04		450.0	
			2.24	68.61	15.94		150.0	
10111-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz,	Z	2.42 2.84	69.44	16.48	0.00	150.0	+0.0.00
CAE	16-QAM)			69.29	16.96	0.00	150.0	± 9.6 %
		Υ Υ	2.62	68.02	15.99		150.0	
		Z	2.75	68.36	16.33		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.23	68.35	16.55	0.00	150.0	±9.6 %
		Y	3.05	67.38	15.81		150.0	
		Z	3.18	67.77	16.10		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.98	69.28	17.01	0.00	150.0	± 9.6 %
·····		Y	2.77	68.14	16.13		150.0	1
		Z	2.90	68.40	16.43		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.25	67.55	16.67	0.00	150.0	± 9.6 %
	·····	Y	5.16	67.27	16.41		150.0	
40445		Ζ	5.23	67.36	16.47		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.62	67.87	16.84	0.00	150.0	± 9.6 %
		Y	5.53	67.61	16.59		150.0	
40440		Z	5.61	67.68	16.64		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.38	67.84	16.74	0.00	150.0	± 9.6 %
		Υ	5.28	67.54	16.47		150.0	
40447		Z	5.37	67.64	16.53		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	×	5.26	67.57	16.70	0.00	150.0	± 9.6 %
		Y	5.15	67.22	16.40		150.0	L
40440		Z	5.24	67.39	16.51		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.70	68.05	16.94	0.00	150.0	± 9.6 %
		Y	5.61	67.82	16.70		150.0	
40440		Z	5.67	67.81	16.71		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.36	67.79	16.73	0.00	150.0	± 9.6 %
		Y	5.26	67.48	16.45		150.0	
10/10		Z	5.34	67.59	16.52		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.59	68.46	16.53	0.00	150.0	± 9.6 %
		Y	3.41	67.56	15.87		150.0	
		Z	3.54	67.97	16.13		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.70	68.46	16.65	0.00	150.0	± 9.6 %
		Y	3.53	67.64	16.03		150.0	
		Ζ	3.65	67.99	16.26		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.36	71.08	17.31	0.00	150.0	± 9.6 %
	······	Y	2.01	68.49	15.62		150.0	
		Z	2.20	69.37	16.30		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	2.76	70.34	17.00	0.00	150.0	± 9.6 %
		Y	2.47	68.62	15.73		150.0	
		Ζ	2.62	69.02	16.23		150.0	
10144- _CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	×	2.54	68.16	15.50	0.00	150.0	± 9.6 %
		Υ	2.28	66.60	14.27		150.0	
		Z	2.46	67.23	14.93		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	1.75	69.86	15.18	0.00	150.0	± 9.6 %
		Y	1.29	65.55	12.27		150.0	
		Ζ	1.55	67.61	14.05		150.0	
10146- _CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.07	76.05	17.30	0.00	150.0	± 9.6 %
		Y	2.52	69.20	13.62		150.0	
		Ζ	3.50	73.50	16.33		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	5.72	80.95	19.32	0.00	150.0	± 9.6 %
		Y	3.13	72.10	15.05		150.0	
		Z	4.43	76.91	17.88		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.13	68.56	16.60	0.00	150.0	± 9.6 %
		Y	2.93	67.47	15.80		150.0	
		Z	3.07	67.93	16.12		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.24	68.40	16.59	0.00	150.0	± 9.6 %
		Y	3.05	67.43	15.85		150.0	
		Z	3.18	67.82	16.13		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.59	81.21	22.61	3.98	65.0	± 9.6 %
		Y	9.21	80.79	22.27		65.0	
		Z	9.05	79.62	21.87		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.53	77,77	21.82	3.98	65.0	± 9.6 %
		Y	8.07	77,03	21.32		65.0	
10150		Z	8.36	76.93	21.37		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.87	78.41	22.41	3.98	65.0	± 9.6 %
		Y	8.48	77.88	22.02		65.0	
1015		Z	8.68	77.54	21.94		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.63	71.34	17.67	0.00	150.0	± 9.6 %
