

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
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	35.1 ± 6 %	4.53 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	8.09 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.5 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.1 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.6 ± 6 %	4.88 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	8.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	83.4 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 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	34.4 ± 6 %	5.03 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	8.06 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.30 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.8 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	51.7 Ω - 6.2 $j\Omega$
Return Loss	- 24.0 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	56.0 Ω - 2.7 $j\Omega$
Return Loss	- 24.1 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	56.7 Ω - 1.0 $j\Omega$
Return Loss	- 23.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.195 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

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

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

Additional EUT Data

Manufactured by	SPEAG
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Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1113

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

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.53$ S/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.88$ S/m; $\epsilon_r = 34.6$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.03$ S/m; $\epsilon_r = 34.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.4, 5.4, 5.4) @ 5250 MHz, ConvF(4.95, 4.95, 4.95) @ 5600 MHz, ConvF(4.98, 4.98, 4.98) @ 5750 MHz; Calibrated: 25.03.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2019
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1504); SEMCAD X 14.6.12(7470)

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 = 78.54 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.33 W/kg

Maximum value of SAR (measured) = 18.1 W/kg

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

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

Reference Value = 78.00 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 31.1 W/kg

SAR(1 g) = 8.40 W/kg; SAR(10 g) = 2.40 W/kg

Maximum value of SAR (measured) = 19.4 W/kg

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

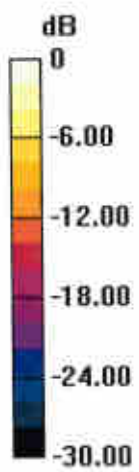
dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 75.13 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 31.8 W/kg

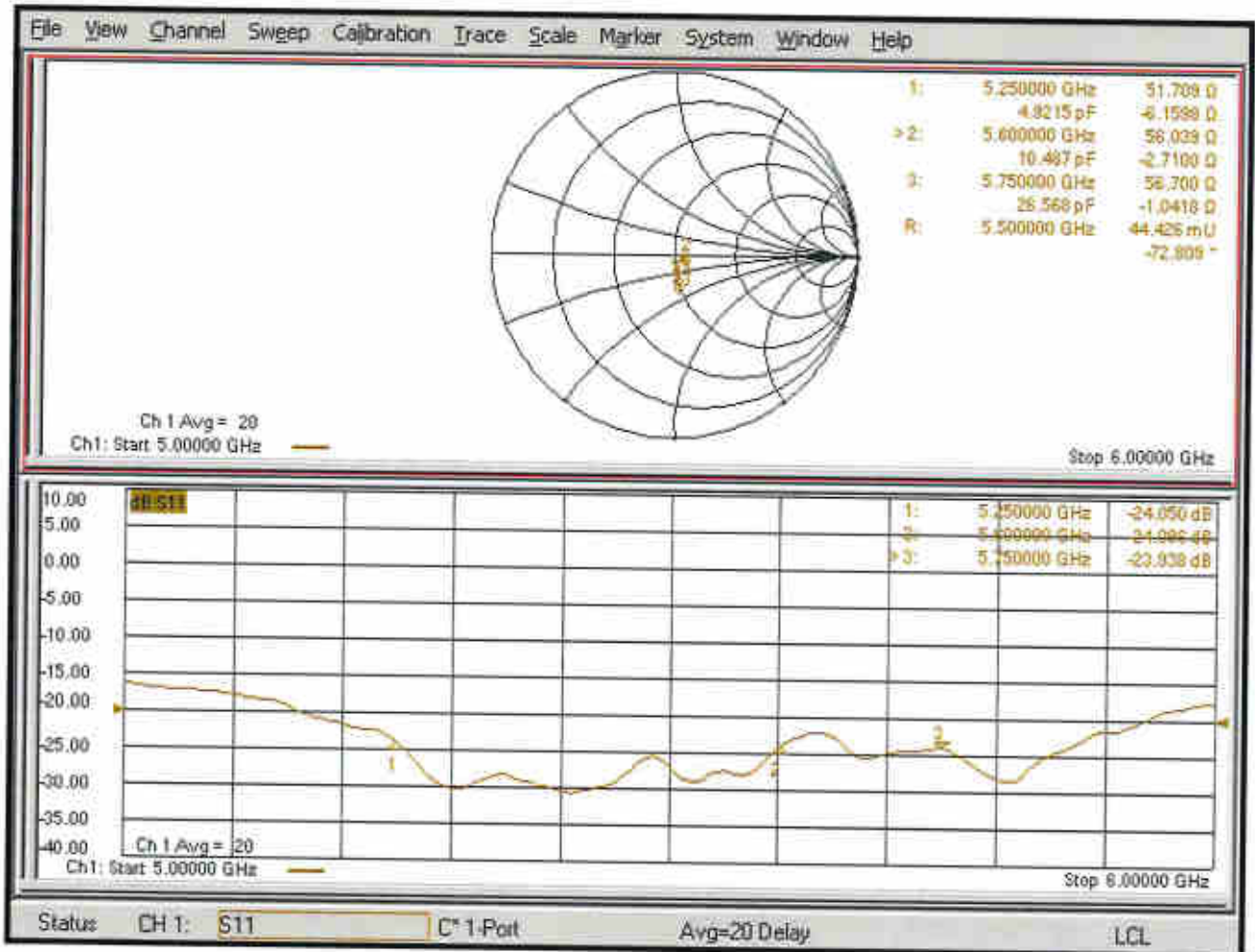
SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.30 W/kg

Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 18.1 W/kg = 12.58 dBW/kg

Impedance Measurement Plot for Head TSL





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Client : **INNOWAVE**

Certificate No: **Z19-60223**

CALIBRATION CERTIFICATE

Object: **DAE4 - SN: 871**

Calibration Procedure(s): **FF-Z11-002-01**
Calibration Procedure for the Data Acquisition Electronics (DAEx)

Calibration date: **June 27, 2019**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Process Calibrator 753	1971018	24-Jun-19 (CTTL, No.J19X05126)	Jun-20

	Name	Function
Calibrated by:	Yu Zongying	SAR Test Engineer
Reviewed by:	Zhao Jing	SAR Test Engineer
Approved by:	Qi Dianyuan	SAR Project Leader



Issued: June 29, 2019

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



Glossary:

DAE data acquisition electronics
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters:

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle:* The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The report provide only calibration results for DAE, it does not contain other performance test results.



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DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	404.719 \pm 0.15% (k=2)	404.706 \pm 0.15% (k=2)	405.146 \pm 0.15% (k=2)
Low Range	3.98180 \pm 0.7% (k=2)	3.93711 \pm 0.7% (k=2)	3.96917 \pm 0.7% (k=2)

Connector Angle

Connector Angle to be used in DASY system	90° \pm 1°
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Client **Sporton-CN (Auden)**

Certificate No: **DAE4-1210_Jul19**

CALIBRATION CERTIFICATE

Object **DAE4 - SD 000 D04 BM - SN: 1210**

Calibration procedure(s) **QA CAL-06.v29
Calibration procedure for the data acquisition electronics (DAE)**

Calibration date: **July 23, 2019**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	03-Sep-18 (No:23488)	Sep-19
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	07-Jan-19 (in house check)	In house check: Jan-20
Calibrator Box V2.1	SE UMS 006 AA 1002	07-Jan-19 (in house check)	In house check: Jan-20

Calibrated by: **Name** Adrian Gehring **Function** Laboratory Technician

Signature

Approved by: **Name** Sven Kühn **Function** Deputy Manager

Issued: July 23, 2019

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Glossary

DAE	data acquisition electronics
Connector angle	information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters

- *DC Voltage Measurement*: Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle*: The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
 - *DC Voltage Measurement Linearity*: Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
 - *Common mode sensitivity*: Influence of a positive or negative common mode voltage on the differential measurement.
 - *Channel separation*: Influence of a voltage on the neighbor channels not subject to an input voltage.
 - *AD Converter Values with inputs shorted*: Values on the internal AD converter corresponding to zero input voltage
 - *Input Offset Measurement*: Output voltage and statistical results over a large number of zero voltage measurements.
 - *Input Offset Current*: Typical value for information; Maximum channel input offset current, not considering the input resistance.
 - *Input resistance*: Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
 - *Low Battery Alarm Voltage*: Typical value for information. Below this voltage, a battery alarm signal is generated.
 - *Power consumption*: Typical value for information. Supply currents in various operating modes.

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV
Low Range: 1LSB = 61nV, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	404.166 \pm 0.02% (k=2)	404.988 \pm 0.02% (k=2)	405.096 \pm 0.02% (k=2)
Low Range	3.99856 \pm 1.50% (k=2)	3.98348 \pm 1.50% (k=2)	3.99912 \pm 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	345.5 $^{\circ}$ \pm 1 $^{\circ}$
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Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range		Reading (μV)	Difference (μV)	Error (%)
Channel X	+ Input	199994.14	-1.58	-0.00
Channel X	+ Input	20003.24	1.63	0.01
Channel X	- Input	-19999.69	2.15	-0.01
Channel Y	+ Input	199994.24	-1.47	-0.00
Channel Y	+ Input	19999.92	-1.59	-0.01
Channel Y	- Input	-20002.36	-0.45	0.00
Channel Z	+ Input	199993.01	-3.18	-0.00
Channel Z	+ Input	20001.72	0.33	0.00
Channel Z	- Input	-20001.83	0.22	-0.00

Low Range		Reading (μV)	Difference (μV)	Error (%)
Channel X	+ Input	2000.95	0.12	0.01
Channel X	+ Input	201.39	0.23	0.11
Channel X	- Input	-198.00	0.76	-0.38
Channel Y	+ Input	2000.37	-0.36	-0.02
Channel Y	+ Input	200.27	-0.81	-0.40
Channel Y	- Input	-199.65	-0.81	0.41
Channel Z	+ Input	2000.08	-0.54	-0.03
Channel Z	+ Input	200.54	-0.42	-0.21
Channel Z	- Input	-199.83	-0.88	0.44

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-6.17	-7.94
	- 200	9.53	7.51
Channel Y	200	-9.87	-9.68
	- 200	8.28	8.02
Channel Z	200	12.52	12.54
	- 200	-13.97	-14.14

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	2.17	-3.57
Channel Y	200	8.43	-	2.81
Channel Z	200	9.90	6.07	-

4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	15961	16608
Channel Y	15954	15680
Channel Z	15869	16574

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input 10M Ω

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	-0.75	-1.83	0.18	0.39
Channel Y	0.12	-0.92	0.78	0.38
Channel Z	1.30	-0.57	3.07	0.63

6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)
Supply (+ Vcc)	+7.9
Supply (- Vcc)	-7.6

9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.01	+6	+14
Supply (- Vcc)	-0.01	-8	-9



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Accreditation No.: **SCS 0108**

Client **Sporton**

Certificate No: **ES3-3293_Nov19**

CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3293**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes**

Calibration date: **November 25, 2019**

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	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	07-Oct-19 (No. DAE4-660_Oct19)	Oct-20
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
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 E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

	Name	Function	Signature
Calibrated by:	Leif Klysnér	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	
			Issued: November 26, 2019

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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	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:

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

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3293

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	1.09	0.90	0.71	$\pm 10.1 \%$
DCP (mV) ^B	105.6	104.0	109.8	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Max dev.	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	197.9	$\pm 3.5 \%$	$\pm 4.7 \%$
		Y	0.0	0.0	1.0		199.0		
		Z	0.0	0.0	1.0		206.6		

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 Page 5).

^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:3293

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-4.6
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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3293

Calibration Parameter Determined in Head Tissue Simulating Media

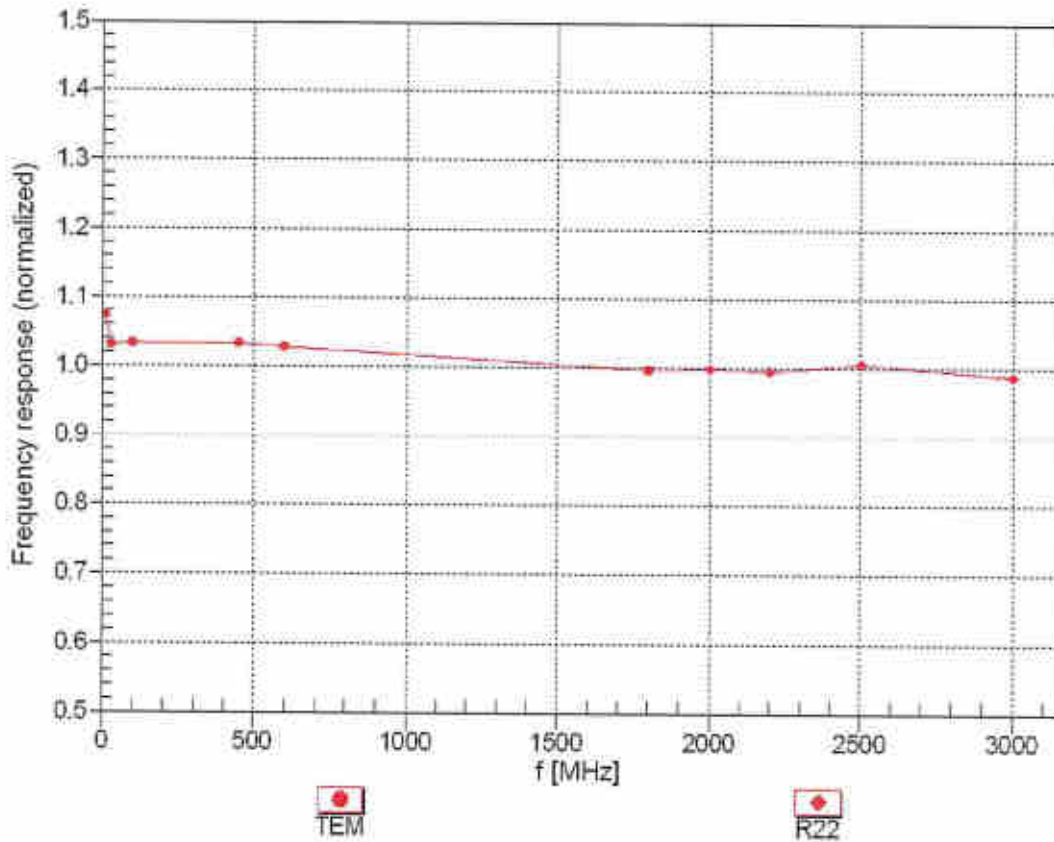
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^H (mm)	Unc (k=2)
750	41.9	0.89	6.56	6.56	6.56	0.80	1.23	± 12.0 %
835	41.5	0.90	6.39	6.39	6.39	0.80	1.26	± 12.0 %
900	41.5	0.97	6.23	6.23	6.23	0.72	1.30	± 12.0 %
1450	40.5	1.20	5.89	5.89	5.89	0.48	1.49	± 12.0 %
1750	40.1	1.37	5.53	5.53	5.53	0.55	1.38	± 12.0 %
1900	40.0	1.40	5.32	5.32	5.32	0.67	1.30	± 12.0 %
2000	40.0	1.40	5.25	5.25	5.25	0.50	1.55	± 12.0 %
2300	39.5	1.67	4.89	4.89	4.89	0.63	1.42	± 12.0 %
2450	39.2	1.80	4.60	4.60	4.60	0.80	1.33	± 12.0 %
2600	39.0	1.96	4.39	4.39	4.39	0.75	1.41	± 12.0 %

^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. Validity of ConvF assessed at 6 MHz is 4-8 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

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

^H 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.

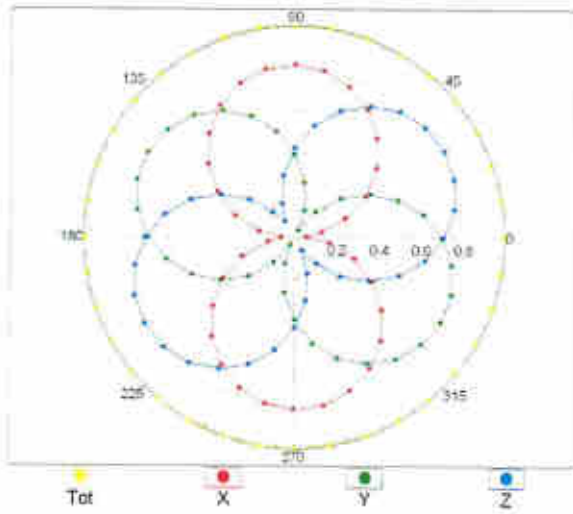
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



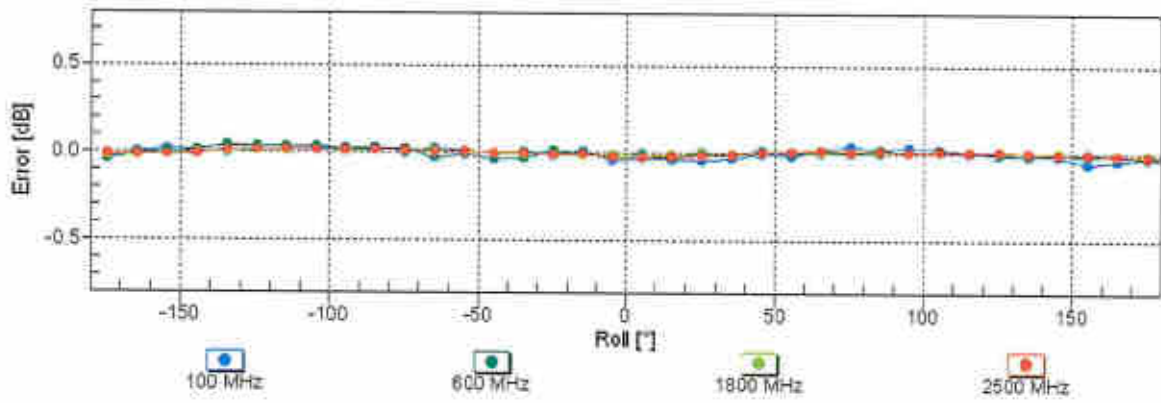
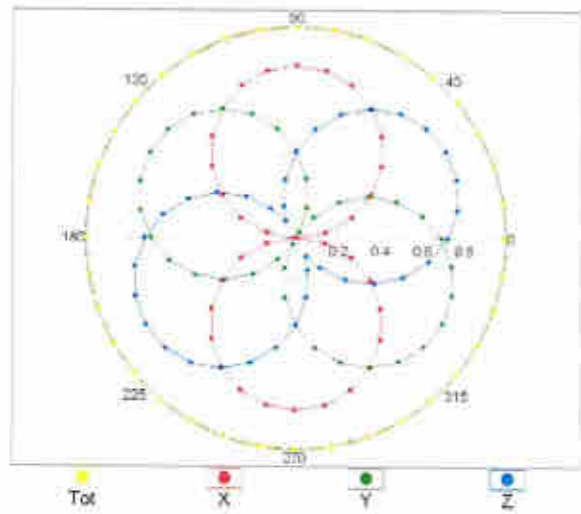
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