		Y	2.29	69.04	16.21		150.0	
		Z	2.48	69.88	16.75		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.84	69.30	16.97	0.00	150.0	±9.6 %
		Y	2,62	68.03	16.00		150.0	
		Z	2.75	68.36	16.34		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.26	71.67	17.44	0.00	150.0	± 9.6 %
		Y	1.86	68.59	15.46		150.0	
		Z	2,07	69.64	16.29		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.42	69.16	15.83	0.00	150.0	± 9.6 %
		Y	2.11	67.12	14.31		150.0	
		Z	2.30	67.87	15.10		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.99	69.33	17.05	0.00	150.0	±9.6 %
		Y	2.78	68.20	16.17		150.0	
		Z	2.90	68.44	16.46		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.55	69.60	16.11	0,00	150.0	± 9.6 %
		Y	2.22	67.56	14.60		150.0	
		Z	2.41	68.28	15.37		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.02	70.16	17.19	0.00	150.0	± 9.6 %
		Y	2.77	68.66	16.17		150.0	
		Z	2.91	69.14	16.50		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.13	68.32	16.54	0.00	150.0	±9.6 %
		Y	2.95	67.34	15.78		150.0	
		Z	3.07	67.70	16.08		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.23	68.35	16.60	0.00	150.0	± 9.6 %
		Y	3.06	67.45	15.88		150.0	
		Z	3.18	67.74	16.14		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.02	71.10	20.08	3.01	150.0	± 9.6 %
		Y	3.79	70.19	19.37		150.0	
		Z	4.03	70.69	19.72		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.24	74.71	20.79	3.01	150.0	± 9.6 %
		Y	4.82	73.39	19.92		150.0	
		Z	5.25	74.14	20.39	·····	150.0	

40400		·						
10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.76	76.76	21.96	3.01	150.0	± 9.6 %
		Y	5.36	75.66	21.24		150.0	·
		Z	5.73	75.99	21.47		150.0	······.
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.69	72,72	20.82	3.01	150.0	± 9.6 %
		Y	3.33	70.78	19.63		150.0	
		Z	3.78	72.61	20.53		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.76	80.54	23.62	3.01	150.0	± 9.6 %
		Y	4.94	77.74	22.22		150.0	
	·	Z	5.83	79.90	23.09		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.61	75.69	20.76	3.01	150.0	± 9.6 %
		Y	3.94	72.92	19.25		150.0	
		Z	4.70	75.28	20.35		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	36.99	114.19	35.08	6.02	65.0	± 9.6 %
		Y	22.97	105.21	32.24		65.0	
		Z	26.68	106.36	32.56		65.0	·····
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	41.01	110.69	32.32	6.02	65.0	± 9.6 %
		Y	35.83	108.35	31.36		65.0	
		Z	28.00	102.66	29.85		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	30.73	104.07	29.95	6.02	65.0	±9.6 %
		Y	27.27	102.14	29.08		65.0	
		Z	22.20	97.35	27.81		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.64	72.35	20.56	3.01	150.0	± 9.6 %
		Y	3.28	70.42	19.36		150.0	
		Z	3.72	72.25	20.28		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5,77	80.56	23.63	3.01	150.0	± 9.6 %
		Y	4.95	77.76	22.23		150.0	
		Z	5.84	79.92	23.10		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.67	72.53	20.66	3.01	150.0	± 9.6 %
		Y	3.31	70.60	19.46		150.0	
		Z	3.76	72.42	20.38		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.68	80,23	23.47	3.01	150.0	± 9.6 %
		Y	4.88	77.46	22.08		150.0	
		Z	5.74	79.60	22.95		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	x	5.14	77.96	22.04	3.01	150.0	± 9.6 %
		Y	4.38	75.13	20.57		150.0	
		Z	5.21	77.41	21.56	1	150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	4.59	75.59	20.70	3.01	150.0	± 9.6 %
		Y	3.92	72.83	19.19		150.0	
		Z	4.68	75.18	20.29		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	3.66	72.51	20.66	3.01	150.0	± 9.6 %
		Y	3.30	70.58	19.46		150.0	
		Z	3.75	72.41	20.37		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.67	80.21	23.46	3.01	150.0	±9.6 %
		Υ	4.87	77.43	22.07		150.0	
		Z	5.73	79.57	22.94		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	4.58	75.56	20.68	3.01	150.0	± 9.6 %
		Y	3.92	72.80	19,18		150.0	
		Ζ	4.67	75.15	20.27	i	150.0	

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.68	72.56	20.68	3.01	150.0	± 9.6 %
		Y	3.32	70.63	19.48		150.0	··································
	Anna fannan an anna an anna an anna an anna an an	Z	3.77	72.45	20.39		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.70	80.29	23.50	3.01	150.0	± 9.6 %
		Y	4.90	77.51	22.11		150.0	
		Ζ	5.76	79.65	22.97		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.61	75.64	20.72	3.01	150.0	±9.6 %
		Y	3.94	72.88	19.21		150.0	
		Z	4.69	75.23	20.31		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	х	3.69	72.61	20.73	3.01	150.0	± 9.6 %
		Y	3.33	70.68	19.54		150.0	
		Ζ	3.77	72.50	20.44		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	х	5.93	81.11	23.91	3.01	150.0	± 9.6 %
		Y	5.09	78.33	22.53		150.0	
		Z	5.99	80.44	23.37		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	4.73	76.16	21.02	3.01	150.0	±9.6 %
		Y	4.04	73.37	19.51		150.0	
		Z	4.82	75.73	20.60		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.67	66.99	16.47	0.00	150.0	± 9.6 %
	······································	Y	4.56	66,66	16.13	****	150.0	
		Ζ	4.66	66.78	16.26		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	4.87	67.36	16.58	0.00	150.0	± 9.6 %
		Y	4.75	67.00	16.25		150.0	
	······································	Ζ	4.87	67.15	16.37	1	150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.91	67.37	16.59	0.00	150.0	± 9.6 %
	•	Y	4.79	67.03	16.27		150.0	
		Ζ	4.91	67.16	16.38		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.69	67.10	16.51	0.00	150.0	± 9.6 %
		Υ	4.58	66.74	16.16		150.0	
		Z	4.69	66.88	16.30		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.89	67.38	16.59	0.00	150.0	± 9.6 %
		Y	4.77	67.03	16.26		150.0	
		Z	4.88	67.17	16.38		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.92	67.39	16.60	0.00	150.0	±9.6 %
		Y	4.80	67.05	16.28		150.0	
		Z	4.91	67.18	16.39		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.64	67.11	16.47	0.00	150.0	±9.6 %
		Y	4.53	66.75	16.12		150.0	
		Ζ	4.64	66.90	16.26		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	×	4.88	67.37	16.59	0.00	150.0	± 9.6 %
		Y	4.76	67.01	16.26		150.0	
		Z	4,88	67.17	16.38		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-	X	4.92	67.32	16.59	0.00	150.0	± 9.6 %
	QAM)			1 00.00	40.07	1	150.0	1
		Y	4.80	66.98	16.27		100.0	
		Z	4.80 4.92	67.11	16.38		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)					0.00		± 9.6 %
10222-	IEEE 802.11n (HT Mixed, 15 Mbps,	Z	4.92	67.11	16.38	0.00	150.0	± 9.6 %

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.61	67.92	16.89	0.00	150.0	± 9.6 %
		Y	5.46	67.48	16.54		150.0	
		Z	5.61	67.78	16.72	· · · · · · · · · · · · · · · · · · ·	150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	x	5.28	67.68	16.67	0.00	150.0	± 9.6 %
		Y	5.17	67.32	16.37		150.0	