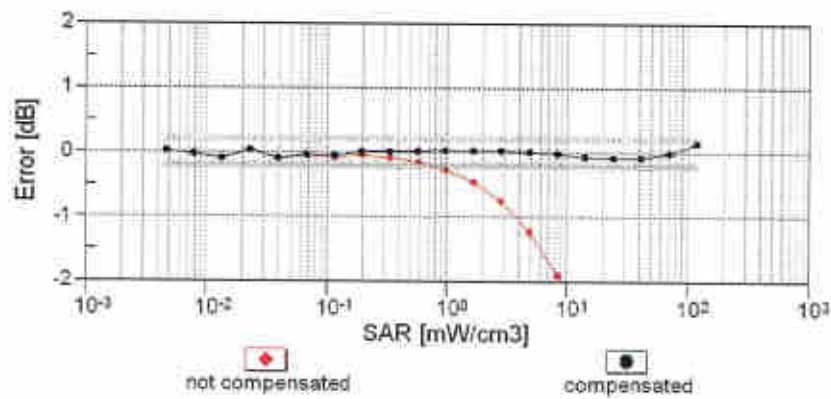
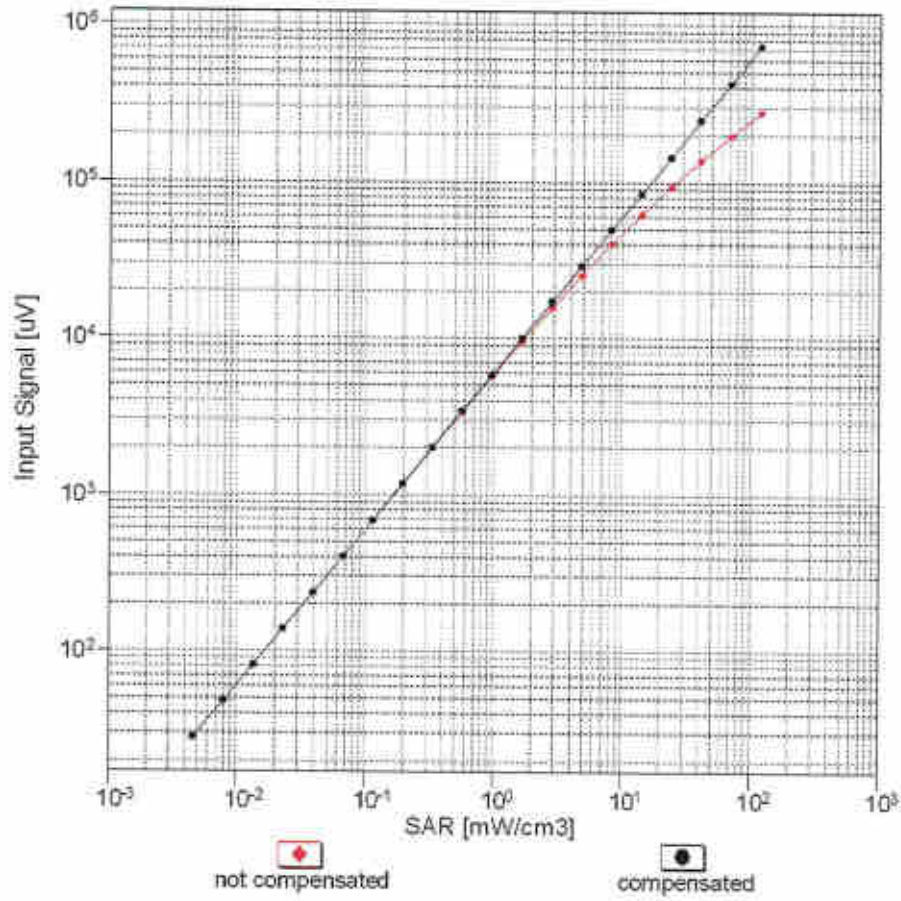


f=1800 MHz,R22



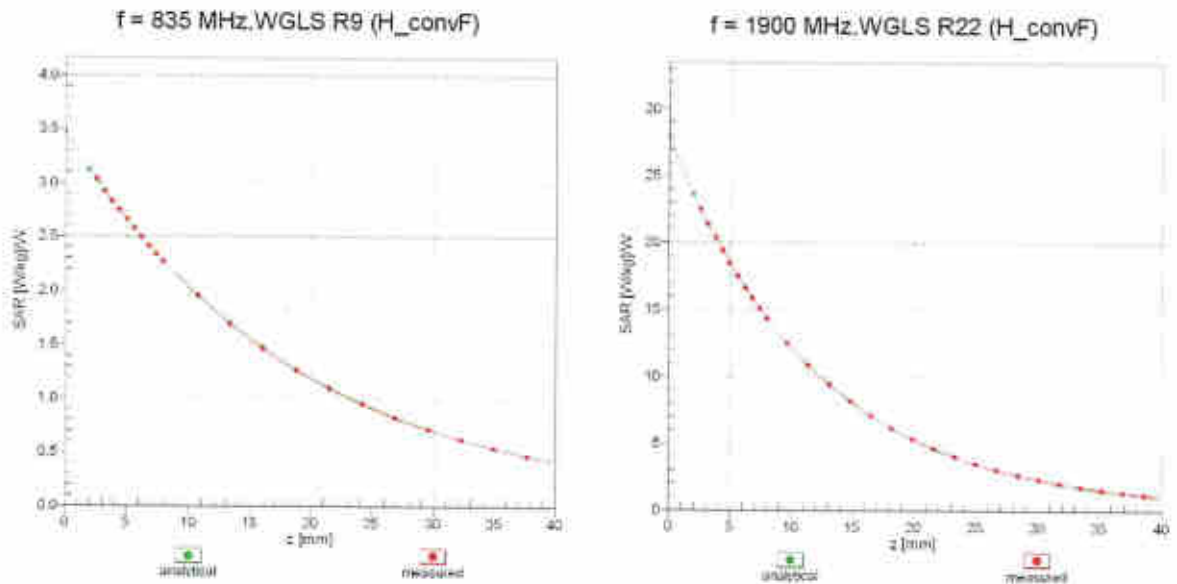
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

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

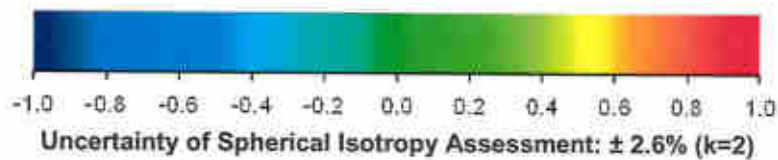
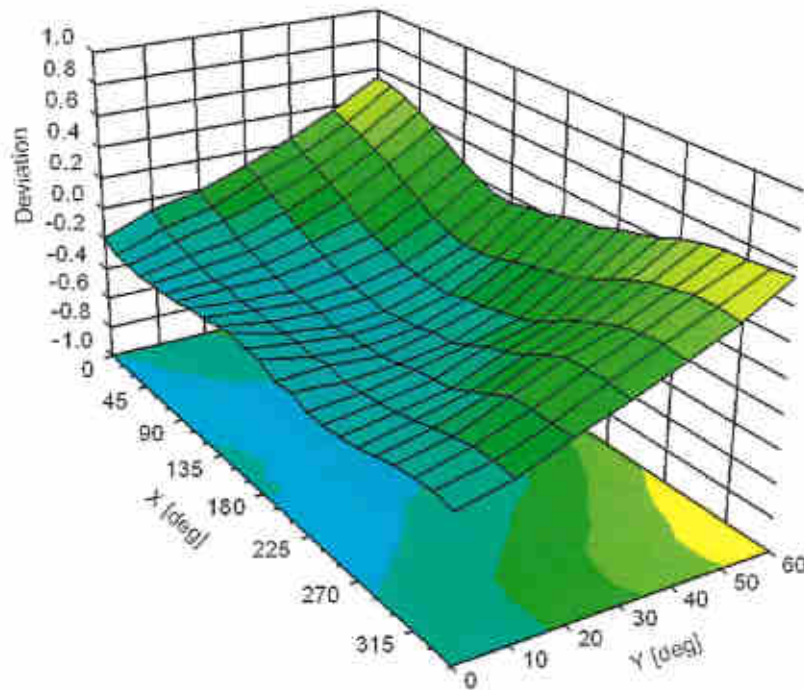


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



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



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ (k=2)



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

Accreditation No.: **SCS 0108**

Client **Sporton**

Certificate No: **EX3-3857_May19**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3857**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes**

Calibration date: **May 27, 2019**

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	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	19-Dec-18 (No. DAE4-660 Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013 Dec18)	Dec-19
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-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	
			Issued: May 28, 2019
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	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:

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

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3857

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.17	0.43	0.45	$\pm 10.1 \%$
DCP (mV) ^B	102.0	100.4	103.0	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB μV	C	D dB	VR mV	Max dev.	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	149.1	$\pm 3.5 \%$	$\pm 4.7 \%$
		Y	0.00	0.00	1.00		142.5		
		Z	0.00	0.00	1.00		128.7		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	5.02	71.79	14.46	10.00	60.0	$\pm 3.0 \%$	$\pm 9.6 \%$
		Y	15.00	85.65	19.05		60.0		
		Z	15.00	87.33	19.76		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	4.88	73.94	13.94	6.99	80.0	$\pm 1.7 \%$	$\pm 9.6 \%$
		Y	15.00	86.82	18.12		80.0		
		Z	15.00	88.67	19.12		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	7.38	78.94	13.73	3.98	95.0	$\pm 1.4 \%$	$\pm 9.6 \%$
		Y	15.00	86.36	16.11		95.0		
		Z	15.00	93.83	20.13		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	0.64	63.16	6.75	2.22	120.0	$\pm 1.5 \%$	$\pm 9.6 \%$
		Y	13.05	81.68	12.64		120.0		
		Z	15.00	101.47	22.26		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	1.68	72.66	15.43	0.00	150.0	$\pm 2.7 \%$	$\pm 9.6 \%$
		Y	0.57	60.00	7.58		150.0		
		Z	0.99	66.12	11.92		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	3.08	73.93	18.74	0.00	150.0	$\pm 1.2 \%$	$\pm 9.6 \%$
		Y	2.07	67.07	15.14		150.0		
		Z	2.60	71.16	17.43		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	3.51	72.69	19.87	3.01	150.0	$\pm 1.6 \%$	$\pm 9.6 \%$
		Y	2.69	68.94	18.38		150.0		
		Z	3.62	74.43	20.55		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.84	69.00	17.04	0.00	150.0	$\pm 2.3 \%$	$\pm 9.6 \%$
		Y	3.40	66.62	15.52		150.0		
		Z	3.68	68.33	16.53		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	5.12	66.37	16.23	0.00	150.0	$\pm 4.3 \%$	$\pm 9.6 \%$
		Y	4.79	65.33	15.44		150.0		
		Z	4.99	66.28	15.97		150.0		

Note: For details on UID parameters see Appendix

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

^A The uncertainties of Norm X,Y,Z do not affect the E^2 -field uncertainty inside TSL (see Page 5).

^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:3857

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-3}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	59.0	455.93	38.07	9.66	1.32	5.00	0.00	0.69	1.01
Y	45.9	356.07	37.98	10.21	0.83	5.05	0.00	0.48	1.01
Z	48.1	356.44	35.21	11.94	0.51	5.06	1.47	0.28	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-43.5
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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3857

Calibration Parameter Determined in Head Tissue Simulating Media

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	9.77	9.77	9.77	0.42	0.99	± 12.0 %
835	41.5	0.90	9.48	9.48	9.48	0.46	0.80	± 12.0 %
900	41.5	0.97	9.34	9.34	9.34	0.29	1.12	± 12.0 %
1750	40.1	1.37	8.46	8.46	8.46	0.34	0.80	± 12.0 %
1900	40.0	1.40	8.10	8.10	8.10	0.34	0.80	± 12.0 %
2000	40.0	1.40	8.04	8.04	8.04	0.26	0.88	± 12.0 %
2300	39.5	1.67	7.88	7.88	7.88	0.33	0.90	± 12.0 %
2450	39.2	1.80	7.50	7.50	7.50	0.37	0.93	± 12.0 %
2600	39.0	1.96	7.31	7.31	7.31	0.35	0.93	± 12.0 %
3300	38.2	2.71	6.96	6.96	6.96	0.30	1.25	± 14.0 %
3500	37.9	2.91	6.92	6.92	6.92	0.30	1.25	± 14.0 %
3700	37.7	3.12	6.65	6.65	6.65	0.30	1.25	± 14.0 %
3900	37.5	3.32	6.60	6.60	6.60	0.40	1.60	± 14.0 %
4100	37.2	3.53	5.99	5.99	5.99	0.40	1.60	± 14.0 %
4200	37.1	3.63	5.98	5.98	5.98	0.40	1.70	± 14.0 %
4400	36.9	3.84	5.86	5.86	5.86	0.45	1.75	± 14.0 %
4600	36.7	4.04	5.83	5.83	5.83	0.45	1.75	± 14.0 %
4800	36.4	4.25	5.73	5.73	5.73	0.45	1.75	± 14.0 %
4950	36.3	4.40	5.53	5.53	5.53	0.40	1.80	± 14.0 %
5250	35.9	4.71	5.19	5.19	5.19	0.40	1.80	± 14.0 %
5600	35.5	5.07	4.92	4.92	4.92	0.40	1.80	± 14.0 %
5750	35.4	5.22	5.17	5.17	5.17	0.40	1.80	± 14.0 %

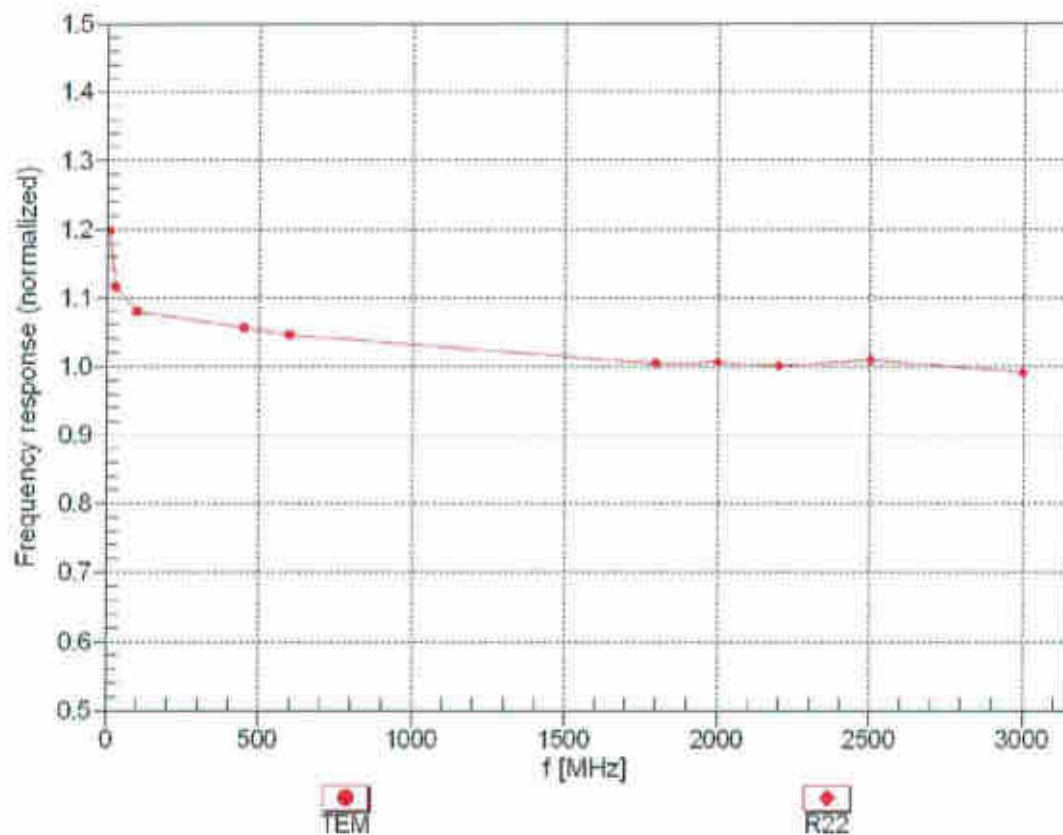
^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^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

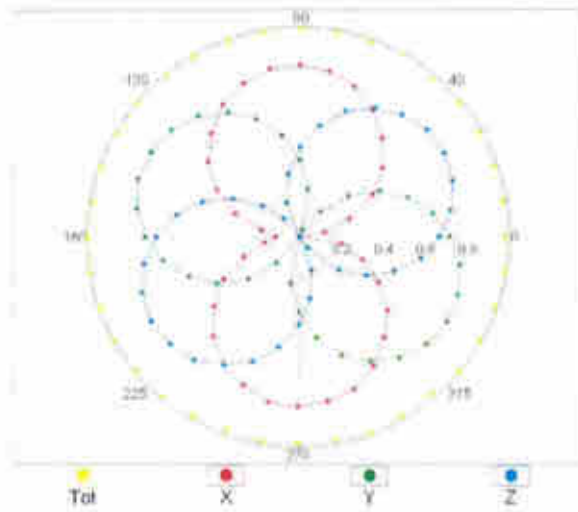
(TEM-Cell:ifi110 EXX, Waveguide: R22)



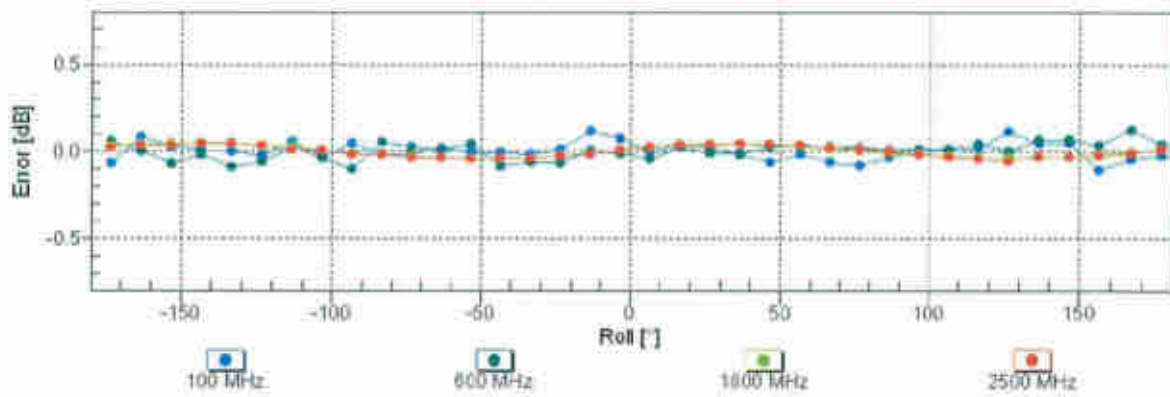
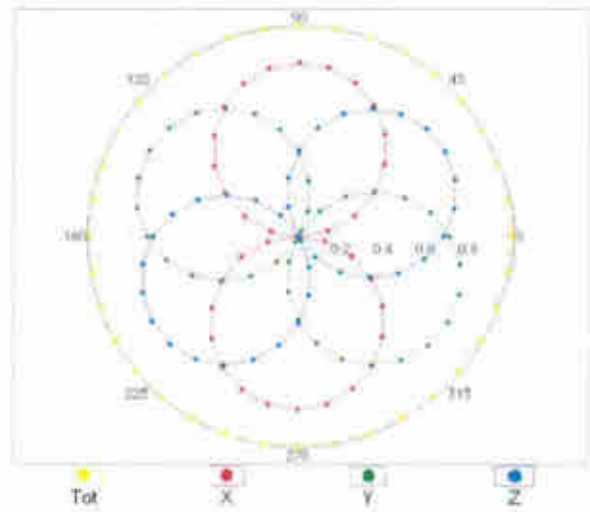
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

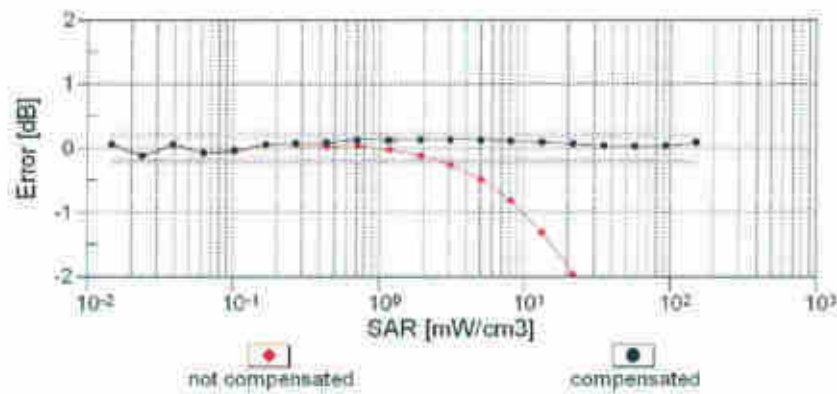
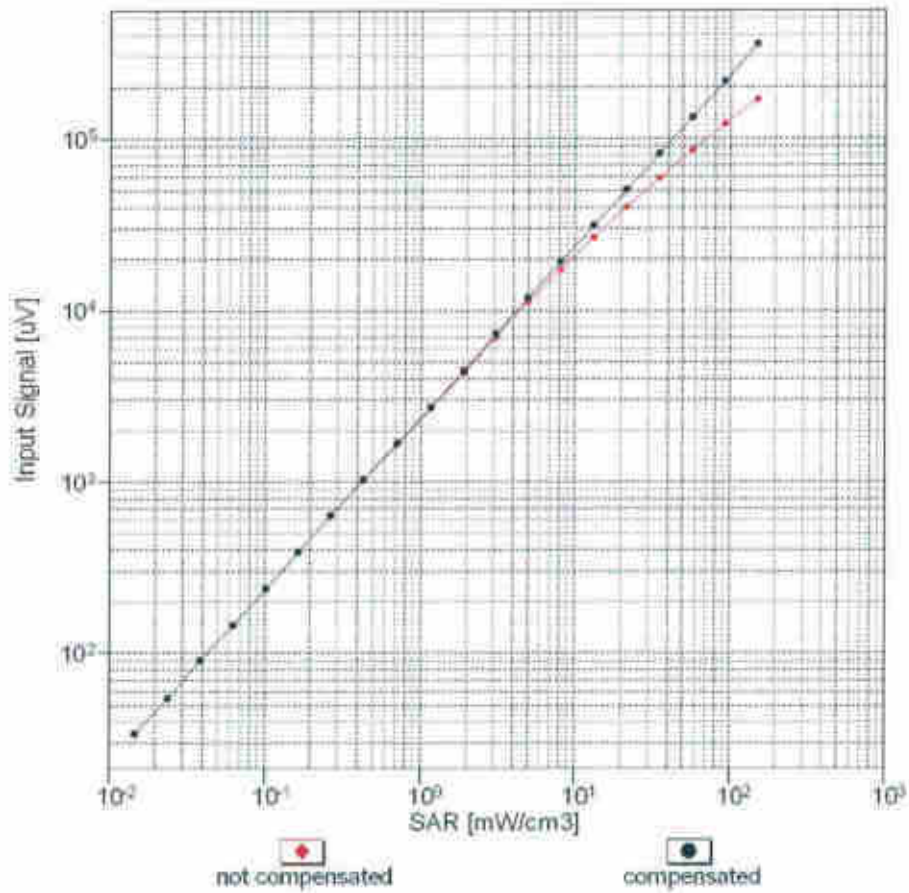


f=1800 MHz,R22



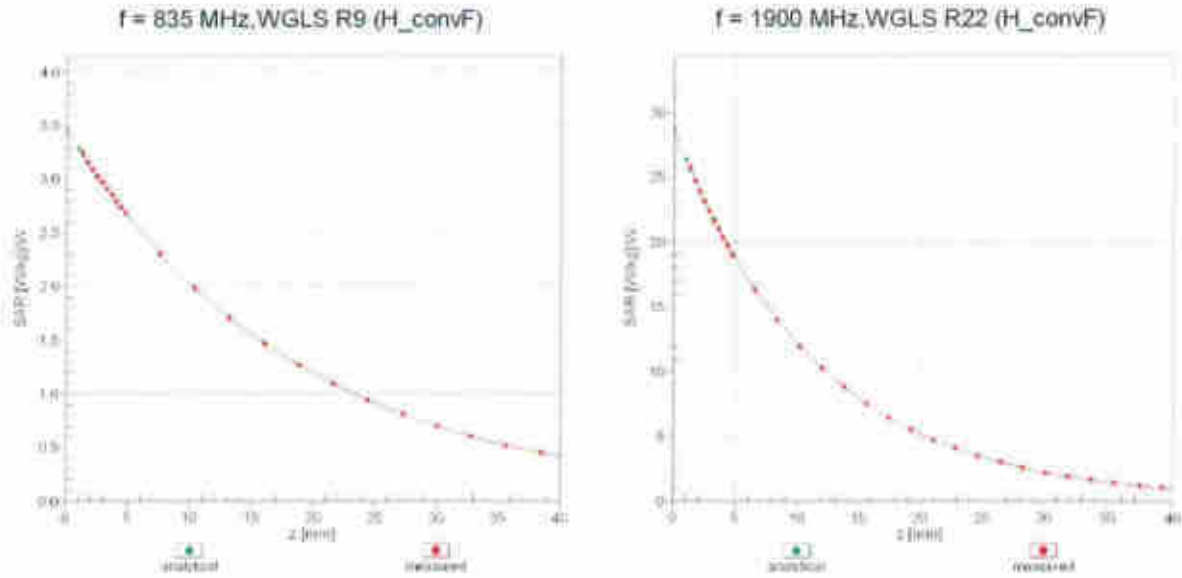
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

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



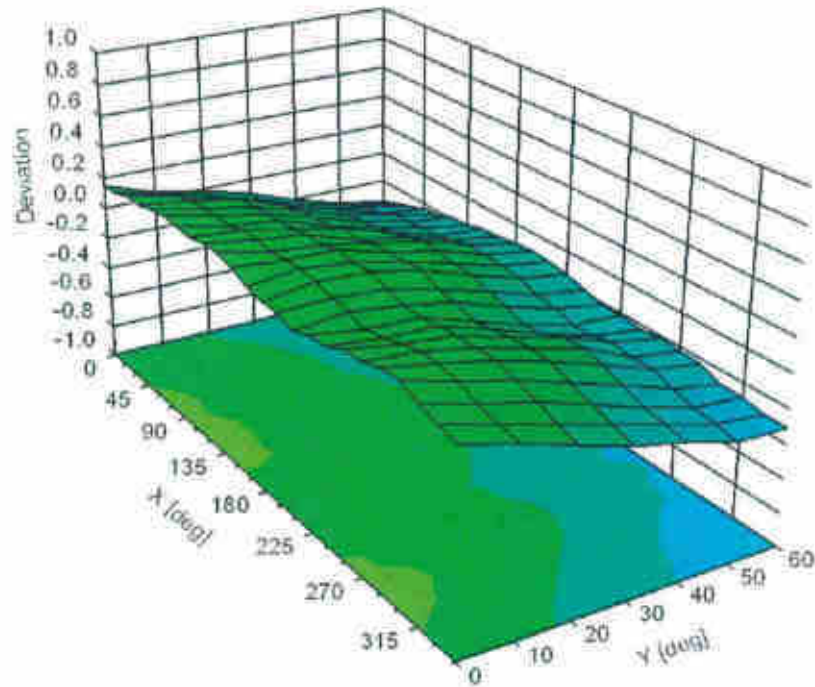
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^F (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (B-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (B-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (B-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6%
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6%
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6%
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6%
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6%
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6%
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6%
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6%
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6%
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6%
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6%
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6%
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6%
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6%
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6%
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6%
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6%
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6%
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6%
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6%
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6%
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6%
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6%
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6%
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6%
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6%
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6%
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6%
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6%
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6%
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6%
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6%
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6%
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6%
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6%
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6%
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6%
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6%
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6%
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6%
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6%
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6%
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6%
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6%
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6%
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6%
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6%
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6%
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6%
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6%
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6%
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6%
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6%
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6%

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6 %
10226	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10237	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10241	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6 %
10256	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	±9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	±9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	IDEN 1:3	IDEN	10.51	± 9.6 %
10314	AAA	IDEN 1:6	IDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	WLAN	8.19	± 9.6 %
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %

10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10462	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	± 9.6 %
10463	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10464	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10466	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10472	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10479	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	± 9.6 %
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10482	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	± 9.6 %
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	± 9.6 %
10485	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	± 9.6 %
10487	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	± 9.6 %
10488	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10490	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %

10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10497	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10498	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	± 9.6 %
10499	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	± 9.6 %
10500	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	± 9.6 %
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	± 9.6 %
10503	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10505	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10506	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	± 9.6 %
10508	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	± 9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	± 9.6 %
10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.45	± 9.6 %

10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6%
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6%
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6%
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6%
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6%
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.48	±9.6%
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6%
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6%
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6%
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6%
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6%
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6%
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6%
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	WLAN	8.38	±9.6%
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6%
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6%
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6%
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	WLAN	8.48	±9.6%
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6%
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	WLAN	8.50	±9.6%
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	WLAN	8.52	±9.6%
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN	8.61	±9.6%
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	WLAN	8.73	±9.6%
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6%
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6%
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.6%
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6%
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6%
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	±9.6%
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	±9.6%
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	±9.6%
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6%
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	±9.6%
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6%
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6%
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6%
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6%
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6%
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6%
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6%
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6%
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6%
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6%
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6%
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6%
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6%
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6%
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6%
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6%
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6%

10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6%
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6%
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6%
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±9.6%
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6%
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6%
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6%
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6%
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6%
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6%
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6%
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6%
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6%
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6%
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6%
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6%
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6%
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6%
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6%
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6%
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6%
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6%
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6%
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6%
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6%
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6%
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6%
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6%
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6%
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6%
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8.58	±9.6%
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6%
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	±9.6%
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6%
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	±9.6%
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6%
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.96	±9.6%
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6%
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6%
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6%
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	±9.6%
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6%
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	±9.6%
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	±9.6%
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6%
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	±9.6%
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6%
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6%
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6%
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6%
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6%
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6%
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6%
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6%
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6%
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	±9.6%
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6%
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	±9.6%
10646	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6%
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6%
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6%
10652	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6%
10653	AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6%
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6%

10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	±9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	±9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	±9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	±9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	±9.6 %
10671	AAA	IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle)	WLAN	9.09	±9.6 %
10672	AAA	IEEE 802.11ax (20MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.6 %
10673	AAA	IEEE 802.11ax (20MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6 %
10674	AAA	IEEE 802.11ax (20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6 %
10675	AAA	IEEE 802.11ax (20MHz, MCS4, 90pc duty cycle)	WLAN	8.90	±9.6 %
10676	AAA	IEEE 802.11ax (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6 %
10677	AAA	IEEE 802.11ax (20MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6 %
10678	AAA	IEEE 802.11ax (20MHz, MCS7, 90pc duty cycle)	WLAN	8.78	±9.6 %
10679	AAA	IEEE 802.11ax (20MHz, MCS8, 90pc duty cycle)	WLAN	8.89	±9.6 %
10680	AAA	IEEE 802.11ax (20MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.6 %
10681	AAA	IEEE 802.11ax (20MHz, MCS10, 90pc duty cycle)	WLAN	8.62	±9.6 %
10682	AAA	IEEE 802.11ax (20MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6 %
10683	AAA	IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6 %
10684	AAA	IEEE 802.11ax (20MHz, MCS1, 99pc duty cycle)	WLAN	8.26	±9.6 %
10685	AAA	IEEE 802.11ax (20MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6 %
10686	AAA	IEEE 802.11ax (20MHz, MCS3, 99pc duty cycle)	WLAN	8.28	±9.6 %
10687	AAA	IEEE 802.11ax (20MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6 %
10688	AAA	IEEE 802.11ax (20MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6 %
10689	AAA	IEEE 802.11ax (20MHz, MCS6, 99pc duty cycle)	WLAN	8.55	±9.6 %
10690	AAA	IEEE 802.11ax (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6 %
10691	AAA	IEEE 802.11ax (20MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6 %
10692	AAA	IEEE 802.11ax (20MHz, MCS9, 99pc duty cycle)	WLAN	8.29	±9.6 %
10693	AAA	IEEE 802.11ax (20MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6 %
10694	AAA	IEEE 802.11ax (20MHz, MCS11, 99pc duty cycle)	WLAN	8.57	±9.6 %
10695	AAA	IEEE 802.11ax (40MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.6 %
10696	AAA	IEEE 802.11ax (40MHz, MCS1, 90pc duty cycle)	WLAN	8.91	±9.6 %
10697	AAA	IEEE 802.11ax (40MHz, MCS2, 90pc duty cycle)	WLAN	8.61	±9.6 %
10698	AAA	IEEE 802.11ax (40MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.6 %
10699	AAA	IEEE 802.11ax (40MHz, MCS4, 90pc duty cycle)	WLAN	8.82	±9.6 %
10700	AAA	IEEE 802.11ax (40MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6 %
10701	AAA	IEEE 802.11ax (40MHz, MCS6, 90pc duty cycle)	WLAN	8.86	±9.6 %
10702	AAA	IEEE 802.11ax (40MHz, MCS7, 90pc duty cycle)	WLAN	8.70	±9.6 %
10703	AAA	IEEE 802.11ax (40MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6 %
10704	AAA	IEEE 802.11ax (40MHz, MCS9, 90pc duty cycle)	WLAN	8.56	±9.6 %
10705	AAA	IEEE 802.11ax (40MHz, MCS10, 90pc duty cycle)	WLAN	8.69	±9.6 %
10706	AAA	IEEE 802.11ax (40MHz, MCS11, 90pc duty cycle)	WLAN	8.66	±9.6 %
10707	AAA	IEEE 802.11ax (40MHz, MCS0, 99pc duty cycle)	WLAN	8.32	±9.6 %
10708	AAA	IEEE 802.11ax (40MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6 %
10709	AAA	IEEE 802.11ax (40MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6 %
10710	AAA	IEEE 802.11ax (40MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6 %
10711	AAA	IEEE 802.11ax (40MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6 %
10712	AAA	IEEE 802.11ax (40MHz, MCS5, 99pc duty cycle)	WLAN	8.67	±9.6 %
10713	AAA	IEEE 802.11ax (40MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6 %
10714	AAA	IEEE 802.11ax (40MHz, MCS7, 99pc duty cycle)	WLAN	8.26	±9.6 %
10715	AAA	IEEE 802.11ax (40MHz, MCS8, 99pc duty cycle)	WLAN	8.45	±9.6 %
10716	AAA	IEEE 802.11ax (40MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6 %
10717	AAA	IEEE 802.11ax (40MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6 %
10718	AAA	IEEE 802.11ax (40MHz, MCS11, 99pc duty cycle)	WLAN	8.24	±9.6 %
10719	AAA	IEEE 802.11ax (80MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6 %
10720	AAA	IEEE 802.11ax (80MHz, MCS1, 90pc duty cycle)	WLAN	8.87	±9.6 %
10721	AAA	IEEE 802.11ax (80MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6 %
10722	AAA	IEEE 802.11ax (80MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6 %
10723	AAA	IEEE 802.11ax (80MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6 %
10724	AAA	IEEE 802.11ax (80MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6 %
10725	AAA	IEEE 802.11ax (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6 %
10726	AAA	IEEE 802.11ax (80MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6 %
10727	AAA	IEEE 802.11ax (80MHz, MCS8, 90pc duty cycle)	WLAN	8.66	±9.6 %

10728	AAA	IEEE 802.11ax (80MHz, MCS9, 90pc duty cycle)	WLAN	8.65	± 9.6 %
10729	AAA	IEEE 802.11ax (80MHz, MCS10, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10730	AAA	IEEE 802.11ax (80MHz, MCS11, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10731	AAA	IEEE 802.11ax (80MHz, MCS0, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10732	AAA	IEEE 802.11ax (80MHz, MCS1, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10733	AAA	IEEE 802.11ax (80MHz, MCS2, 99pc duty cycle)	WLAN	8.40	± 9.6 %
10734	AAA	IEEE 802.11ax (80MHz, MCS3, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10735	AAA	IEEE 802.11ax (80MHz, MCS4, 99pc duty cycle)	WLAN	8.33	± 9.6 %
10736	AAA	IEEE 802.11ax (80MHz, MCS5, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10737	AAA	IEEE 802.11ax (80MHz, MCS6, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10738	AAA	IEEE 802.11ax (80MHz, MCS7, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10739	AAA	IEEE 802.11ax (80MHz, MCS8, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10740	AAA	IEEE 802.11ax (80MHz, MCS9, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10741	AAA	IEEE 802.11ax (80MHz, MCS10, 99pc duty cycle)	WLAN	8.40	± 9.6 %
10742	AAA	IEEE 802.11ax (80MHz, MCS11, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10743	AAA	IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10744	AAA	IEEE 802.11ax (160MHz, MCS1, 90pc duty cycle)	WLAN	9.16	± 9.6 %
10745	AAA	IEEE 802.11ax (160MHz, MCS2, 90pc duty cycle)	WLAN	8.93	± 9.6 %
10746	AAA	IEEE 802.11ax (160MHz, MCS3, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10747	AAA	IEEE 802.11ax (160MHz, MCS4, 90pc duty cycle)	WLAN	9.04	± 9.6 %
10748	AAA	IEEE 802.11ax (160MHz, MCS5, 90pc duty cycle)	WLAN	8.93	± 9.6 %
10749	AAA	IEEE 802.11ax (160MHz, MCS6, 90pc duty cycle)	WLAN	8.90	± 9.6 %
10750	AAA	IEEE 802.11ax (160MHz, MCS7, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10751	AAA	IEEE 802.11ax (160MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10752	AAA	IEEE 802.11ax (160MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10753	AAA	IEEE 802.11ax (160MHz, MCS10, 90pc duty cycle)	WLAN	9.00	± 9.6 %
10754	AAA	IEEE 802.11ax (160MHz, MCS11, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10755	AAA	IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle)	WLAN	8.64	± 9.6 %
10756	AAA	IEEE 802.11ax (160MHz, MCS1, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10757	AAA	IEEE 802.11ax (160MHz, MCS2, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10758	AAA	IEEE 802.11ax (160MHz, MCS3, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10759	AAA	IEEE 802.11ax (160MHz, MCS4, 99pc duty cycle)	WLAN	8.58	± 9.6 %
10760	AAA	IEEE 802.11ax (160MHz, MCS5, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10761	AAA	IEEE 802.11ax (160MHz, MCS6, 99pc duty cycle)	WLAN	8.58	± 9.6 %
10762	AAA	IEEE 802.11ax (160MHz, MCS7, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10763	AAA	IEEE 802.11ax (160MHz, MCS8, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10764	AAA	IEEE 802.11ax (160MHz, MCS9, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10765	AAA	IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10766	AAA	IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle)	WLAN	8.51	± 9.6 %

⁸ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



Appendix E. Conducted RF Output Power Table

The detailed power table are shown as follows.



Full Power

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	624.2	636.4	648.8	624.2	636.4	648.8		
GSM 1 Tx slot	32.82	33.00	32.85	33.50	23.82	24.00	23.85	24.50
GPRS 1 Tx slot	32.81	32.99	32.83	33.50	23.81	23.99	23.83	24.50
GPRS 2 Tx slots	32.14	31.91	31.93	32.50	23.14	23.91	23.93	26.50
GPRS 3 Tx slots	30.43	30.29	30.26	31.50	26.17	26.03	26.00	27.24
GPRS 4 Tx slots	28.83	28.74	28.42	29.50	25.53	25.74	25.42	26.50
EDGE 1 Tx slot	26.78	26.70	26.53	27.50	17.78	17.70	17.53	18.50
EDGE 2 Tx slots	25.67	25.62	25.42	26.50	18.67	19.62	19.42	20.50
EDGE 3 Tx slots	24.04	24.00	23.77	25.00	19.78	19.74	18.51	20.74
EDGE 4 Tx slots	22.44	22.40	22.27	23.50	18.44	19.40	19.27	20.50

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1527.2	1553	1579.2	1527.2	1553	1579.2		
GSM 1 Tx slot	29.81	29.82	29.70	30.50	20.81	20.82	20.70	21.50
GPRS 1 Tx slot	26.79	26.81	26.66	30.50	20.79	20.81	20.69	21.50
GPRS 2 Tx slots	28.73	28.76	28.74	29.50	22.73	22.76	22.74	23.50
GPRS 3 Tx slots	27.08	27.19	27.26	28.00	22.82	22.93	23.00	23.74
GPRS 4 Tx slots	25.43	25.50	25.62	26.50	22.43	22.50	22.62	23.50
EDGE 1 Tx slot	25.48	25.54	25.57	26.50	16.48	16.54	16.57	17.50
EDGE 2 Tx slots	24.45	24.41	24.25	25.50	18.45	18.41	18.55	19.50
EDGE 3 Tx slots	22.83	22.88	22.90	23.50	18.57	18.62	18.64	19.24
EDGE 4 Tx slots	21.18	21.27	21.24	22.50	18.18	18.27	18.24	19.50



Band	WCDMA II				Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
	TX Channel		RX Channel			1312	1413	1513		4132	4162	4233	
	9662	9400	9538	9662		9800	9938	1537		1638	1738	4357	
Frequency (MHz)		1862.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	23.28	23.21	23.25	24.00	22.96	23.12	23.20	24.00	23.64	23.55	23.23	24.00
3GPP Rel 99	AMR 12.7Kbps	23.29	23.22	23.27	24.00	22.97	23.14	23.22	24.00	23.65	23.56	23.24	24.00
3GPP Rel 6	HSDPA Subtest-1	22.90	22.18	22.22	23.00	21.94	22.43	22.21	23.00	22.80	22.69	22.37	23.00
3GPP Rel 6	HSDPA Subtest-2	22.28	22.21	22.24	23.00	21.99	22.12	22.20	23.00	22.80	22.74	22.45	23.00
3GPP Rel 6	HSDPA Subtest-3	21.72	21.67	21.73	22.50	21.52	21.56	21.68	22.50	22.32	22.16	21.85	22.50
3GPP Rel 6	HSDPA Subtest-4	21.73	21.64	21.68	22.50	21.28	21.52	21.64	22.50	22.33	22.27	21.86	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.29	22.17	22.21	23.00	21.88	22.37	22.19	23.00	22.78	22.63	22.35	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.28	22.19	22.13	23.00	21.90	22.11	22.15	23.00	22.65	22.70	22.42	23.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.71	21.68	21.71	22.50	21.50	21.48	21.60	22.50	22.30	22.13	21.80	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.70	21.63	21.69	22.50	21.22	21.50	21.57	22.50	22.24	22.24	21.83	22.50
3GPP Rel 6	HSUPA Subtest-1	22.10	22.05	22.05	23.00	22.01	22.27	22.16	23.00	22.81	22.72	22.88	23.00
3GPP Rel 6	HSUPA Subtest-2	20.10	20.09	20.07	21.00	20.06	20.18	20.07	21.00	20.74	20.82	20.32	21.00
3GPP Rel 6	HSUPA Subtest-3	21.17	21.04	21.05	22.00	21.10	21.22	21.06	22.00	21.76	21.75	21.75	22.00
3GPP Rel 6	HSUPA Subtest-4	20.15	20.07	20.03	21.00	20.00	20.09	20.13	21.00	20.82	20.66	20.73	21.00
3GPP Rel 6	HSUPA Subtest-5	22.20	22.00	22.10	23.00	21.96	22.17	22.19	23.00	22.80	22.70	22.35	23.00

Band	CDMA BC9			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)	
	TX Channel		RX Channel		25	800	1175		476	568	684		
	624.7	636.52	648.31		1851.25	1880	1906.75		817.9	820.5	823.1		
Frequency (MHz)		24.41	24.33	24.03	25.00	24.03	24.10	24.08	25.00	24.43	24.40	24.27	25.00
RC1 SO55		24.42	24.34	24.04	25.00	24.04	24.10	24.16	25.00	24.43	24.40	24.28	25.00
RC1 SO5Z (F-SCH)		24.38	24.38	24.03	25.00	24.08	24.08	24.11	25.00	24.44	24.46	24.28	25.00
RC1 SO32 (F-SCH)		24.38	24.39	24.04	25.00	24.10	24.07	24.12	25.00	24.45	24.48	24.27	25.00
RTAP 163 8Kbps		24.41	24.41	24.40	25.00	24.05	24.02	24.15	25.00	24.43	24.44	24.28	25.00
RETAP 4596Bts		24.39	24.40	24.01	25.00	24.07	24.03	24.13	25.00	24.44	24.43	24.28	25.00