		Z	5.27	67.52	16.48		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.96	66.82	16.01	0.00	150.0	±9.6%
		Y	2.82	66.09	15.31		150.0	
		Z	2.93	66.33	15.63		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	43.59	111.94	32.75	6.02	65.0	± 9.6 %
		Y	38.77	109.92	31.88		65.0	
40007		Z	29.30	103.58	30.20		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	32.72	105.33	30.40	6.02	65.0	± 9.6 %
		Y	30.31	104.10	29.73		65.0	
40000		Ζ	23.58	98.50	28.23		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	45.04	118.57	36.38	6.02	65.0	± 9.6 %
		Y	33.63	112.96	34.54		65.0	
40000		Z	30.07	109.15	33.47		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	40.99	110.67	32.33	6.02	65.0	± 9.6 %
		Y	35.91	108.38	31.38		65.0	
		Z	28.02	102.65	29.86		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	31.17	104.37	30.06	6.02	65.0	± 9.6 %
		Y	28.46	102.90	29.31		65.0	
		Ζ	22.72	97.78	27.95		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	42.43	117.25	35.96	6.02	65.0	± 9.6 %
		Y	31.37	111.47	34.05		65.0	
		Z	28.77	108.18	33.13		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	40.99	110.68	32.33	6.02	65.0	± 9.6 %
		Y	35.90	108.38	31.38		65.0	
		Z	28.01	102.65	29.86		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	31.21	104.41	30.07	6.02	65.0	±9.6 %
		Y	28.46	102.91	29.32		65.0	
		Z	22.74	97.80	27.96		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	39.80	115.77	35.45	6.02	65.0	±9.6 %
		Y	29.32	109.94	33.51		65.0	
		Z	27.42	107.07	32.71		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	41.16	110.77	32.35	6.02	65.0	±9.6 %
		Y	36.04	108.46	31.40		65.0	
		Z	28.08	102.71	29.87		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	31.50	104.54	30.10	6.02	65.0	± 9.6 %
		Y	28.73	103.05	29.35		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z X	22.90 42.99	97.90 117.54	27.98 36.03	6.02	65.0 65.0	±9.6 %
	QPSK)		04.07	444.00	04.44			
		Y	31.67	111.68	34.11	ļ	65.0	
10000		Z	29.03	108.38	33.18	0.00	65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	41.04	110.71	32.33	6.02	65.0	±9.6 %
		Y	35.91	108.40	31.38		65.0	
		Z	28.02	102.67	29.86		65.0	

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	31.24	104.44	30.08	6.02	65.0	± 9.6 %
		Y	28.46	102.92	29.32		65.0	
		Z	22.74	97.82	27.96		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	42.83	117.47	36.01	6.02	65.0	±9.6 %
		Y	31.56	111.62	34.09		65.0	
		Z	28.94	108.32	33.17		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	13.21	88.13	28.12	6.98	65.0	± 9.6 %
		Y	12.19	86.75	27.34		65.0	
		Ζ	12.93	86.92	27.56		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	×	11.82	85.64	27.08	6.98	65.0	±9.6 %
		Y	11.88	86.18	27.05		65.0	
		Z	11.71	84.70	26.62		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.69	83.18	27.04	6.98	65.0	±9.6 %
		Y	8.48	80.58	25.71		65.0	
		Z	9.71	82.55	26.66		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.16	81.71	21.73	3.98	65.0	±9.6 %
		<u>Y</u>	9.31	80.28	20.70		65.0	
		Z	9.66	80.44	21.31		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	9.99	81.19	21.49	3.98	65.0	± 9.6 %
		Y	9.12	79.71	20.44		65.0	
		Z	9.56	80.04	21.12	ļ	65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.26	84.67	22.74	3.98	65.0	± 9.6 %
		Y	9.22	82.91	21.64		65.0	
		Z	9.02	82.03	21.79		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.13	78.66	21.05	3.98	65.0	±9.6 %