LTE Band 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				2550	2535	2550		
20	QPSK	1	0	22.68	22.71	23.07	24	0
20	QPSK	1	49	22.60	22.61	22.95		
20	QPSK	1	99	22.60	22.62	22.92		
20	QPSK	50	0	21.82	21.84	22.04	23	1
20	QPSK	50	24	21.75	21.76	22.00		
20	QPSK	50	50	21.65	21.72	21.99		
20	QPSK	100	0	21.75	21.77	22.05	23	1
20	16QAM	1	0	21.52	21.52	22.25		
20	16QAM	1	49	21.88	21.83	22.18		
20	16QAM	1	99	21.88	21.87	22.18	22	2
20	16QAM	50	0	20.88	20.89	21.11		
20	16QAM	50	24	20.84	20.85	21.08		
20	16QAM	50	50	20.76	20.81	21.03	22	2
20	16QAM	100	0	20.78	20.84	21.04		
20	64QAM	1	0	20.88	20.85	21.28		
20	64QAM	1	49	20.85	20.86	21.10	21	3
20	64QAM	1	99	20.72	20.88	21.04		
20	64QAM	50	0	19.90	19.92	20.09		
20	64QAM	50	24	19.84	19.87	20.12	21	3
20	64QAM	50	50	19.77	19.81	20.03		
20	64QAM	100	0	19.84	19.88	20.05		
Channel								
Frequency (MHz)				25625	21100	21375		
15	QPSK	1	0	22.70	22.78	23.08	24	0
15	QPSK	1	37	22.81	22.88	22.94		
15	QPSK	1	74	22.63	22.68	22.93		
15	QPSK	36	0	21.78	21.81	22.02	23	1
15	QPSK	36	20	21.81	21.76	22.01		
15	QPSK	36	39	21.73	21.73	21.98		
15	QPSK	75	0	21.74	21.81	22.01	23	1
15	16QAM	1	0	21.79	22.01	22.29		
15	16QAM	1	37	21.79	21.82	22.27		
15	16QAM	1	74	21.80	21.85	22.28	22	2
15	16QAM	36	0	20.80	20.86	21.07		
15	16QAM	36	20	20.82	20.82	21.05		
15	16QAM	36	39	20.72	20.75	21.04	22	2
15	16QAM	75	0	20.84	20.88	21.07		
15	64QAM	1	0	20.85	20.96	21.18		
15	64QAM	1	37	20.71	20.86	21.11	22	2
15	64QAM	1	74	20.76	20.86	21.05		
15	64QAM	36	0	19.83	19.80	20.13		
15	64QAM	36	20	19.80	19.87	20.15	21	3
15	64QAM	36	39	19.79	19.79	20.08		
15	64QAM	75	0	19.84	19.82	20.09		
Channel								
Frequency (MHz)				25625	21100	21400		
10	QPSK	1	0	22.79	22.77	23.04	24	0
10	QPSK	1	25	22.68	22.71	23.03		
10	QPSK	1	49	22.85	22.89	22.96		
10	QPSK	25	0	21.72	21.82	22.06	23	1
10	QPSK	25	12	21.75	21.79	22.07		
10	QPSK	25	25	21.75	21.79	22.00		
10	QPSK	50	0	21.79	21.81	22.04	23	1
10	16QAM	1	0	21.92	22.06	22.34		
10	16QAM	1	25	21.88	21.94	22.24		
10	16QAM	1	49	21.89	21.96	22.21	23	1
10	16QAM	25	0	20.76	20.87	21.11		
10	16QAM	25	12	20.83	20.87	21.10		
10	16QAM	25	25	20.81	20.82	21.04	22	2
10	16QAM	50	0	20.87	20.83	21.11		
10	64QAM	1	0	20.88	20.90	21.19		
10	64QAM	1	25	20.80	20.84	21.16	22	2
10	64QAM	1	49	20.88	20.85	21.18		
10	64QAM	25	0	19.79	19.86	20.10		
10	64QAM	25	12	19.82	19.87	20.13	21	3
10	64QAM	25	25	19.78	19.82	20.09		
10	64QAM	50	0	19.87	19.83	20.08		
Channel								
Frequency (MHz)				25775	21100	21425		
5	QPSK	1	0	22.70	22.74	23.00	24	0
5	QPSK	1	12	22.76	22.79	23.08		
5	QPSK	1	24	22.70	22.73	23.04		
5	QPSK	12	0	21.79	21.77	22.06	23	1
5	QPSK	12	7	21.80	21.79	22.12		
5	QPSK	12	13	21.76	21.80	22.04		
5	QPSK	25	0	21.81	21.82	22.09	23	1
5	16QAM	1	0	21.89	21.95	22.25		
5	16QAM	1	12	21.95	22.00	22.24		
5	16QAM	1	24	21.88	21.90	22.10	23	1
5	16QAM	1	24	21.88	21.90	22.10		
5	16QAM	12	0	20.80	20.86	21.18		
5	16QAM	12	7	20.78	20.84	21.12	22	2
5	16QAM	12	7	20.78	20.88	21.17		
5	16QAM	12	13	20.76	20.83	21.14		
5	16QAM	25	0	20.77	20.84	21.13	22	2
5	64QAM	1	0	20.88	20.93	21.28		
5	64QAM	1	12	20.83	20.90	21.21		
5	64QAM	1	24	20.80	20.86	21.18	22	2
5	64QAM	12	0	19.90	19.86	20.18		
5	64QAM	12	7	19.84	19.91	20.18		
5	64QAM	12	13	19.86	19.87	20.15	21	3
5	64QAM	25	0	19.84	19.84	20.16		

LTE Band 12

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	22.92	23.09	23.04	24	0
10	QPSK	1	25	22.82	23.00	22.94		
10	QPSK	1	49	22.79	22.91	22.93		
10	QPSK	25	0	22.02	22.08	22.06	23	1
10	QPSK	25	12	22.06	22.04	22.01		
10	QPSK	25	25	22.02	22.00	22.00		
10	QPSK	50	0	22.07	22.06	22.01	23	1
10	16QAM	1	0	22.21	22.27	22.40		
10	16QAM	1	25	22.24	22.25	22.20		
10	16QAM	1	49	22.18	22.28	22.23	22	2
10	16QAM	25	0	21.17	21.20	21.13		
10	16QAM	25	12	21.18	21.17	21.10		
10	16QAM	25	25	21.11	21.07	21.07	22	2
10	16QAM	50	0	21.15	21.11	21.13		
10	64QAM	1	0	21.25	21.28	21.40		
10	64QAM	1	25	21.30	21.28	21.25	22	2
10	64QAM	1	49	21.19	21.22	21.13		
10	64QAM	25	0	20.19	20.17	20.17		
10	64QAM	25	12	20.19	20.15	20.14	21	3
10	64QAM	25	25	20.12	20.05	20.08		
10	64QAM	50	0	20.18	20.14	20.12		
Channel								
Frequency (MHz)				23035	23095	23155		
5	QPSK	1	0	23.08	22.98	23.02	24	0
5	QPSK	1	12	22.99	23.00	22.97		
5	QPSK	1	24	22.97	22.95	22.91		
5	QPSK	12	0	22.06	22.07	22.02	23	1
5	QPSK	12	7	22.03	22.07	22.02		
5	QPSK	12	13	22.00	22.02	21.99		
5	QPSK	25	0	22.04	22.05	21.97	23	1
5	16QAM	1	0	22.35	22.32	22.33		
5	16QAM	1	12	22.35	22.28	22.26		
5	16QAM	1	24	22.27	22.31	22.26	22	2
5	16QAM	12	0	21.11	21.16	21.09		
5	16QAM	12	7	21.18	21.12	21.12		
5	16QAM	12	13	21.12	21.09	21.05	22	2
5	16QAM	25	0	21.11	21.13	21.08		
5	64QAM	1	0	21.29	21.24	21.22		
5	64QAM	1	12	21.29	21.22	21.27	22	2
5	64QAM	1	24	21.16	21.17	21.09		
5	64QAM	12	0	20.13	20.17	20.14		
5	64QAM	12	7	20.22	20.20	20.12	21	3
5	64QAM	12	13	20.11	20.13	20.10		
5	64QAM	25	0	20.10	20.11	20.08		
Channel								
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	23.05	23.06	23.00	24	0
3	QPSK	1	8	23.04	23.00	22.95		
3	QPSK	1	14	23.01	22.99	22.95		
3	QPSK	8	0	22.08	22.05	21.98	23	1
3	QPSK	8	4	22.07	22.06	21.96		
3	QPSK	8	7	22.02	22.05	21.97		
3	QPSK	15	0	22.07	22.04	22.00	23	1
3	16QAM	1	0	22.28	22.27	22.32		
3	16QAM	1	8	22.29	22.26	22.28		
3	16QAM	1	14	22.22	22.31	22.14	22	2
3	16QAM	8	0	21.16	21.19	21.14		
3	16QAM	8	4	21.16	21.17	21.12		
3	16QAM	8	7	21.14	21.14	21.09	22	2
3	16QAM	15	0	21.14	21.13	21.10		
3	64QAM	1	0	21.28	21.26	21.27		
3	64QAM	1	8	21.27	21.30	21.21	22	



LTE Band 14

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
793								
10	QPSK	1	0	23.11			24	0
10	QPSK	1	25	23.10				
10	QPSK	1	49	23.02				
10	QPSK	25	0	22.10			23	1
10	QPSK	25	12	22.01				
10	QPSK	50	0	22.09				
10	16QAM	1	0	21.53			23	1
10	16QAM	1	25	22.34				
10	16QAM	1	49	22.18				
10	16QAM	25	0	21.08			22	2
10	16QAM	25	12	21.17				
10	16QAM	25	25	21.13				
10	16QAM	50	0	21.17			22	2
10	16QAM	50	0	20.98				
10	16QAM	50	0	21.25				
10	64QAM	1	25	21.25			21	3
10	64QAM	1	49	21.32				
10	64QAM	25	0	20.05				
10	64QAM	25	12	20.18			21	3
10	64QAM	25	25	20.12				
10	64QAM	50	0	20.15				
Channel								
Frequency (MHz)								
23305								
5	QPSK	1	0	22.81	22.91	23.08	24	0
5	QPSK	1	12	22.90	22.93	23.10		
5	QPSK	1	24	23.06	23.06	23.05		
5	QPSK	12	0	21.88	22.03	22.07	23	1
5	QPSK	12	7	22.07	22.09	22.07		
5	QPSK	12	13	21.92	22.02	22.12		
5	QPSK	25	0	22.06	22.05	22.03	23	1
5	16QAM	1	0	21.92	22.13	22.26		
5	16QAM	1	12	22.13	22.31	22.38		
5	16QAM	1	24	22.29	22.32	22.17	22	2
5	16QAM	12	0	20.87	21.11	21.09		
5	16QAM	12	7	21.03	21.08	21.12		
5	16QAM	12	13	20.96	21.06	21.20	22	2
5	16QAM	25	0	20.99	21.13	21.10		
5	64QAM	1	0	20.91	21.07	21.30		
5	64QAM	1	12	21.12	21.27	21.35	22	2
5	64QAM	1	24	21.23	21.30	21.24		
5	64QAM	12	0	19.86	20.17	20.16		
5	64QAM	12	7	20.06	20.10	20.22	21	3
5	64QAM	12	13	20.10	20.16	20.25		
5	64QAM	25	0	20.04	20.12	20.15		

LTE Band 17

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
709								
10	QPSK	1	0	23.14	23.11	23.11	24	0
10	QPSK	1	25	23.05	23.01	22.85		
10	QPSK	1	49	22.79	22.81	22.77		
10	QPSK	25	0	22.14	22.10	22.07	23	1
10	QPSK	25	12	22.09	22.10	22.09		
10	QPSK	25	25	22.00	22.03	21.92		
10	16QAM	1	0	22.11	22.09	22.07	23	1
10	16QAM	1	0	22.52	22.39	22.38		
10	16QAM	1	25	22.31	22.36	22.16		
10	16QAM	1	49	22.15	22.21	22.05	22	2
10	16QAM	25	0	21.18	21.20	21.17		
10	16QAM	25	12	21.19	21.13	21.17		
10	16QAM	25	25	21.11	21.08	20.98	22	2
10	16QAM	50	0	21.16	21.15	21.13		
10	64QAM	1	0	21.44	21.27	21.42		
10	64QAM	1	25	21.23	21.34	21.10	21	3
10	64QAM	1	49	21.15	21.08	21.02		
10	64QAM	25	0	20.21	20.19	20.17		
10	64QAM	25	12	20.15	20.20	20.16	21	3
10	64QAM	25	25	20.13	20.15	20.03		
10	64QAM	50	0	20.16	20.19	20.14		
Channel								
Frequency (MHz)								
23755								
5	QPSK	1	0	23.12	23.07	22.85	24	0
5	QPSK	1	12	23.07	22.99	22.91		
5	QPSK	1	24	23.05	22.98	22.83		
5	QPSK	12	0	22.15	22.07	21.92	23	1
5	QPSK	12	7	22.10	22.05	21.90		
5	QPSK	12	13	22.03	22.01	21.89		
5	QPSK	25	0	22.06	22.05	21.88	23	1
5	16QAM	1	0	22.55	22.42	22.21		
5	16QAM	1	12	22.43	22.37	22.20		
5	16QAM	1	24	22.36	22.20	22.14	22	2
5	16QAM	12	0	21.20	21.14	21.08		
5	16QAM	12	7	21.19	21.12	21.05		
5	16QAM	12	13	21.16	21.14	21.00	22	2
5	16QAM	25	0	21.20	21.14	21.01		
5	64QAM	1	0	21.49	21.36	21.10		
5	64QAM	1	12	21.29	21.23	21.14	22	2
5	64QAM	1	24	21.23	21.10	21.02		
5	64QAM	12	0	20.27	20.22	20.04		
5	64QAM	12	7	20.25	20.22	20.06	21	3
5	64QAM	12	13	20.19	20.15	20.01		
5	64QAM	25	0	20.18	20.12	19.99		

LTE Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
1800								
20	QPSK	1	0	23.15	23.09	22.90	24	0
20	QPSK	1	49	22.90	22.90	22.86		
20	QPSK	1	99	22.89	22.96	22.88		
20	QPSK	50	0	22.07	22.02	21.93	23	1
20	QPSK	50	24	21.97	21.96	21.97		
20	QPSK	50	50	21.94	21.89	21.82		
20	16QAM	1	0	22.56	22.51	22.56	23	1
20	16QAM	1	0	22.56	22.49	22.18		
20	16QAM	1	49	22.22	22.19	22.23		
20	16QAM	1	99	22.41	22.40	22.20	22	2
20	16QAM	50	0	21.15	21.15	21.00		
20	16QAM	50	24	21.11	21.09	21.09		
20	16QAM	50	50	21.02	21.02	21.03	22	2
20	16QAM	100	0	21.08	21.04	21.01		
20	64QAM	1	0	21.52	21.41	21.13		
20	64QAM	1	49	21.24	21.20	21.23	22	2
20	64QAM	1	99	21.39	21.30	21.20		
20	64QAM	50	0	20.16	20.10	20.02		
20	64QAM	50	24	20.07	20.05	20.05	21	3
20	64QAM	50	50	20.05	19.97	20.08		
20	64QAM	100	0	20.07	20.08	20.01		
Channel								
Frequency (MHz)								
2615								
15	QPSK	1	0	23.02	22.89	22.97	24	0
15	QPSK	1	37	22.93	22.80	22.86		
15	QPSK	1	74	22.88	22.85	22.83		
15	QPSK	36	0	22.08	22.00	21.88	23	1
15	QPSK	36	20	22.02	21.99	21.91		
15	QPSK	36	39	22.00	21.91	21.92		
15	QPSK	75	0	22.00	21.93	21.95	23	1
15	16QAM	1	0	22.34	22.33	22.35		
15	16QAM	1	37	22.29	22.19	22.17		
15	16QAM	1	74	22.15	22.00	22.25	22	2
15	16QAM	36	0	21.19	21.10	21.07		
15	16QAM	36	20	21.14	21.03	21.03		
15	16QAM	36	39	21.13	21.04	21.03	22	2
15	16QAM	75	0	21.12	21.05	21.07		
15	64QAM	1	0	21.31	21.27	21.38		
15	64QAM	1	37	21.26	21.09	21.15	22	2
15	64QAM	1	74	21.18	21.15	21.20		
15	64QAM	36	0	20.21	20.12	20.13		
15	64QAM	36	20	20.18	20.12	20.08	21	3
15	64QAM	36	39	20.14	20.03	20.03		
15	64QAM	75	0	20.12	20.02	20.04		
Channel								
Frequency (MHz)								
1855								
10	QPSK	1	0	23.16	23.05	22.87	24	0
10	QPSK	1	25	22.93	22.82	22.82		
10	QPSK	1	49	23.09	23.00	22.89		
10	QPSK	25	0	22.01	21.94	21.83	23	1
10	QPSK	25	12	21.96	21.95	21.85		
10	QPSK	25	25	21.93	21.91	21.79		
10	QPSK	50	0	21.95	21.92	21.82	23	1
10	16QAM	1	0	22.55	22.40	22.08		
10	16QAM	1	25	22.25	22.19	22.07		
10	16QAM	1	49	22.49	22.41	22.10	22	2
10	16QAM	25	0	21.13	21.07	20.96		
10	16QAM	25	12	21.09	21.01	20.88		
10	16QAM	25	25	21.05	20.97	20.94	22	2
10	16QAM	50	0	21.10	21.07	20.96		
10	64QAM	1	0	21.46	21.26	21.06		
10	64QAM	1	25	21.10	21.12	21.00	22	2
10	64QAM	1	49	21.39	21.36	21.11		
10	64QAM	25	0	20.15	19.95	19.99		
10	64QAM	25	12	20.13	20.06	19.94	21	3
10	64QAM	25	25	20.04	20.00	19.95		
10	64QAM							



LTE Band 26									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				26765	26865	26965			
Frequency (MHz)				831.5	831.5	841.5			
15	QPSK	1	0	23.17	23.30	23.20			
15	QPSK	1	37	23.20	23.05	22.96			
15	QPSK	1	74	22.92	23.04	22.82			
15	QPSK	36	0	22.25	22.28	22.19			
15	QPSK	36	20	22.26	22.26	22.07			
15	QPSK	36	39	22.12	22.15	21.95			
15	QPSK	75	0	22.21	22.29	22.17			
15	16QAM	1	0	22.38	22.52	22.45			
15	16QAM	1	37	22.52	22.42	22.28			
15	16QAM	1	74	22.27	22.29	22.09			
15	16QAM	36	0	21.33	21.25	21.32			
15	16QAM	36	20	21.35	21.35	21.13			
15	16QAM	36	39	21.27	21.21	21.02			
15	16QAM	75	0	21.29	21.35	21.20			
15	64QAM	1	0	21.36	21.47	21.48			
15	64QAM	1	37	21.51	21.41	21.24			
15	64QAM	1	74	21.22	21.31	21.07			
15	64QAM	36	0	20.41	20.32	20.33			
15	64QAM	36	20	20.39	20.43	20.14			
15	64QAM	36	39	20.29	20.27	20.08			
15	64QAM	75	0	20.33	20.32	20.22			
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	23.15	23.11	22.97			
10	QPSK	1	25	23.09	23.17	22.89			
10	QPSK	1	49	23.08	23.00	22.80			
10	QPSK	25	0	22.20	22.27	22.01			
10	QPSK	25	12	22.19	22.25	21.99			
10	QPSK	25	25	22.22	22.21	21.91			
10	QPSK	50	0	22.24	22.23	21.98			
10	16QAM	1	0	22.53	22.45	22.21			
10	16QAM	1	25	22.34	22.55	22.31			
10	16QAM	1	49	22.31	22.35	22.08			
10	16QAM	25	0	21.28	21.32	21.13			
10	16QAM	25	12	21.25	21.35	21.08			
10	16QAM	25	25	21.28	21.30	21.03			
10	16QAM	50	0	21.30	21.29	21.07			
10	64QAM	1	0	21.41	21.36	21.28			
10	64QAM	1	25	21.31	21.50	21.17			
10	64QAM	1	49	21.38	21.41	21.03			
10	64QAM	25	0	20.28	20.37	20.15			
10	64QAM	25	12	20.24	20.32	20.13			
10	64QAM	25	25	20.27	20.26	20.04			
10	64QAM	50	0	20.34	20.34	20.09			
Channel				26715	26865	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	23.18	23.22	22.96			
5	QPSK	1	12	23.13	23.21	22.84			
5	QPSK	1	24	23.08	23.15	22.83			
5	QPSK	12	0	22.19	22.19	21.93			
5	QPSK	12	7	22.22	22.23	21.99			
5	QPSK	12	13	22.16	22.19	21.93			
5	QPSK	25	0	22.17	22.23	21.89			
5	16QAM	1	0	22.38	22.58	22.19			
5	16QAM	1	12	22.46	22.45	22.24			
5	16QAM	1	24	22.45	22.41	22.08			
5	16QAM	12	0	21.23	21.34	21.04			
5	16QAM	12	7	21.29	21.33	21.03			
5	16QAM	12	13	21.22	21.30	21.02			
5	16QAM	25	0	21.23	21.32	21.04			
5	64QAM	1	0	21.45	21.53	21.18			
5	64QAM	1	12	21.37	21.62	21.18			
5	64QAM	1	24	21.36	21.54	21.11			
5	64QAM	12	0	20.34	20.35	20.10			
5	64QAM	12	7	20.33	20.41	20.16			
5	64QAM	12	13	20.24	20.31	20.08			
5	64QAM	25	0	20.24	20.35	20.01			
Channel				26715	26865	27015			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	23.26	23.29	22.99			
3	QPSK	1	8	23.24	23.26	22.82			
3	QPSK	1	14	23.19	23.23	22.83			
3	QPSK	8	0	22.26	22.32	22.01			
3	QPSK	8	4	22.27	22.32	22.00			
3	QPSK	8	7	22.27	22.26	21.99			
3	QPSK	15	0	22.27	22.31	22.03			
3	16QAM	1	0	22.42	22.65	22.35			
3	16QAM	1	8	22.50	22.60	22.30			
3	16QAM	1	14	22.41	22.57	22.18			
3	16QAM	8	0	21.37	21.47	21.13			
3	16QAM	8	4	21.36	21.47	21.17			
3	16QAM	8	7	21.39	21.46	21.14			
3	16QAM	15	0	21.40	21.40	21.12			
3	64QAM	1	0	21.51	21.54	21.28			
3	64QAM	1	8	21.51	21.54	21.23			
3	64QAM	1	14	21.51	21.45	21.25			
3	64QAM	8	0	20.39	20.45	20.19			
3	64QAM	8	4	20.39	20.50	20.16			
3	64QAM	8	7	20.39	20.41	20.11			
3	64QAM	15	0	20.37	20.39	20.07			
Channel				26697	26865	27033			
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	23.11	23.12	22.83			
1.4	QPSK	1	3	23.20	23.22	22.91			
1.4	QPSK	1	5	23.12	23.15	22.82			
1.4	QPSK	3	0	23.20	23.22	22.88			
1.4	QPSK	3	1	23.20	23.26	22.90			
1.4	QPSK	3	3	23.16	23.21	22.85			
1.4	QPSK	6	0	22.21	22.25	21.86			
1.4	16QAM	1	0	22.48	22.46	22.10			
1.4	16QAM	1	3	22.52	22.51	22.21			
1.4	16QAM	1	5	22.33	22.53	22.06			
1.4	16QAM	3	0	22.22	22.25	22.03			
1.4	16QAM	3	1	22.23	22.29	22.03			
1.4	16QAM	3	3	22.17	22.24	21.92			
1.4	16QAM	6	0	21.31	21.34	21.09			
1.4	64QAM	1	0	21.31	21.50	21.17			
1.4	64QAM	1	3	21.39	21.49	21.15			
1.4	64QAM	1	5	21.37	21.48	21.13			
1.4	64QAM	3	0	21.35	21.46	21.15			
1.4	64QAM	3	1	21.37	21.51	21.14			
1.4	64QAM	3	3	21.33	21.36	21.02			
1.4	64QAM	6	0	20.24	20.31	19.97			

LTE Band 30									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				27710	27710	27710			
Frequency (MHz)				2310	2310	2310			
10	QPSK	1	0	23.31					
10	QPSK	1	25	23.26					
10	QPSK	1	49	23.30					
10	QPSK	25	0	22.32					
10	QPSK	25	12	22.31					
10	QPSK	25	25	22.26					
10	QPSK	50	0	22.31					
10	16QAM	1	0	22.65					
10	16QAM	1	25	22.60					
10	16QAM	1	49	22.57					
10	16QAM	25	0	21.47					
10	16QAM	25	12	21.47					
10	16QAM	25	25	21.46					
10	16QAM	50	0	21.40					
10	64QAM	1	0	21.54					
10	64QAM	1	25	21.54					
10	64QAM	1	49	21.45					
10	64QAM	25	0	20.45					
10	64QAM	25	12	20.50					
10	64QAM	25	25	20.41					
10	64QAM	50	0	20.39					
Channel				27685	27710	27735			
Frequency (MHz)				2307.5	2310	2312.5			
5	QPSK	1	0	23.30	23.23	23.28			
5	QPSK	1	12	23.20	23.19	23.14			
5	QPSK	1	24	23.23	23.16	23.17			
5	QPSK	12	0	22.18	22.25	22.21			



LTE Band 66

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	23.05	22.93	23.00	24	0
20	QPSK	1	49	22.83	22.77	22.85		
20	QPSK	1	99	22.82	22.77	22.86		
20	QPSK	50	0	22.01	21.87	21.94	23	1
20	QPSK	50	24	21.91	21.85	21.96		
20	QPSK	50	50	21.89	21.85	21.87		
20	QPSK	100	0	21.97	21.95	21.96	23	1
20	16QAM	1	0	22.45	22.32	22.43		
20	16QAM	1	49	22.18	22.10	22.23		
20	16QAM	1	99	22.24	22.09	22.24	22	2
20	16QAM	50	0	21.02	21.00	21.12		
20	16QAM	50	24	21.03	20.97	21.05		
20	16QAM	50	50	21.00	20.92	21.00	22	2
20	16QAM	100	0	21.02	20.91	21.04		
20	64QAM	1	0	21.30	21.10	21.32		
20	64QAM	1	49	21.11	20.99	21.12	21	3
20	64QAM	1	99	21.11	21.03	21.16		
20	64QAM	50	0	20.03	20.02	19.98		
20	64QAM	50	24	20.04	19.92	20.05	21	3
20	64QAM	50	50	19.95	19.93	19.98		
20	64QAM	100	0	19.98	19.92	19.91		
Channel								
Frequency (MHz)								
15	QPSK	1	0	22.96	22.86	22.93	24	0
15	QPSK	1	37	22.87	22.72	22.91		
15	QPSK	1	74	22.77	22.60	22.85		
15	QPSK	36	0	21.95	21.81	21.90	23	1
15	QPSK	36	20	21.90	21.78	21.90		
15	QPSK	36	39	21.87	21.76	21.87		
15	QPSK	75	0	21.87	21.85	21.88	23	1
15	16QAM	1	0	22.37	22.18	22.22		
15	16QAM	1	37	22.18	22.08	22.07		
15	16QAM	1	74	22.07	22.13	22.14	22	2
15	16QAM	36	0	21.03	20.93	21.03		
15	16QAM	36	20	20.99	20.87	20.94		
15	16QAM	36	39	20.96	20.86	20.93	22	2
15	16QAM	75	0	20.98	20.87	20.98		
15	64QAM	1	0	21.23	21.12	21.16		
15	64QAM	1	37	20.94	20.98	20.93	21	3
15	64QAM	1	74	20.97	20.88	20.94		
15	64QAM	36	0	20.01	19.91	19.97		
15	64QAM	36	20	19.98	19.90	19.97	21	3
15	64QAM	36	39	19.92	19.85	19.94		
15	64QAM	75	0	19.99	19.96	19.97		
Channel								
Frequency (MHz)								
10	QPSK	1	0	22.92	22.81	22.91	24	0
10	QPSK	1	25	22.84	22.75	22.87		
10	QPSK	1	49	22.81	22.76	22.83		
10	QPSK	25	0	21.97	21.88	21.91	23	1
10	QPSK	25	12	21.87	21.85	21.88		
10	QPSK	25	25	21.90	21.84	21.85		
10	QPSK	50	0	21.94	21.81	21.88	23	1
10	16QAM	1	0	22.23	22.20	22.21		
10	16QAM	1	25	22.14	22.08	22.12		
10	16QAM	1	49	22.16	22.10	22.18	22	2
10	16QAM	25	0	20.99	20.91	20.98		
10	16QAM	25	12	20.98	20.89	21.00		
10	16QAM	25	25	20.95	20.87	20.97	22	2
10	64QAM	50	0	20.98	20.92	21.00		
10	64QAM	1	0	21.12	21.02	21.00		
10	64QAM	1	25	21.06	21.00	20.95	21	3
10	64QAM	1	49	21.14	21.03	21.00		
10	64QAM	25	0	20.00	19.78	19.95		
10	64QAM	25	12	20.01	19.89	19.97	21	3
10	64QAM	25	25	19.92	19.86	19.94		
10	64QAM	50	0	19.97	19.90	19.90		
Channel								
Frequency (MHz)								
5	QPSK	1	0	22.90	22.79	22.87	24	0
5	QPSK	1	12	22.85	22.75	22.79		
5	QPSK	1	24	22.87	22.74	22.81		
5	QPSK	12	0	21.91	21.81	21.87	23	1
5	QPSK	12	7	21.89	21.77	21.84		
5	QPSK	12	13	21.93	21.81	21.83		
5	QPSK	25	0	21.93	21.80	21.83	23	1
5	16QAM	1	0	22.20	22.09	22.13		
5	16QAM	1	12	22.24	22.04	22.20		
5	16QAM	1	24	22.16	22.08	22.17	22	2
5	16QAM	12	0	21.02	20.93	20.99		
5	16QAM	12	7	21.00	20.89	20.99		
5	16QAM	12	13	20.93	20.87	20.96	22	2
5	16QAM	25	0	20.95	20.86	20.93		
5	64QAM	1	0	21.18	20.97	21.10		
5	64QAM	1	12	21.24	20.97	21.05	22	2
5	64QAM	1	24	21.14	20.97	21.09		
5	64QAM	12	0	20.00	19.90	20.00		
5	64QAM	12	7	20.07	19.98	19.98	21	3
5	64QAM	12	13	20.01	19.90	20.02		
5	64QAM	25	0	19.98	19.87	19.98		
Channel								
Frequency (MHz)								
3	QPSK	1	0	22.84	22.75	22.78	24	0
3	QPSK	1	8	22.87	22.76	22.83		
3	QPSK	1	14	22.81	22.70	22.75		
3	QPSK	8	0	21.85	21.75	21.81	23	1
3	QPSK	8	4	21.88	21.79	21.88		
3	QPSK	8	7	21.91	21.81	21.82		
3	QPSK	15	0	21.93	21.77	21.81	23	1
3	16QAM	1	0	22.29	22.05	22.11		
3	16QAM	1	8	22.14	21.98	22.23		
3	16QAM	1	14	22.19	22.02	22.17	22	2
3	16QAM	8	0	21.03	20.90	20.98		
3	16QAM	8	4	21.03	20.96	20.97		
3	16QAM	8	7	20.96	20.89	20.93	22	2
3	16QAM	15	0	21.01	20.87	20.96		
3	64QAM	1	0	21.08	21.04	21.04		
3	64QAM	1	8	21.18	21.02	21.09	22	2
3	64QAM	1	14	21.14	21.00	20.99		
3	64QAM	8	0	20.02	19.77	19.94		
3	64QAM	8	4	19.99	19.89	19.94	21	3
3	64QAM	8	7	20.02	19.77	19.90		
3	64QAM	15	0	19.95	19.82	19.87		
Channel								
Frequency (MHz)								
1.4	QPSK	1	0	22.70	22.59	22.65	24	0
1.4	QPSK	1	3	22.79	22.67	22.73		
1.4	QPSK	1	5	22.73	22.62	22.61		
1.4	QPSK	3	0	22.78	22.64	22.69	23	1
1.4	QPSK	3	1	22.82	22.65	22.77		
1.4	QPSK	3	3	22.78	22.67	22.69		
1.4	QPSK	8	0	21.75	21.59	21.71	23	1
1.4	16QAM	1	0	21.97	21.95	21.95		
1.4	16QAM	1	3	22.14	21.96	22.05		
1.4	16QAM	1	5	21.99	21.94	21.89	23	1
1.4	16QAM	3	0	21.86	21.72	21.79		
1.4	16QAM	3	1	21.83	21.74	21.85		
1.4	16QAM	3	3	21.85	21.70	21.79	22	2
1.4	16QAM	8	0	20.91	20.77	20.89		
1.4	64QAM	1	0	20.98	20.87	20.94		
1.4	64QAM	1	3	20.93	20.87	20.97	22	2
1.4	64QAM	1	5	21.00	20.82	20.70		
1.4	64QAM	3	0	20.81	20.79	20.80		
1.4	64QAM	3	1	20.76	20.80	20.82	21	3
1.4	64QAM	3	3	20.93	20.76	20.79		
1.4	64QAM	6	0	19.85	19.74	19.80		

LTE Band 71

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	23.12	22.99	23.03	24	0
20	QPSK	1	49	22.90	22.81	22.85		
20	QPSK	1	99	22.66	22.69	22.64		
20	QPSK	50	0	22.07	22.04	21.94	23	1
20	QPSK	50	24	22.00	21.94	21.84		
20	QPSK	50	50	21.96	21.83	21.78		
20	QPSK	100	0	21.98	21.96	21.93	23	1
20	16QAM	1	0	22.46	22.31	22.21		
20	16QAM	1	49	22.13	22.14	22.13		
20	16QAM	1	99	22.02	22.00	21.98	22	2
20	16QAM	50	0	21.15	21.05	21.00		
20	16QAM	50	24	21.05	20.98	20.89		
20	16QAM	50	50	21.03	20.84	20.83	22	2
20	16QAM	100	0	20.98	20.91	20.86		
20	64QAM	1	0	21.38	21.16	21.33		
20	64QAM	1	49	21.18	21.07	20.97	22	2
20	64QAM	1	99	21.01	20.94	20.94		
20	64QAM	50	0	20.16	20.11	19.97		
20	64QAM	50	24	20.05	19.96	19.87	21	3
20	64QAM	50	50	20.05	19.85	19.85		
20	64QAM	100	0	20.04	19.97	19.85		
Channel								
Frequency (MHz)								



LTE Band 38

BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)		
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.				
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.82	22.87	22.77	24	0		
20	QPSK	1	49	22.68	22.68	22.53				
20	QPSK	1	99	22.68	22.52	22.59				
20	QPSK	50	0	21.84	21.84	21.66				
20	QPSK	50	24	21.73	21.75	21.58	23	1		
20	QPSK	50	50	21.75	21.95	21.53				
20	QPSK	100	0	21.73	21.73	21.59				
20	16QAM	1	0	21.96	21.98	21.87				
20	16QAM	1	49	21.81	21.81	21.66	23	1		
20	16QAM	1	99	21.82	21.68	21.55				
20	16QAM	50	0	20.93	20.94	20.76				
20	16QAM	50	24	20.85	20.86	20.71				
20	16QAM	50	50	20.87	20.81	20.64	22	2		
20	16QAM	100	0	20.83	20.85	20.71				
20	84QAM	1	0	20.54	20.60	20.53				
20	84QAM	1	49	20.43	20.42	20.30				
20	84QAM	1	99	20.45	20.30	20.15	22	2		
20	84QAM	50	0	19.92	19.94	19.77				
20	84QAM	50	24	19.83	19.85	19.69				
20	84QAM	50	50	19.84	19.78	19.63				
20	84QAM	100	0	19.81	19.86	19.68	21	3		
Channel				37825	38000	38175				
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	22.78	22.78	22.74			24	0
15	QPSK	1	37	22.71	22.70	22.57				
15	QPSK	1	74	22.67	22.58	22.43				
15	QPSK	38	0	21.78	21.77	21.63				
15	QPSK	38	20	21.72	21.72	21.62	23	1		
15	QPSK	38	39	21.61	21.62	21.62				
15	QPSK	75	0	21.74	21.70	21.56				
15	16QAM	1	0	21.88	22.02	21.89				
15	16QAM	1	37	21.82	21.85	21.74	23	1		
15	16QAM	1	74	21.79	21.68	21.59				
15	16QAM	38	0	20.82	20.86	20.72				
15	16QAM	38	20	20.80	20.82	20.68				
15	16QAM	38	39	20.71	20.73	20.63	22	2		
15	16QAM	75	0	20.83	20.85	20.68				
15	84QAM	1	0	20.55	20.62	20.48				
15	84QAM	1	37	20.48	20.45	20.39				
15	84QAM	1	74	20.40	20.32	20.21	22	2		
15	84QAM	38	0	19.88	19.87	19.71				
15	84QAM	38	20	19.82	19.82	19.69				
15	84QAM	38	39	19.74	19.76	19.61				
15	84QAM	75	0	19.85	19.85	19.70	21	3		
Channel				37800	38000	38200				
Frequency (MHz)				2574	2595	2615				
10	QPSK	1	0	22.68	22.79	22.84			24	0
10	QPSK	1	25	22.64	22.68	22.49				
10	QPSK	1	49	22.68	22.65	22.44				
10	QPSK	25	0	21.64	21.72	21.59				
10	QPSK	25	12	21.73	21.71	21.59	23	1		
10	QPSK	25	25	21.67	21.64	21.42				
10	QPSK	50	0	21.73	21.72	21.59				
10	16QAM	1	0	21.84	21.90	21.80				
10	16QAM	1	25	21.78	21.85	21.81	23	1		
10	16QAM	1	49	21.75	21.78	21.53				
10	16QAM	25	0	20.75	20.85	20.71				
10	16QAM	25	12	20.84	20.82	20.73				
10	16QAM	25	25	20.77	20.75	20.54	22	2		
10	16QAM	50	0	20.85	20.84	20.73				
10	84QAM	1	0	20.49	20.57	20.42				
10	84QAM	1	25	20.38	20.44	20.29				
10	84QAM	1	49	20.40	20.39	20.21	22	2		
10	84QAM	25	0	19.81	19.86	19.72				
10	84QAM	25	12	19.92	19.87	19.75				
10	84QAM	25	25	19.83	19.81	19.60				
10	84QAM	50	0	19.85	19.82	19.68	21	3		
Channel				37775	38000	38225				
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	22.67	22.73	22.49			24	0
5	QPSK	1	12	22.63	22.72	22.48				
5	QPSK	1	24	22.58	22.61	22.40				
5	QPSK	12	0	21.68	21.71	21.49				
5	QPSK	12	7	21.67	21.73	21.50	23	1		
5	QPSK	12	13	21.61	21.70	21.49				
5	QPSK	25	0	21.61	21.68	21.44				
5	16QAM	1	0	21.78	21.84	21.62				
5	16QAM	1	12	21.75	21.81	21.63	23	1		
5	16QAM	1	24	21.71	21.79	21.59				
5	16QAM	12	0	20.70	20.79	20.54				
5	16QAM	12	7	20.72	20.77	20.58				
5	16QAM	12	13	20.70	20.75	20.55	22	2		
5	16QAM	25	0	20.72	20.80	20.57				
5	84QAM	1	0	20.44	20.47	20.28				
5	84QAM	1	12	20.39	20.46	20.26				
5	84QAM	1	24	20.38	20.44	20.23	22	2		
5	84QAM	12	0	19.81	19.85	19.65				
5	84QAM	12	7	19.81	19.88	19.65				
5	84QAM	12	13	19.77	19.86	19.61				
5	84QAM	25	0	19.79	19.85	19.64	21	3		

LTE Band 41

BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)		
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.				
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	22.87	22.86	22.82	24	0		
20	QPSK	1	49	22.50	22.60	22.67				
20	QPSK	1	99	22.81	22.58	22.71				
20	QPSK	50	0	21.57	21.79	21.83				
20	QPSK	50	24	21.63	21.70	21.76	23	1		
20	QPSK	50	50	21.62	21.58	21.71				
20	QPSK	100	0	21.65	21.69	21.76				
20	16QAM	1	0	21.73	22.02	22.01				
20	16QAM	1	49	21.70	21.82	21.79	23	1		
20	16QAM	1	99	21.77	21.75	21.87				
20	16QAM	50	0	20.73	20.94	20.92				
20	16QAM	50	24	20.78	20.82	20.85				
20	16QAM	50	50	20.76	20.70	20.81	22	2		
20	16QAM	100	0	20.77	20.81	20.77				
20	84QAM	1	0	20.50	20.81	20.72				
20	84QAM	1	49	20.38	20.55	20.54				
20	84QAM	1	99	20.47	20.51	20.56	22	2		
20	84QAM	50	0	19.66	19.87	19.90				
20	84QAM	50	24	19.73	19.79	19.80				
20	84QAM	50	50	19.74	19.69	19.73				
20	84QAM	100	0	19.81	19.86	19.88	21	3		
Channel				39725	40173	40620				
Frequency (MHz)				2503.5	2548.3	2593				
15	QPSK	1	0	22.51	22.81	22.79			24	0
15	QPSK	1	37	22.49	22.63	22.69				
15	QPSK	1	74	22.60	22.84	22.74				
15	QPSK	38	0	21.50	21.74	21.74				
15	QPSK	38	20	21.49	21.66	21.71	23	1		
15	QPSK	38	39	21.54	21.60	21.62				
15	QPSK	75	0	21.57	21.67	21.70				
15	16QAM	1	0	21.71	22.01	21.93				
15	16QAM	1	37	21.64	21.83	21.79	23	1		
15	16QAM	1	74	21.73	21.81	21.82				
15	16QAM	38	0	20.54	20.81	20.81				
15	16QAM	38	20	20.59	20.75	20.70				
15	16QAM	38	39	20.63	20.71	20.69	22	2		
15	16QAM	75	0	20.69	20.81	20.76				
15	84QAM	1	0	20.41	20.68	20.67				
15	84QAM	1	37	20.33	20.51	20.49				
15	84QAM	1	74	20.47	20.50	20.59	22	2		
15	84QAM	38	0	19.60	19.88	19.79				
15	84QAM	38	20	19.60	19.79	19.77				
15	84QAM	38	39	19.69	19.70	19.72				
15	84QAM	75	0	19.70	19.78	19.80	21	3		
Channel				39700	40160	40620				
Frequency (MHz)				2501	2547	2593				
10	QPSK	1	0	22.50	22.68	22.70			24	0
10	QPSK	1	25	22.45	22.64	22.68				
10	QPSK	1	49	22.47	22.55	22.67				
10	QPSK	25	0	21.48	21.67	21.72				
10	QPSK	25	12	21.48	21.61	21.69	23	1		
10	QPSK	25	25	21.44	21.57	21.64				
10	QPSK	50	0	21.44	21.63	21.72				
10	16QAM	1	0	21.66	21.86	21.88				
10	16QAM	1	25	21.61	21.79	21.84	23	1		
10	16QAM	1	49	21.57	21.69	21.74				
10	16QAM	25	0	20.58	20.81	20.84				
10	16QAM	25	12	20.58	20.78	20.73				
10	16QAM	25	25	20.53	20.71	20.76	22	2		
10	16QAM	50	0	20.59	20.78	20.83				
10	84QAM	1								