		Y	7.56	77,60	20.25		65.0	
		Z	7.81	77.51	20.59		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.10	78.15	20.84	3.98	65.0	± 9.6 %
		Y	7.50	77.03	20.01		65.0	
		Z	7.84	77.14	20.44		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.10	86,20	23.88	3.98	65.0	± 9.6 %
······		Y	10.38	85.15	23.14		65.0	
******		Z	9.69	83.27	22.77		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.90	80.26	22.85	3.98	65.0	± 9.6 %
		Y	8.50	79.72	22.41		65.0	
		Z	8.55	78.98	22.26		65.0	<u> </u>
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.43	78.18	21.77	3.98	65.0	± 9.6 %
		Y	7.97	77.44	21.21		65.0	
		Z	8.21	77.20	21.30		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.55	84.69	23.95	3.98	65.0	± 9.6 %
		Y	10.10	84.18	23.52	1	65.0	
		Z	9.56	82.30	22.95		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.29	77.16	21.61	3.98	65.0	± 9.6 %
		Y	7.87	76.45	21.11		65.0	
		Z	8.15	76.38	21.20		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.65	77.83	22.17	3.98	65.0	± 9.6 %
		Y	8.27	77.28	21.75	1	65.0	-
		1			· · · · · · ·			

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	9.28	.80.86	22.71	3.98	65.0	± 9.6 %
		Y	8.89	80.40	22.35		65.0	
		Z	8.80	79.34	21.99		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.13	79.62	20.18	3.98	65.0	± 9.6 %
		Y	7.96	77.38	18.74		65.0	
		Z	8.84	78.74	19.97		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.90	78.86	19.81	3.98	65.0	± 9.6 %
		Y	7.73	76.58	18.34		65.0	
		Z	8.71	78.17	19.67		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	8.90	81.94	21.19	3.98	65.0	± 9.6 %
		Y	7.60	79.37	19.69		65.0	
		Z	8.10	80.01	20.54		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.43	79.20	21.67	3.98	65.0	± 9.6 %
		Y	7.92	78.34	21.01		65.0	
		Z	8.11	78.01	21.17		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	Х	8.43	78.91	21.57	3.98	65.0	± 9.6 %
		Y	7.92	78.05	20.91		65.0	
		Z	8.14	77.80	21.11	-p-,	65,0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.44	84.93	23.72	3.98	65.0	± 9.6 %
		Y	9.81	84.03	23.07		65.0	
		Z	9.35	82.40	22.71		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.89	80.23	22.82	3.98	65.0	± 9.6 %
		Y	8.49	79.67	22.37		65.0	
		Z	8.55	78.95	22.23		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.43	78.18	21.77	3.98	65.0	± 9.6 %
		Y	7.96	77.43	21.21		65,0	
		Z	8.21	77.20	21.30		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.49	84.56	23.88	3.98	65.0	± 9.6 %
		Y	10.02	84.01	23.44		65.0	
		Z	9.51	82.19	22.89		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.52	77.77	21.82	3.98	65.0	± 9.6 %
		Y	8.07	77.03	21.32		65.0	
		Ż	8.36	76.93	21.32		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.87	78.41	22.40	3.98	65.0	± 9.6 %
		Y	8.48	77.88	22.01		65.0	1
		Z	8.68	77.54	21.94		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.58	81.18	22.60	3.98	65.0	± 9.6 %
	······································	Y	9.19	80.75	22.26		65.0	
		Z	9.04	79.59	21.85		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.91	77.09	21.88	3.98	65.0	± 9.6 %
		Y	8.54	76.56	21.51		65.0	
		Ζ	8.80	76.43	21.50		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.82	76.67	21.78	3.98	65.0	± 9.6 %
		Y	8.46	76.15	21.41		65.0	
		Z	8.73	76.06	21.42		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.97	78.33	21.62	3.98	65.0	± 9.6 %
				1				1
0,10		Y	8.64	77.97	21.34		65.0	