LTE Band 41 HPUe

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				3975.0	4018.5	4062.0	4105.5	4149.0		
Frequency (MHz)				2505	2548.5	2593	2636.5	2680		
20	QPSK	1	0	25.57	25.64	25.71	25.75	25.55	27	0
20	QPSK	1	49	25.55	25.50	25.50	25.57	25.53		
20	QPSK	1	99	25.43	25.50	25.70	25.56	25.44		
20	QPSK	50	0	24.46	24.47	24.63	24.89	24.73	26	1
20	QPSK	50	24	24.40	24.46	24.62	24.48	24.73		
20	QPSK	50	50	24.57	24.45	24.86	24.40	24.73		
20	QPSK	100	0	24.43	24.74	24.91	24.52	24.58	26	1
20	19QAM	1	0	24.58	24.77	24.91	24.81	24.73		
20	19QAM	1	49	24.42	24.76	24.84	24.90	24.68		
20	19QAM	1	99	24.76	24.83	24.76	24.80	24.86	25	2
20	19QAM	50	0	23.39	23.68	23.65	23.88	23.61		
20	19QAM	50	24	23.50	23.57	23.83	23.76	23.62		
20	19QAM	50	50	23.51	23.59	23.81	23.78	23.63	25	2
20	19QAM	100	0	23.45	23.62	23.93	23.75	23.77		
20	84QAM	1	0	23.80	24.08	23.87	23.96	23.78		
20	84QAM	1	49	23.84	23.59	23.96	23.94	23.71	24	3
20	84QAM	1	99	23.77	23.78	24.06	23.72	23.88		
20	84QAM	50	0	22.48	22.64	22.85	22.87	22.79		
20	84QAM	50	24	22.59	22.64	22.72	22.82	22.69	24	3
20	84QAM	50	50	22.58	22.65	22.70	22.66	22.70		
20	84QAM	100	0	22.81	22.79	22.92	22.73	22.83		
Channel				3972.5	4017.3	4062.0	4105.8	4151.5	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.48	25.49	25.42	25.38	25.67	27	0
15	QPSK	1	37	25.20	25.70	25.56	25.68	25.40		
15	QPSK	1	74	25.36	25.83	25.62	25.46	25.64		
15	QPSK	36	0	24.22	24.69	24.58	24.57	24.50	26	1
15	QPSK	36	20	24.31	24.68	24.54	24.59	24.51		
15	QPSK	36	39	24.35	24.40	24.54	24.45	24.67		
15	QPSK	75	0	24.40	24.40	24.67	24.71	24.55	26	1
15	19QAM	1	0	24.79	24.78	24.90	24.86	24.70		
15	19QAM	1	37	24.50	24.65	24.94	24.93	24.85		
15	19QAM	1	74	24.53	24.78	24.91	24.83	24.82	25	2
15	19QAM	36	0	23.63	23.75	23.66	23.89	23.61		
15	19QAM	36	20	23.80	23.84	23.63	23.83	23.63		
15	19QAM	36	39	23.62	23.51	23.81	23.79	23.61	25	2
15	19QAM	75	0	23.42	23.60	23.88	23.80	23.61		
15	84QAM	1	0	23.82	23.79	23.76	23.91	23.82		
15	84QAM	1	37	23.44	23.74	23.79	23.79	23.68	24	3
15	84QAM	1	74	23.54	23.75	23.93	23.67	23.94		
15	84QAM	36	0	22.72	22.72	22.79	22.84	22.96		
15	84QAM	36	20	22.76	22.71	22.95	22.68	22.79	24	3
15	84QAM	36	39	22.48	22.98	22.68	22.73	22.95		
15	84QAM	75	0	22.74	22.93	22.91	22.91	22.92		
Channel				3970.0	4016.0	4062.0	4109.0	4154.0	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501.0	2547.0	2593	2639.0	2685.0		
10	QPSK	1	0	25.41	25.25	25.68	25.46	25.47	27	0
10	QPSK	1	25	25.43	25.29	25.61	25.60	25.48		
10	QPSK	1	49	25.18	25.25	25.53	25.42	25.50		
10	QPSK	25	0	24.33	24.37	24.70	24.73	24.88	26	1
10	QPSK	25	12	24.33	24.73	24.66	24.68	24.52		
10	QPSK	25	25	24.24	24.34	24.69	24.54	24.50		
10	QPSK	50	0	24.25	24.37	24.61	24.53	24.67	26	1
10	19QAM	1	0	24.59	24.70	24.78	24.96	24.84		
10	19QAM	1	25	24.46	24.59	24.86	24.76	24.61		
10	19QAM	1	49	24.60	24.65	24.77	24.65	24.69	25	2
10	19QAM	25	0	23.55	23.59	23.76	23.77	23.79		
10	19QAM	25	12	23.45	23.57	23.81	23.80	23.62		
10	19QAM	25	25	23.55	23.77	23.74	23.58	23.80	25	2
10	19QAM	50	0	23.36	23.79	23.75	23.81	23.67		
10	84QAM	1	0	23.58	24.02	23.90	23.92	23.78		
10	84QAM	1	25	23.74	23.57	23.82	23.87	23.80	24	3
10	84QAM	1	49	23.79	23.62	23.97	23.76	23.82		
10	84QAM	25	0	22.61	22.67	22.83	22.83	22.73		
10	84QAM	25	12	22.62	22.84	22.86	22.66	22.75	24	3
10	84QAM	25	25	22.82	22.84	22.82	22.83	22.65		
10	84QAM	50	0	22.52	22.64	22.83	22.59	22.90		
Channel				3975.5	4014.8	4062.0	4109.3	4155.5	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.55	25.64	25.53	25.46	25.42	27	0
5	QPSK	1	12	25.23	25.23	25.63	25.47	25.45		
5	QPSK	1	24	25.19	25.24	25.42	25.36	25.55		
5	QPSK	12	0	24.34	24.39	24.68	24.56	24.67	26	1
5	QPSK	12	7	24.53	24.44	24.61	24.53	24.69		
5	QPSK	12	13	24.27	24.45	24.63	24.65	24.65		
5	QPSK	25	0	24.25	24.38	24.68	24.56	24.52	26	1
5	19QAM	1	0	24.47	24.66	24.80	24.81	24.68		
5	19QAM	1	12	24.45	24.65	24.79	24.82	24.76		
5	19QAM	1	24	24.64	24.67	24.68	24.72	24.80	25	2
5	19QAM	12	0	23.58	23.80	23.71	23.75	23.67		
5	19QAM	12	7	23.39	23.86	23.74	23.82	23.78		
5	19QAM	12	13	23.61	23.78	23.85	23.76	23.85	25	2
5	19QAM	25	0	23.42	23.80	23.72	23.69	23.83		
5	84QAM	1	0	23.69	23.98	23.94	23.97	23.91		
5	84QAM	1	12	23.75	23.63	23.83	23.69	23.71	24	3
5	84QAM	1	24	23.51	23.65	23.72	23.87	23.75		
5	84QAM	12	0	22.46	22.88	22.82	22.84	22.76		
5	84QAM	12	7	22.48	22.75	22.76	22.73	22.69	24	3
5	84QAM	12	13	22.50	22.65	22.94	22.67	22.75		
5	84QAM	25	0	22.58	22.87	22.80	22.85	22.72		



Reduced Power Mode for P-Sensor On

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
	1850.2	1880	1909.8		1850.2	1880	1909.8	
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	25.26	25.41	25.46	26	16.26	16.41	16.46	17
GPRS 1 Tx slot	25.25	25.39	25.45	26	16.25	16.39	16.45	17
GPRS 2 Tx slots	24.16	24.22	24.3	25	16.16	16.22	16.3	16
GPRS 3 Tx slots	22.68	22.8	22.89	23.5	14.42	14.54	14.63	15.24
GPRS 4 Tx slots	21.02	21.09	21.22	22	13.02	13.09	13.22	13
EDGE 1 Tx slot	20.7	20.71	20.77	22	11.7	11.71	11.77	13
EDGE 2 Tx slots	20.03	20.05	20.1	21	14.03	14.05	14.1	15
EDGE 3 Tx slots	18.42	18.15	18.52	19	14.16	13.89	14.26	14.74
EDGE 4 Tx slots	16.9	17	17.04	18	13.9	14	14.04	15

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
	9282	9400	9538		1312	1413	1513	
	9682	9800	9938		1537	1633	1738	
Rx Channel	9282	9400	9538		1312	1413	1513	
Frequency (MHz)	1652.4	1659	1671.6		1772.4	1782.2	1792.3	
3GPP Rel 99 AMR 12.2Kbps	15.74	15.72	15.74	16.5	17.01	17.16	17.23	18.5
3GPP Rel 99 RMC 12.2Kbps	15.76	15.74	15.75	16.5	17.02	17.2	17.25	18.5
3GPP Rel 6 HSDPA Subtest-1	14.7	14.54	14.51	15.5	15.94	16.06	16.14	17
3GPP Rel 6 HSDPA Subtest-2	14.67	14.52	14.55	15.5	15.96	16.11	16.1	17
3GPP Rel 6 HSDPA Subtest-3	14.23	14.07	14.03	15	15.46	15.56	15.64	16.5
3GPP Rel 6 HSDPA Subtest-4	14.16	14.09	14.03	15	15.37	15.57	15.6	16.5
3GPP Rel 8 DC-HSDPA Subtest-1	14.68	14.53	14.47	15.5	15.92	16.04	16.12	17
3GPP Rel 8 DC-HSDPA Subtest-2	14.65	14.51	14.53	15.5	15.94	16.08	16.11	17
3GPP Rel 8 DC-HSDPA Subtest-3	14.2	14.08	14.01	15	15.45	15.55	15.63	16.5
3GPP Rel 8 DC-HSDPA Subtest-4	14.15	14.1	14.02	15	15.39	15.58	15.61	16.5
3GPP Rel 6 HSUPA Subtest-1	14.75	14.6	14.51	15.5	15.89	15.99	16.05	17
3GPP Rel 6 HSUPA Subtest-2	12.77	12.58	12.51	13.5	13.94	13.99	14.09	15
3GPP Rel 6 HSUPA Subtest-3	13.74	13.6	13.52	14.5	14.89	14.97	15.05	16
3GPP Rel 6 HSUPA Subtest-4	12.73	12.54	12.49	13.5	13.9	14.01	14.13	15
3GPP Rel 6 HSUPA Subtest-5	14.8	14.6	14.5	15.5	15.9	16	16.04	17



Band	CDMA BC1			Tune-up Limit (dBm)
	25	600	1175	
TX Channel	1851.25	1880	1908.75	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 S055	16.64	16.61	16.05	17
RC1 S055	16.6	16.64	16.67	17
RC3 S055 (F-SICH)	16.64	16.65	16.62	17
RC3 S052 (F-SICH)	16.6	16.65	16.66	17
RTAP 153.8kbps	16.32	16.32	16.35	17
RETAP 4056bits	16.62	16.66	16.64	17



LTE Band 2

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of modulation parameters.

LTE Band 4

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of modulation parameters.

LTE Band 7

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of modulation parameters.



LTE Band 25

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				1860	1880	1906		
20	QPSK	1	0	16.56	16.18	16.45	17.5	0
20	QPSK	1	49	16.34	16.21	16.23		
20	QPSK	1	99	16.43	16.23	16.21		
20	QPSK	50	0	16.06	16.05	15.95	17.5	0
20	QPSK	50	24	15.96	15.94	16.01		
20	QPSK	50	49	15.91	15.92	15.95		
20	QPSK	100	0	15.988	15.97	15.92	17.5	0
20	16QAM	1	0	16.49	16.48	16.29		
20	16QAM	1	49	16.17	16.19	16.19		
20	16QAM	1	99	16.21	16.19	16.24	17.5	0
20	16QAM	50	0	16.12	16.13	16.03		
20	16QAM	50	24	16.01	16.03	16.06		
20	16QAM	50	49	15.98	15.97	16	17.5	0
20	16QAM	100	0	15.96	16.05	15.97		
20	64QAM	1	0	16.41	16.36	16.18		
20	64QAM	1	49	16.1	16.06	16.1	17.5	0
20	64QAM	1	99	16.11	16.11	16.09		
20	64QAM	50	0	16.11	16.12	15.99		
20	64QAM	50	24	16.06	16.02	16.04	17.5	0
20	64QAM	50	49	15.96	15.92	15.99		
20	64QAM	100	0	16.01	16.03	15.97		
Channel								
Frequency (MHz)				2011.5	20340	20615		
15	QPSK	1	0	16.09	15.97	16.04	17.5	0
15	QPSK	1	37	15.85	15.87	15.88		
15	QPSK	1	74	15.85	15.82	15.88		
15	QPSK	36	0	16.03	16	16.02	17.5	0
15	QPSK	36	20	15.94	15.92	15.98		
15	QPSK	36	39	15.9	15.88	15.92		
15	QPSK	75	0	15.97	15.95	15.95	17.5	0
15	16QAM	1	0	16.33	16.28	16.36		
15	16QAM	1	37	16.17	16.14	16.15		
15	16QAM	1	74	16.12	16.12	16.25	17.5	0
15	16QAM	36	0	16.07	16.09	16.09		
15	16QAM	36	20	15.96	16.01	15.98		
15	16QAM	36	39	15.94	15.92	15.97	17.5	0
15	16QAM	75	0	16.01	16.01	16.03		
15	64QAM	1	0	16.25	16.14	16.34		
15	64QAM	1	37	16.06	16.03	16.08	17.5	0
15	64QAM	1	74	16.03	15.99	16.11		
15	64QAM	36	0	16.07	16.07	16.09		
15	64QAM	36	20	15.97	16.02	15.98	17.5	0
15	64QAM	36	39	15.94	15.94	15.95		
15	64QAM	75	0	16.01	16.02	16		
Channel								
Frequency (MHz)				2090	20340	20640		
10	QPSK	1	0	16.21	16.05	15.96	17.5	0
10	QPSK	1	25	15.88	15.85	15.87		
10	QPSK	1	49	16.01	16.02	15.82		
10	QPSK	25	0	15.96	15.97	15.88	17.5	0
10	QPSK	25	12	15.98	15.93	15.84		
10	QPSK	25	25	15.91	15.9	15.88		
10	QPSK	50	0	15.97	15.96	15.92	17.5	0
10	16QAM	1	0	16.48	16.38	16.25		
10	16QAM	1	25	16.16	16.15	16.14		
10	16QAM	1	49	16.34	16.28	16.13	17.5	0
10	16QAM	25	0	16.04	16.02	16.01		
10	16QAM	25	12	15.98	16	15.99		
10	16QAM	25	25	15.94	15.93	15.94	17.5	0
10	16QAM	50	0	15.99	15.98	16.04		
10	64QAM	1	0	16.35	16.27	16.12		
10	64QAM	1	25	16.02	16.04	16.09	17.5	0
10	64QAM	1	49	16.17	16.2	16.05		
10	64QAM	25	0	16.02	16.05	16.01		
10	64QAM	25	12	15.96	15.9	15.88	17.5	0
10	64QAM	25	25	15.94	15.94	15.94		
10	64QAM	50	0	15.99	15.99	16.01		
Channel								
Frequency (MHz)				2090.5	20340	20640.5		
5	QPSK	1	0	15.96	15.83	15.91	17.5	0
5	QPSK	1	12	15.9	15.85	15.81		
5	QPSK	1	24	15.89	15.84	15.79		
5	QPSK	12	0	15.96	15.9	15.87	17.5	0
5	QPSK	12	7	15.92	15.9	15.9		
5	QPSK	12	13	15.9	15.85	15.88		
5	QPSK	25	0	15.93	15.9	15.89	17.5	0
5	16QAM	1	0	16.22	16.1	16.17		
5	16QAM	1	12	16.15	16.09	16.15		
5	16QAM	1	24	16.18	16.11	16.14	17.5	0
5	16QAM	12	0	15.96	16	15.98		
5	16QAM	12	7	15.97	15.96	15.96		
5	16QAM	12	13	15.93	15.94	15.91	17.5	0
5	16QAM	25	0	15.97	15.94	15.92		
5	64QAM	1	0	16.11	16.01	16.06		
5	64QAM	1	12	16.05	16.02	16.05	17.5	0
5	64QAM	1	24	16.08	16	16.05		
5	64QAM	12	0	15.96	15.9	15.85		
5	64QAM	12	7	15.95	15.94	15.95	17.5	0
5	64QAM	12	13	15.93	15.9	15.91		
5	64QAM	25	0	15.98	15.92	15.94		
Channel								
Frequency (MHz)				2090.5	20340	20640.5		
3	QPSK	1	0	15.89	15.75	15.81	17.5	0
3	QPSK	1	8	15.91	15.85	15.79		
3	QPSK	1	16	15.87	15.81	15.75		
3	QPSK	8	0	15.93	15.9	15.82	17.5	0
3	QPSK	8	4	15.98	15.91	15.88		
3	QPSK	8	7	15.91	15.84	15.85		
3	QPSK	15	0	15.9	15.86	15.83	17.5	0
3	16QAM	1	0	16.19	16.04	16.15		
3	16QAM	1	8	16.14	16.13	16.17		
3	16QAM	1	16	16.1	16.09	16.15	17.5	0
3	16QAM	8	0	15.98	15.96	15.96		
3	16QAM	8	4	16.01	16	16.01		
3	16QAM	8	7	15.97	15.96	15.96	17.5	0
3	16QAM	15	0	15.96	15.95	15.93		
3	64QAM	1	0	16.07	15.93	16.02		
3	64QAM	1	8	16.02	16.03	16.01	17.5	0
3	64QAM	1	16	16.04	15.98	16.05		
3	64QAM	1	0	15.95	15.9	15.9		
3	64QAM	8	4	15.98	15.96	15.96	17.5	0
3	64QAM	8	7	15.92	15.93	15.9		
3	64QAM	15	0	15.95	15.95	15.89		
Channel								
Frequency (MHz)				2094.7	20340	20683		
1.4	QPSK	1	0	15.79	15.73	15.65	17.5	0
1.4	QPSK	1	3	15.84	15.78	15.72		
1.4	QPSK	1	5	15.76	15.71	15.64		
1.4	QPSK	3	0	15.8	15.78	15.69	17.5	0
1.4	QPSK	3	1	15.84	15.81	15.74		
1.4	QPSK	3	3	15.81	15.75	15.72		
1.4	QPSK	6	0	15.82	15.77	15.69	17.5	0
1.4	16QAM	1	0	16.04	16.05	16.06		
1.4	16QAM	1	3	16.09	16.03	16.1		
1.4	16QAM	1	5	16.02	15.96	15.98	17.5	0
1.4	16QAM	3	0	15.85	15.8	15.79		
1.4	16QAM	3	1	15.9	15.87	15.82		
1.4	16QAM	3	3	15.85	15.79	15.81	17.5	0
1.4	16QAM	6	0	15.93	15.86	15.85		
1.4	64QAM	1	0	15.95	15.91	15.89		
1.4	64QAM	1	3	16.02	15.97	15.98	17.5	0
1.4	64QAM	1	5	15.93	15.89	15.81		
1.4	64QAM	3	0	15.89	15.85	15.81		
1.4	64QAM	3	1	15.93	15.9	15.85	17.5	0
1.4	64QAM	3	3	15.87	15.86	15.84		
1.4	64QAM	6	0	15.85	15.81	15.81		

LTE Band 30

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)				2310				
10	QPSK	1	0	22.44			23	0
10	QPSK	1	25	22.09				
10	QPSK	1	49	22.1				
10	QPSK	25	0	22.25			23	0
10	QPSK	25	12	22.16				
10	QPSK	25	25	22.15				
10	QPSK	50	0	22.18			23	0
10	16QAM	1	0	22.23				
10	16QAM	1	25	22.42				
10	16QAM	1	49	22.23			23	0
10	16QAM	25	0	21.3				
10	16QAM	25	12	21.25				
10	16QAM	25	25	21.23			22	1
10	16QAM	50	0	21.2				
10	64QAM	1	0	21.57				
10	64QAM	1	25	21.42			22	1
10	64QAM	1	49	21.43				
10	64QAM	25	0	20.39				
10	64QAM	25	12	20.37			21	2
10	64QAM	25	25	20.34				
10	64QAM	50	0	20.34				



LTE Band 38

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	22.13	22.2	22.18	22.5	0
20	QPSK	1	49	22.1	22.15	22.11		
20	QPSK	1	99	21.93	22.13	22.02		
20	QPSK	50	0	21.67	21.73	21.56	22.5	0
20	QPSK	30	24	21.6	21.69	21.59		
20	QPSK	30	50	21.88	21.86	21.54		
20	QPSK	100	0	21.6	21.66	21.59	22.5	0
20	16QAM	1	0	21.67	21.6	21.75		
20	16QAM	1	49	21.65	21.7	21.66		
20	16QAM	1	99	21.79	21.68	21.64	22	0.5
20	16QAM	50	0	20.73	20.81	20.71		
20	16QAM	50	24	20.73	20.77	20.66		
20	16QAM	50	50	20.81	20.74	20.68	22	0.5
20	16QAM	100	0	20.7	20.76	20.69		
20	64QAM	1	0	20.7	20.77	20.75		
20	64QAM	1	49	20.68	20.69	20.65	22	0.5
20	64QAM	1	99	20.77	20.69	20.61		
20	64QAM	50	0	19.94	19.95	19.87		
20	64QAM	50	24	19.91	19.95	19.87	21	1.5
20	64QAM	50	50	20	19.93	19.86		
20	64QAM	100	0	19.98	20.04	19.96		
Channel				37825	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	22.02	22.11	22.11	22.5	0
15	QPSK	1	37	21.99	22.06	22.04		
15	QPSK	1	74	21.82	22.04	21.95		
15	QPSK	36	0	21.56	21.64	21.49	22.5	0
15	QPSK	36	20	21.49	21.6	21.52		
15	QPSK	36	39	21.57	21.57	21.47		
15	QPSK	75	0	21.49	21.57	21.52	22.5	0
15	16QAM	1	0	21.56	21.71	21.68		
15	16QAM	1	37	21.54	21.61	21.59		
15	16QAM	1	74	21.68	21.59	21.57	22	0.5
15	16QAM	36	0	20.62	20.72	20.64		
15	16QAM	36	20	20.62	20.68	20.59		
15	16QAM	36	39	20.7	20.65	20.61	22	0.5
15	16QAM	75	0	20.59	20.67	20.62		
15	64QAM	1	0	20.59	20.68	20.68		
15	64QAM	1	37	20.57	20.6	20.58	22	0.5
15	64QAM	1	74	20.66	20.6	20.54		
15	64QAM	36	0	19.83	19.86	19.8		
15	64QAM	36	20	19.8	19.86	19.8	21	1.5
15	64QAM	36	39	19.89	19.84	19.79		
15	64QAM	75	0	19.87	19.95	19.89		
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	22.09	21.71	22.14	22.5	0
10	QPSK	1	25	22.05	22.18	22.01		
10	QPSK	1	49	22.14	22.18	22.01		
10	QPSK	25	0	21.49	21.64	21.53	22.5	0
10	QPSK	25	12	21.6	21.66	21.58		
10	QPSK	25	25	21.55	21.59	21.45		
10	QPSK	50	0	21.6	21.67	21.58	22.5	0
10	16QAM	1	0	21.66	21.91	21.72		
10	16QAM	1	25	21.59	21.74	21.59		
10	16QAM	1	49	21.68	21.71	21.53	22	0.5
10	16QAM	25	0	20.63	20.74	20.67		
10	16QAM	25	12	20.72	20.75	20.68		
10	16QAM	25	25	20.7	20.72	20.55	22	0.5
10	16QAM	50	0	20.72	20.74	20.7		
10	64QAM	1	0	20.64	20.77	20.69		
10	64QAM	1	25	20.56	20.74	20.56	22	0.5
10	64QAM	1	49	20.65	20.73	20.55		
10	64QAM	25	0	19.78	19.94	19.87		
10	64QAM	25	12	19.9	19.95	19.87	21	1.5
10	64QAM	25	25	19.88	19.9	19.74		
10	64QAM	50	0	19.9	19.92	19.82		
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	21.98	21.62	22.07	22.5	0
5	QPSK	1	12	21.94	22.09	21.94		
5	QPSK	1	24	22.03	22.09	21.94		
5	QPSK	12	0	21.38	21.55	21.46	22.5	0
5	QPSK	12	7	21.49	21.57	21.51		
5	QPSK	12	13	21.44	21.5	21.38		
5	QPSK	25	0	21.49	21.58	21.51	22.5	0
5	16QAM	1	0	21.55	21.72	21.65		
5	16QAM	1	12	21.48	21.65	21.52		
5	16QAM	1	24	21.55	21.62	21.46	22	0.5
5	16QAM	12	0	20.52	20.65	20.6		
5	16QAM	12	7	20.61	20.66	20.61		
5	16QAM	12	13	20.59	20.63	20.48	22	0.5
5	16QAM	25	0	20.61	20.65	20.63		
5	64QAM	1	0	20.53	20.68	20.62		
5	64QAM	1	12	20.45	20.65	20.49	22	0.5
5	64QAM	1	24	20.54	20.64	20.48		
5	64QAM	12	0	19.67	19.85	19.8		
5	64QAM	12	7	19.79	19.86	19.8	21	1.5
5	64QAM	12	13	19.77	19.81	19.67		
5	64QAM	25	0	19.79	19.83	19.75		

LTE Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.95	22.07	22.23	22.34	22.28	22.5	0
20	QPSK	1	49	21.88	21.84	22.08	22.23	22.17		
20	QPSK	1	99	21.91	22.05	22.28	22.18	22.16		
20	QPSK	50	0	21.44	21.52	21.77	21.85	21.79	22.5	0
20	QPSK	50	24	21.54	21.56	21.74	21.72	21.76		
20	QPSK	50	50	21.45	21.51	21.73	21.72	21.72		
20	QPSK	100	0	21.5	21.51	21.72	21.77	21.75	22.5	0
20	16QAM	1	0	21.65	21.72	21.87	21.85	21.91		
20	16QAM	1	49	21.64	21.64	21.75	21.87	21.79		
20	16QAM	1	99	21.6	21.77	21.92	21.84	21.8	22	0.5
20	16QAM	50	0	20.56	20.66	20.5	20.98	20.88		
20	16QAM	50	24	20.62	20.67	20.88	20.85	20.85		
20	16QAM	50	50	20.58	20.66	20.88	20.85	20.79	22	0.5
20	16QAM	100	0	20.63	20.66	20.86	20.87	20.83		
20	64QAM	1	0	20.52	20.64	20.74	20.88	20.79		
20	64QAM	1	49	20.41	20.51	20.64	20.75	20.67	22	0.5
20	64QAM	1	99	20.45	20.63	20.82	20.67	20.63		
20	64QAM	50	0	19.62	19.73	19.87	20.05	19.98		
20	64QAM	50	24	19.68	19.75	19.95	19.92	19.95	21	1.5
20	64QAM	50	50	19.66	19.7	19.89	19.92	19.88		
20	64QAM	100	0	19.83	19.78	20.04	19.99	20.02		
Channel				39745	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.5	2682.5		
15	QPSK	1	0	21.85	21.94	22.24	22.28	22.13	22.5	0
15	QPSK	1	37	21.81	21.89	22.14	22.19	22.03		
15	QPSK	1	74	21.84	21.98	22.27	22.17	22.07		
15	QPSK	36	0	21.32	21.66	21.74	21.75	21.68	22.5	0
15	QPSK	36	20	21.29	21.63	21.74	21.69	21.64		
15	QPSK	36	39	21.29	21.6	21.72	21.62	21.61		
15	QPSK	75	0	21.36	21.68	21.72	21.7	21.68	22.5	0
15	16QAM	1	0	21.49	21.71	21.87	21.88	21.77		
15	16QAM	1	37	21.51	21.64	21.79	21.82	21.69		
15	16QAM	1	74	21.5	21.82	21.96	21.75	21.73	22	0.5
15	16QAM	36	0	20.39	20.66	20.81	20.83	20.68		
15	16QAM	36	20	20.36	20.69	20.8	20.68	20.73		
15	16QAM	36	39	20.43	20.62	20.77	20.7	20.66	22	0.5
15	16QAM	75	0	20.52	20.74	20.8	20.79	20.8		
15	64QAM	1	0	20.44	20.67	20.78	20.76	20.67		
15	64QAM	1	37	20.34	20.61	20.75	20.72	20.57	21	1.5
15	64QAM	1	74	20.41	20.79	20.83	20.62	20.63		
15	64QAM	36	0	19.52	19.86	19.95	20.01	19.82		
15	64QAM	36	20	19.53	19.83	19.97	19.86	19.89	21	1.5
15	64QAM	36	39	19.6	19.62	19.99	19.84	19.79		
15	64QAM	75	0	19.59	19.61	19.95	19.92	19.91		
Channel				39700	40180	40620	41080	41540		
Frequency (MHz)				2501	2547					



LTE Band 41 NPUE				Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.02	21.98	21.96	22.09	21.98	22.5	0
20	QPSK	1	49	21.78	21.98	21.91	21.87	21.9		
20	QPSK	1	99	21.62	21.72	22.06	21.84	21.95		
20	QPSK	50	0	21.87	21.75	22.01	22.07	22.06	22.5	0
20	QPSK	50	24	21.76	21.73	22.06	22.01	22.04		
20	QPSK	50	50	21.69	21.68	22.03	21.89	21.98		
20	QPSK	100	0	21.75	21.73	22.01	22.06	22.05	22.5	0
20	QPSK	1	0	21.97	22.04	22.01	22.03	22.03		
20	16QAM	1	49	21.84	22	22.01	22.06	22.02		
20	16QAM	1	99	21.69	22.02	22.01	21.99	22.05	22.5	0
20	16QAM	50	0	21.82	21.9	22.01	21.99	21.97		
20	16QAM	50	24	21.86	21.9	21.98	21.88	22		
20	16QAM	50	50	21.79	21.85	21.97	21.86	21.93	22.5	0
20	16QAM	100	0	21.82	21.92	21.99	21.92	21.94		
20	64QAM	1	0	21.87	21.96	21.92	22.07	22.01		
20	64QAM	1	49	21.77	21.86	21.91	21.99	21.92	22.5	0
20	64QAM	1	99	21.85	21.98	21.98	21.88	21.93		
20	64QAM	50	0	21.8	21.83	21.93	21.97	21.91		
20	64QAM	50	24	21.78	21.81	21.95	21.87	21.88	22.5	0
20	64QAM	50	50	21.7	21.82	21.99	21.77	21.86		
20	64QAM	100	0	21.88	21.94	21.98	21.91	21.97		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.6	2682.5		
15	QPSK	1	0	21.71	21.7	22.02	22.04	21.93	22.5	0
15	QPSK	1	37	21.58	21.69	21.97	21.95	21.91		
15	QPSK	1	74	21.66	21.78	22.04	21.93	21.92		
15	QPSK	36	0	21.69	21.75	22.04	22.03	22.01	22.5	0
15	QPSK	36	20	21.87	21.79	22.06	21.99	22.01		
15	QPSK	36	39	21.71	21.77	21.83	21.75	21.77		
15	QPSK	75	0	21.73	21.76	21.81	21.76	21.77	22.5	0
15	16QAM	1	0	21.99	22.05	22.03	22.01	22.01		
15	16QAM	1	37	21.85	22.04	22.04	22.04	22.04		
15	16QAM	1	74	22.02	22.01	21.93	21.99	22.05	22.5	0
15	16QAM	36	0	21.75	21.88	21.93	21.96	21.88		
15	16QAM	36	20	21.75	21.88	21.95	21.83	21.86		
15	16QAM	36	39	21.8	21.85	21.95	21.81	21.83	22.5	0
15	16QAM	75	0	21.83	21.93	21.96	21.84	21.9		
15	64QAM	1	0	21.91	21.93	22.05	22.02	21.95		
15	64QAM	1	37	21.81	21.93	21.99	21.93	21.94	22.5	0
15	64QAM	1	74	21.85	22.03	22.08	21.89	21.97		
15	64QAM	36	0	21.76	21.9	21.96	21.97	21.93		
15	64QAM	36	20	21.78	21.95	21.97	21.88	21.9	22.5	0
15	64QAM	36	39	21.8	21.87	21.94	21.82	21.86		
15	64QAM	75	0	21.88	21.87	21.95	21.86	21.87		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.53	21.83	21.95	21.99	21.83	22.5	0
10	QPSK	1	25	21.53	21.84	21.98	22	21.93		
10	QPSK	1	49	21.53	21.62	21.93	21.86	21.94		
10	QPSK	25	0	21.65	21.69	22.02	22.04	22.03	22.5	0
10	QPSK	25	12	21.6	21.67	22.03	21.99	21.98		
10	QPSK	25	25	21.58	21.68	22.02	21.93	21.99		
10	QPSK	50	0	21.6	21.72	21.84	21.8	21.84	22.5	0
10	16QAM	1	0	21.83	22.06	21.92	22.01	22.01		
10	16QAM	1	25	21.69	21.99	21.92	21.88	21.91		
10	16QAM	1	49	21.9	22	21.92	21.98	22.04	22.5	0
10	16QAM	25	0	21.78	21.91	22.01	22	21.9		
10	16QAM	25	12	21.81	21.91	22.02	21.92	21.95		
10	16QAM	25	25	21.73	21.88	21.95	21.91	21.91	22.5	0
10	16QAM	50	0	21.76	21.87	21.96	21.9	21.93		
10	64QAM	1	0	21.8	21.92	22.03	22.01	21.98		
10	64QAM	1	25	21.79	21.96	22.02	22.03	21.94	22.5	0
10	64QAM	1	49	21.75	21.87	21.97	21.87	21.96		
10	64QAM	25	0	21.74	21.85	21.96	21.94	21.84		
10	64QAM	25	12	21.75	21.83	21.95	21.85	21.87	22.5	0
10	64QAM	25	25	21.68	21.85	21.92	21.83	21.85		
10	64QAM	50	0	21.71	21.81	21.91	21.85	21.85		
Channel				39875	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	21.54	21.62	21.99	21.99	21.9	22.5	0
5	QPSK	1	12	21.53	21.65	21.98	21.88	21.91		
5	QPSK	1	24	21.51	21.81	21.93	21.86	21.87		
5	QPSK	12	0	21.64	21.71	22.03	21.92	22	22.5	0
5	QPSK	12	7	21.62	21.74	22.03	21.99	22		
5	QPSK	12	13	21.59	21.71	22.04	21.94	21.96		
5	QPSK	25	0	21.62	21.71	22.04	21.94	21.98	22.5	0
5	16QAM	1	0	21.84	22.02	22.03	22.03	22.02		
5	16QAM	1	12	21.88	22.02	22.01	22.01	22.01		
5	16QAM	1	24	21.91	22.01	22.03	21.98	22.02	22.5	0
5	16QAM	12	0	21.77	21.9	22	21.87	21.92		
5	16QAM	12	7	21.8	21.92	22.01	21.9	21.93		
5	16QAM	12	13	21.72	21.88	22.01	21.88	21.91	22.5	0
5	16QAM	25	0	21.75	21.88	21.99	21.88	21.93		
5	64QAM	1	0	21.82	21.89	21.99	21.99	21.93		
5	64QAM	1	12	21.76	21.86	22	21.92	21.96	22.5	0
5	64QAM	1	24	21.74	21.91	21.98	21.88	21.89		
5	64QAM	12	0	21.71	21.86	21.95	21.81	21.88		
5	64QAM	12	7	21.74	21.86	21.94	21.86	21.89	22.5	0
5	64QAM	12	13	21.65	21.83	21.95	21.82	21.86		
5	64QAM	25	0	21.82	21.81	21.92	21.82	21.86		



Reduced Power Mode for Hotspot On

GSM1800	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	912	881	810		912	881	810	
TX Channel	912	881	810		912	881	810	
Frequency (MHz)	1852.2	1850	1807.8		1852.2	1850	1807.8	
GSM 1 Tx slot	24.34	24.39	24.52	25	15.34	15.39	15.52	16
GPRS 1 Tx slot	24.33	24.38	24.5	25	15.33	15.38	15.5	16
GPRS 2 Tx slots	23.37	23.47	23.46	24	17.37	17.47	17.46	18
GPRS 3 Tx slots	21.69	21.75	21.86	22.5	17.43	17.49	17.6	18.24
GPRS 4 Tx slots	20.05	20.14	20.23	21	17.05	17.14	17.23	18
EDGE 1 Tx slot	20.56	20.6	20.7	21	11.58	11.6	11.7	12
EDGE 2 Tx slots	19.02	19	19.06	20	13.02	13	13.06	14
EDGE 3 Tx slots	17.41	17.4	17.5	18	13.15	13.14	13.24	13.74
EDGE 4 Tx slots	16.44	16.69	16.65	17	13.44	13.69	13.65	14

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
TX Channel	9262	9400	9538		1312	1413	1513	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	14.84	14.74	14.75	15.5	15.07	15.23	15.28
3GPP Rel 99	AMR 12.2Kbps	14.85	14.75	14.78	15.5	15.08	15.24	15.29
3GPP Rel 6	HSDPA Subtest-1	13.8	13.44	13.38	14.5	13.82	13.83	13.9
3GPP Rel 6	HSDPA Subtest-2	13.66	13.43	13.4	14.5	13.51	13.91	13.66
3GPP Rel 6	HSDPA Subtest-3	13.14	12.93	12.9	14	13.29	13.45	13.12
3GPP Rel 6	HSDPA Subtest-4	13.14	12.89	12.89	14	13.3	13.47	13.42
3GPP Rel 6	DCHSDPA Subtest-1	13.59	13.43	13.39	14.5	13.81	13.92	13.89
3GPP Rel 6	DCHSDPA Subtest-2	13.65	13.42	13.41	14.5	13.5	13.9	13.65
3GPP Rel 6	DCHSDPA Subtest-3	13.15	12.94	12.92	14	13.3	13.46	13.13
3GPP Rel 6	DCHSDPA Subtest-4	13.13	12.91	12.9	14	13.32	13.46	13.43
3GPP Rel 6	HSUPA Subtest-1	13.55	13.39	13.35	14.5	13.69	13.72	13.78
3GPP Rel 6	HSUPA Subtest-2	11.62	11.36	11.33	12.5	11.66	11.69	11.74
3GPP Rel 6	HSUPA Subtest-3	12.59	12.4	12.38	13.5	12.99	12.71	12.75
3GPP Rel 6	HSUPA Subtest-4	11.58	11.4	11.33	12.5	11.71	11.76	11.79
3GPP Rel 6	HSUPA Subtest-5	13.6	13.4	13.3	14.5	13.7	13.74	13.82

Band	CDMA BC1			Tune-up Limit (dBm)
	25	800	1175	
TX Channel	25	800	1175	
Frequency (MHz)	1851.25	1880	1809.75	
RC1 S055	15.61	15.64	15.62	16.5
RC1 S055	15.58	15.62	15.68	16.5
RC3 S042 (F+SCH)	15.6	15.65	15.61	16.5
RC3 S030 (F+SCH)	15.67	15.64	15.65	16.5
RTAP 153 89bps	15.37	15.35	15.38	16.5
RETAP 49986bps	15.64	15.6	15.65	16.5



LTE Band 2

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.

LTE Band 4

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.

LTE Band 7

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.



LTE Band 25

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple channel frequency blocks for various modulation schemes and RB sizes.

LTE Band 30

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple channel frequency blocks for various modulation schemes and RB sizes.

LTE Band 66

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Contains multiple channel frequency blocks for various modulation schemes and RB sizes.



LTE Band 38

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	22.13	22.2	22.18	22.5	0
20	QPSK	1	49	22.1	22.15	22.11		
20	QPSK	1	99	21.93	22.13	22.02		
20	QPSK	50	0	21.67	21.73	21.56	22.5	0
20	QPSK	30	24	21.6	21.69	21.59		
20	QPSK	30	50	21.88	21.66	21.54		
20	QPSK	100	0	21.6	21.66	21.59	22.5	0
20	16QAM	1	0	21.67	21.8	21.75		
20	16QAM	1	49	21.65	21.7	21.66		
20	16QAM	1	99	21.79	21.68	21.64	22	0.5
20	16QAM	50	0	20.73	20.81	20.71		
20	16QAM	50	24	20.73	20.77	20.66		
20	16QAM	50	50	20.81	20.74	20.68	22	0.5
20	16QAM	100	0	20.7	20.76	20.69		
20	64QAM	1	0	20.7	20.77	20.75		
20	64QAM	1	49	20.68	20.69	20.65	22	0.5
20	64QAM	1	99	20.77	20.69	20.61		
20	64QAM	50	0	19.94	19.95	19.87		
20	64QAM	50	24	19.91	19.95	19.87	21	1.5
20	64QAM	50	50	20	19.93	19.86		
20	64QAM	100	0	19.98	20.04	19.96		
Channel				37925	38000	38175		
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	22.02	22.11	22.11	22.5	0
15	QPSK	1	37	21.99	22.06	22.04		
15	QPSK	1	74	21.82	22.04	21.95		
15	QPSK	36	0	21.56	21.64	21.49	22.5	0
15	QPSK	36	20	21.49	21.6	21.52		
15	QPSK	36	39	21.57	21.57	21.47		
15	QPSK	75	0	21.49	21.57	21.52	22.5	0
15	16QAM	1	0	21.56	21.71	21.68		
15	16QAM	1	37	21.54	21.61	21.59		
15	16QAM	1	74	21.68	21.59	21.57	22	0.5
15	16QAM	36	0	20.62	20.72	20.64		
15	16QAM	36	20	20.62	20.68	20.59		
15	16QAM	36	39	20.7	20.65	20.61	22	0.5
15	16QAM	75	0	20.59	20.67	20.62		
15	64QAM	1	0	20.59	20.68	20.68		
15	64QAM	1	37	20.57	20.6	20.58	22	0.5
15	64QAM	1	74	20.66	20.6	20.54		
15	64QAM	36	0	19.83	19.86	19.8		
15	64QAM	36	20	19.8	19.86	19.8	21	1.5
15	64QAM	36	39	19.89	19.84	19.79		
15	64QAM	75	0	19.87	19.95	19.89		
Channel				37800	38000	38200		
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	22.09	22.1	22.14	22.5	0
10	QPSK	1	25	22.05	22.18	22.01		
10	QPSK	1	49	22.14	22.18	22.01		
10	QPSK	25	0	21.49	21.64	21.53	22.5	0
10	QPSK	25	12	21.6	21.66	21.58		
10	QPSK	25	25	21.55	21.59	21.45		
10	QPSK	50	0	21.6	21.67	21.58	22.5	0
10	16QAM	1	0	21.66	21.91	21.72		
10	16QAM	1	25	21.59	21.74	21.59		
10	16QAM	1	49	21.68	21.71	21.53	22	0.5
10	16QAM	25	0	20.63	20.74	20.67		
10	16QAM	25	12	20.72	20.75	20.68		
10	16QAM	25	25	20.7	20.72	20.55	22	0.5
10	16QAM	50	0	20.72	20.74	20.7		
10	64QAM	1	0	20.64	20.77	20.69		
10	64QAM	1	25	20.56	20.74	20.56	22	0.5
10	64QAM	1	49	20.65	20.73	20.55		
10	64QAM	25	0	19.78	19.94	19.87		
10	64QAM	25	12	19.9	19.95	19.87	21	1.5
10	64QAM	25	25	19.88	19.9	19.74		
10	64QAM	50	0	19.9	19.92	19.82		
Channel				37775	38000	38225		
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	21.98	21.62	22.07	22.5	0
5	QPSK	1	12	21.94	22.09	21.94		
5	QPSK	1	24	22.03	22.09	21.94		
5	QPSK	12	0	21.38	21.55	21.46	22.5	0
5	QPSK	12	7	21.49	21.57	21.51		
5	QPSK	12	13	21.44	21.5	21.38		
5	QPSK	25	0	21.49	21.58	21.51	22.5	0
5	16QAM	1	0	21.55	21.72	21.65		
5	16QAM	1	12	21.48	21.65	21.52		
5	16QAM	1	24	21.55	21.62	21.46	22	0.5
5	16QAM	12	0	20.52	20.65	20.6		
5	16QAM	12	7	20.61	20.66	20.61		
5	16QAM	12	13	20.59	20.63	20.48	22	0.5
5	16QAM	25	0	20.61	20.65	20.63		
5	64QAM	1	0	20.53	20.68	20.62		
5	64QAM	1	12	20.45	20.65	20.49	22	0.5
5	64QAM	1	24	20.54	20.64	20.48		
5	64QAM	12	0	19.67	19.85	19.8		
5	64QAM	12	7	19.79	19.86	19.8	21	1.5
5	64QAM	12	13	19.77	19.81	19.67		
5	64QAM	25	0	19.79	19.83	19.75		

LTE Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.95	22.07	22.23	22.34	22.28	22.5	0
20	QPSK	1	49	21.88	21.84	22.08	22.23	22.17		
20	QPSK	1	99	21.91	22.05	22.28	22.18	22.16		
20	QPSK	50	0	21.44	21.52	21.77	21.85	21.79	22.5	0
20	QPSK	50	24	21.54	21.56	21.74	21.72	21.76		
20	QPSK	50	50	21.45	21.51	21.73	21.72	21.72		
20	QPSK	100	0	21.5	21.51	21.72	21.77	21.75	22.5	0
20	16QAM	1	0	21.65	21.72	21.87	21.85	21.91		
20	16QAM	1	49	21.64	21.64	21.75	21.87	21.79		
20	16QAM	1	99	21.6	21.77	21.92	21.84	21.8	22	0.5
20	16QAM	50	0	20.56	20.66	20.5	20.98	20.88		
20	16QAM	50	24	20.62	20.67	20.88	20.85	20.85		
20	16QAM	50	50	20.58	20.66	20.88	20.85	20.79	22	0.5
20	16QAM	100	0	20.63	20.66	20.86	20.87	20.83		
20	64QAM	1	0	20.52	20.64	20.74	20.88	20.79		
20	64QAM	1	49	20.41	20.51	20.64	20.75	20.67	22	0.5
20	64QAM	1	99	20.45	20.63	20.82	20.67	20.63		
20	64QAM	50	0	19.62	19.73	19.87	20.05	19.98		
20	64QAM	50	24	19.68	19.75	19.95	19.92	19.95	21	1.5
20	64QAM	50	50	19.66	19.7	19.89	19.92	19.88		
20	64QAM	100	0	19.83	19.78	20.04	19.99	20.02		
Channel				39745	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	21.85	21.94	22.24	22.28	22.13	22.5	0
15	QPSK	1	37	21.81	21.89	22.14	22.19	22.03		
15	QPSK	1	74	21.84	21.98	22.27	22.17	22.07		
15	QPSK	36	0	21.32	21.66	21.74	21.75	21.68	22.5	0
15	QPSK	36	20	21.29	21.63	21.74	21.69	21.64		
15	QPSK	36	39	21.29	21.6	21.72	21.62	21.61		
15	QPSK	75	0	21.36	21.68	21.72	21.7	21.68	22.5	0
15	16QAM	1	0	21.49	21.71	21.87	21.88	21.77		
15	16QAM	1	37	21.51	21.64	21.79	21.82	21.69		
15	16QAM	1	74	21.5	21.82	21.96	21.75	21.73	22	0.5
15	16QAM	36	0	20.39	20.66	20.81	20.83	20.68		
15	16QAM	36	20	20.36	20.69	20.8	20.68	20.73		
15	16QAM	36	39	20.43	20.62	20.77	20.7	20.66	22	0.5
15	16QAM	75	0	20.52	20.74	20.8	20.79	20.8		
15	64QAM	1	0	20.44	20.67	20.78	20.76	20.67		
15	64QAM	1	37	20.34	20.61	20.75	20.72	20.57	21	1.5
15	64QAM	1	74	20.41	20.79	20.83	20.62	20.63		
15	64QAM	36	0	19.52	19.86	19.95	20.01	19.82		
15	64QAM	36	20	19.53	19.83	19.97	19.86	19.89	21	1.5
15	64QAM	36	39	19.6	19.62	19.99	19.84	19.79		
15	64QAM	75	0	19.69	19.61	19.95	19.92	19.91		
Channel				39700	40180	40620	41080	41540		
Frequency (MHz)				2501	2547					



LTE Band 41 NPUE										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.02	21.98	21.96	22.09	21.98	22.5	0
20	QPSK	1	49	21.78	21.98	21.91	21.87	21.9		
20	QPSK	1	99	21.62	21.72	22.06	21.84	21.95		
20	QPSK	50	0	21.87	21.75	22.01	22.07	22.06	22.5	0
20	QPSK	50	24	21.76	21.73	22.06	22.01	22.04		
20	QPSK	50	50	21.69	21.68	22.03	21.89	21.98		
20	QPSK	100	0	21.75	21.73	22.01	22.06	22.05	22.5	0
20	QPSK	1	0	21.97	22.04	22.01	22.03	22.03		
20	16QAM	1	49	21.84	22	22.01	22.06	22.02		
20	16QAM	1	99	21.69	22.02	22.01	21.99	22.05	22.5	0
20	16QAM	50	0	21.82	21.9	22.01	21.99	21.97		
20	16QAM	50	24	21.86	21.9	21.98	21.88	22		
20	16QAM	50	50	21.79	21.85	21.97	21.86	21.93	22.5	0
20	16QAM	100	0	21.82	21.92	21.99	21.92	21.94		
20	64QAM	1	0	21.87	21.96	21.92	22.07	22.01		
20	64QAM	1	49	21.77	21.86	21.91	21.99	21.92	22.5	0
20	64QAM	1	99	21.85	21.98	21.98	21.88	21.93		
20	64QAM	50	0	21.8	21.83	21.93	21.97	21.91		
20	64QAM	50	24	21.78	21.81	21.95	21.87	21.88	22.5	0
20	64QAM	50	50	21.7	21.82	21.99	21.77	21.86		
20	64QAM	100	0	21.88	21.94	21.98	21.91	21.97		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.6	2682.5		
15	QPSK	1	0	21.71	21.7	22.02	22.04	21.93	22.5	0
15	QPSK	1	37	21.58	21.69	21.97	21.95	21.91		
15	QPSK	1	74	21.66	21.78	22.04	21.93	21.92		
15	QPSK	36	0	21.69	21.75	22.04	22.03	22.01	22.5	0
15	QPSK	36	20	21.87	21.79	22.06	21.99	22.01		
15	QPSK	36	39	21.71	21.77	21.83	21.75	21.77		
15	QPSK	75	0	21.73	21.76	21.81	21.76	21.77	22.5	0
15	16QAM	1	0	21.99	22.05	22.03	22.01	22.01		
15	16QAM	1	37	21.85	22.04	22.04	22.04	22.04		
15	16QAM	1	74	22.02	22.01	21.93	21.99	22.05	22.5	0
15	16QAM	36	0	21.75	21.88	21.93	21.96	21.88		
15	16QAM	36	20	21.75	21.88	21.95	21.83	21.86		
15	16QAM	36	39	21.8	21.85	21.95	21.81	21.83	22.5	0
15	16QAM	75	0	21.83	21.93	21.96	21.84	21.9		
15	64QAM	1	0	21.91	21.93	22.05	22.02	21.95		
15	64QAM	1	37	21.81	21.93	21.99	21.93	21.94	22.5	0
15	64QAM	1	74	21.85	22.03	22.08	21.89	21.97		
15	64QAM	36	0	21.76	21.9	21.96	21.97	21.93		
15	64QAM	36	20	21.78	21.95	21.97	21.88	21.9	22.5	0
15	64QAM	36	39	21.8	21.87	21.94	21.82	21.86		
15	64QAM	75	0	21.88	21.87	21.95	21.86	21.87		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.53	21.63	21.95	21.99	21.83	22.5	0
10	QPSK	1	25	21.53	21.64	21.98	22	21.93		
10	QPSK	1	49	21.53	21.62	21.93	21.86	21.94		
10	QPSK	25	0	21.65	21.69	22.02	22.04	22.03	22.5	0
10	QPSK	25	12	21.6	21.67	22.03	21.99	21.98		
10	QPSK	25	25	21.58	21.68	22.02	21.93	21.99		
10	QPSK	50	0	21.6	21.72	21.84	21.8	21.84	22.5	0
10	16QAM	1	0	21.83	22.06	21.92	22.01	22.01		
10	16QAM	1	25	21.69	21.99	21.92	21.88	21.91		
10	16QAM	1	49	21.9	22	21.92	21.88	22.04	22.5	0
10	16QAM	25	0	21.78	21.91	22.01	22	21.9		
10	16QAM	25	12	21.81	21.91	22.02	21.92	21.95		
10	16QAM	25	25	21.73	21.88	21.95	21.91	21.91	22.5	0
10	16QAM	50	0	21.76	21.87	21.96	21.9	21.93		
10	64QAM	1	0	21.8	21.92	22.03	22.01	21.98		
10	64QAM	1	25	21.79	21.96	22.02	22.03	21.94	22.5	0
10	64QAM	1	49	21.75	21.87	21.97	21.87	21.96		
10	64QAM	25	0	21.74	21.85	21.96	21.94	21.94		
10	64QAM	25	12	21.75	21.83	21.95	21.85	21.87	22.5	0
10	64QAM	25	25	21.68	21.85	21.92	21.83	21.85		
10	64QAM	50	0	21.71	21.81	21.91	21.85	21.85		
Channel				39875	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	21.54	21.62	21.99	21.99	21.9	22.5	0
5	QPSK	1	12	21.53	21.65	21.98	21.88	21.91		
5	QPSK	1	24	21.51	21.61	21.93	21.86	21.87		
5	QPSK	12	0	21.64	21.71	22.03	21.92	22	22.5	0
5	QPSK	12	7	21.62	21.74	22.03	21.99	22		
5	QPSK	12	13	21.59	21.71	22.04	21.94	21.96		
5	QPSK	25	0	21.62	21.71	22.04	21.94	21.98	22.5	0
5	16QAM	1	0	21.84	22.02	22.03	22.03	22.02		
5	16QAM	1	12	21.88	22.02	22.01	22.01	22.01		
5	16QAM	1	24	21.91	22.01	22.03	21.98	22.02	22.5	0
5	16QAM	12	0	21.77	21.9	22	21.87	21.92		
5	16QAM	12	7	21.8	21.92	22.01	21.9	21.93		
5	16QAM	12	13	21.72	21.88	22.01	21.88	21.91	22.5	0
5	16QAM	25	0	21.75	21.88	21.99	21.88	21.93		
5	64QAM	1	0	21.82	21.89	21.99	21.99	21.93		
5	64QAM	1	12	21.76	21.86	22	21.92	21.96	22.5	0
5	64QAM	1	24	21.74	21.91	21.98	21.88	21.89		
5	64QAM	12	0	21.71	21.86	21.95	21.81	21.88		
5	64QAM	12	7	21.74	21.86	21.94	21.86	21.89	22.5	0
5	64QAM	12	13	21.65	21.83	21.95	21.82	21.86		
5	64QAM	25	0	21.82	21.81	21.92	21.82	21.86		



Reduced Power Mode for Handheld On

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	
	TX Channel	9262	9400		9538	1312	1413		1513
	Rx Channel	9662	9800		9938	1537	1638		1738
	Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2Kbps	19.12	19.04	19.03	20	18.77	18.94	18.86	
3GPP Rel 99	RM-C 12.2Kbps	19.13	19.05	19.04	20	18.78	18.95	18.90	
3GPP Rel 6	HSDPA Subtest-1	18.22	18.12	18.07	19	17.95	18.07	18.14	
3GPP Rel 6	HSDPA Subtest-2	18.18	18.09	18.14	19	17.94	18.12	18.1	
3GPP Rel 6	HSDPA Subtest-3	17.78	17.62	17.6	18.5	17.43	17.55	17.62	
3GPP Rel 6	HSDPA Subtest-4	17.69	17.65	17.62	18.5	17.35	17.58	17.6	
3GPP Rel 6	DCHSDPA Subtest-1	18.21	18.11	18.08	19	17.94	18.08	18.15	
3GPP Rel 6	DCHSDPA Subtest-2	18.19	18.1	18.15	19	17.93	18.11	18.12	
3GPP Rel 6	DCHSDPA Subtest-3	17.79	17.63	17.61	18.5	17.44	17.54	17.61	
3GPP Rel 6	DCHSDPA Subtest-4	17.7	17.66	17.6	18.5	17.36	17.55	17.63	
3GPP Rel 6	HSUPA Subtest-1	18.27	18.14	18.09	19	17.89	17.96	18.06	
3GPP Rel 6	HSUPA Subtest-2	18.3	18.11	18.08	17	15.96	15.98	16.04	
3GPP Rel 6	HSUPA Subtest-3	17.29	17.15	17.05	18	16.54	16.55	17.08	
3GPP Rel 6	HSUPA Subtest-4	16.24	16.13	16.04	17	15.88	16.01	16.11	
3GPP Rel 6	HSUPA Subtest-5	18.28	18.17	18.08	19	17.92	18.05	18.07	

Band	CDMA BC1			Tune-up Limit (dBm)	
	TX Channel	25	600		1175
	Frequency (MHz)	1851.25	1880		1908.75
	RC1 384kbps	20.24	20.31	20.27	21
	RC3 384kbps	20.21	20.28	20.33	21
	RC3 SQ32 (F+SCH)	20.26	20.32	20.29	21
	RC3 SQ32 (H+SCH)	20.28	20.3	20.27	21
	RTAP 153.6Kbps	20.14	20.16	20.27	21
	RETAP 4096bits	20.23	20.28	20.28	21



LTE Band 2

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.

LTE Band 4

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.

LTE Band 7

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz) with multiple rows of data.



LTE Band 25

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz).

LTE Band 30

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz).

LTE Band 66

Table with columns: BW [MHz], Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power Middle Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Channel and Frequency (MHz).

Full Power

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	22.58	24.00
40185	39987	QPSK	1	0	0	0	1	0	22.97	24.00
40620	40422	QPSK	1	0	0	0	1	0	23.03	24.00
41055	40857	QPSK	1	0	0	0	1	0	23.05	24.00
41490	41292	QPSK	1	0	0	0	1	0	23.15	24.00

Reduced Power Mode for Hotspot On

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	22.34	22.50
40185	39987	QPSK	1	0	0	0	1	0	22.08	22.50
40620	40422	QPSK	1	0	0	0	1	0	22.24	22.50
41055	40857	QPSK	1	0	0	0	1	0	22.38	22.50
41490	41292	QPSK	1	0	0	0	1	0	22.39	22.50

Reduced Power Mode for Sensor On

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	100	0	0	0	1	0	22.38	22.50
40185	39987	QPSK	100	0	0	0	1	0	22.12	22.50
40620	40422	QPSK	100	0	0	0	1	0	22.22	22.50
41055	40857	QPSK	100	0	0	0	1	0	22.41	22.50
41490	41292	QPSK	100	0	0	0	1	0	22.46	22.50

Reduced Power Mode for Handheld On

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	22.85	24.00
40185	39987	QPSK	1	0	0	0	1	0	22.27	24.00
40620	40422	QPSK	1	0	0	0	1	0	22.78	24.00
41055	40857	QPSK	1	0	0	0	1	0	22.86	24.00
41490	41292	QPSK	1	0	0	0	1	0	22.93	24.00

Full Power

CA_B5										
Combination 10MHz+5MHz (50RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20522	QPSK	1	0	0	0	1	0	23.37	24.00
20525	20597	QPSK	1	0	0	0	1	0	23.39	24.00
20600	20528	QPSK	1	0	0	0	1	0	23.02	24.00



Configure	CA List	PCC								SCC				Power		
		LTE Band	BW (MHz)	UL	UL Channel	Mod.	UL#	UL RB	UL Offset	LTE Band	BW (MHz)	DL	DL Channel	With CA	Without CA	
				Freq. (MHz)			RB					Freq. (MHz)		Tx. Power (dBm)	Tx. Power (dBm)	
Inter-Band	CA_2A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	23.47	23.30		
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	23.25	23.08		
	CA_2A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	23.40	23.30		
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	23.41	23.38		
	CA_2A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 7	20M	2655	3100	23.47	23.30		
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	23.27	23.07		
	CA_2A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	23.51	23.30		
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	23.27	23.09		
	CA_2A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	23.53	23.30		
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	22.75	22.68		
	CA_2A-14A	Band 2	20M	1860	18700	QPSK	1	0	Band 14	10M	763	5330	23.40	23.30		
		Band 14	10M	793	23330	QPSK	1	0	Band 2	20M	1960	900	23.03	23.11		
	CA_2A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 29	10M	722.5	9715	23.52	23.30		
		Band 29	10M	722.5	9715	QPSK	1	0	Band 30	10M	2355	9820	23.51	23.30		
	CA_2A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1960	900	23.42	23.31		
		Band 30	10M	2310	27710	QPSK	1	0	Band 2	20M	1960	900	23.42	23.31		
	CA_2A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	23.40	23.30		
		Band 66	20M	1720	132072	QPSK	1	0	Band 2	20M	1960	900	23.25	23.09		
	CA_2A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 71	20M	637	68786	23.50	23.30		
		Band 71	20M	673	133222	QPSK	1	0	Band 2	20M	1960	900	23.25	23.12		
	CA_4A-5A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	23.15	23.08		
		Band 5	10M	829	20450	QPSK	1	0	Band 4	20M	2132.5	2175	23.55	23.38		
	CA_4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	23.28	23.08		
		Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2132.5	2175	23.21	23.07		
	CA_4A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	23.15	23.08		
		Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	23.25	23.09		
	CA_4A-13A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	23.16	23.08		
		Band 13	10M	782	23230	QPSK	1	0	Band 4	20M	2132.5	2175	22.86	22.68		
	CA_4A-29A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	23.16	23.08		
		Band 29	10M	722.5	9715	QPSK	1	0	Band 30	10M	2355	9820	23.18	23.08		
	CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 66	20M	2155	66886	23.16	23.08		
		Band 66	20M	1720	132072	QPSK	1	0	Band 4	20M	2132.5	2175	23.28	23.09		
	CA_4A-66A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 71	20M	637	68786	23.19	23.08		
		Band 71	20M	673	133222	QPSK	1	0	Band 4	20M	2132.5	2175	23.23	23.12		
	CA_5A-7A	Band 5	10M	829	20450	QPSK	1	0	Band 7	20M	2655	3100	23.45	23.38		
		Band 7	20M	2560	21350	QPSK	1	0	Band 5	10M	881.5	2525	23.25	23.07		
	CA_5A-30A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	23.50	23.38		
		Band 30	10M	2310	27710	QPSK	1	0	Band 5	10M	881.5	2525	23.51	23.31		
	CA_5A-41A	Band 5	10M	829	20450	QPSK	1	0	Band 41	20M	2593	40620	23.55	23.38		
		Band 41	20M	2636.5	41055	QPSK	1	0	Band 5	10M	881.5	2525	22.99	22.89		
	CA_5A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 66	20M	2155	66886	23.54	23.38		
		Band 66	20M	1720	132072	QPSK	1	0	Band 5	10M	881.5	2525	23.29	23.09		
	CA_7A-12A	Band 7	20M	2560	21350	QPSK	1	0	Band 12	10M	737.5	5095	23.15	23.07		
		Band 12	10M	707.5	23095	QPSK	1	0	Band 7	20M	2655	3100	23.22	23.09		
	CA_7A-66A	Band 7	20M	2560	21350	QPSK	1	0	Band 66	20M	2155	66886	23.15	23.07		
		Band 66	20M	1720	132072	QPSK	1	0	Band 7	20M	2655	3100	22.89	23.09		
	CA_12A-30A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	23.31	23.09		
		Band 30	10M	2310	27710	QPSK	1	0	Band 12	10M	737.5	5095	23.45	23.31		
	CA_12A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 66	20M	2155	66886	23.30	23.09		
		Band 66	20M	1720	132072	QPSK	1	0	Band 12	10M	737.5	5095	23.15	23.09		
	CA_13A-66A	Band 13	10M	782	23230	QPSK	1	0	Band 66	20M	2155	66886	22.85	22.68		
		Band 66	20M	1720	132072	QPSK	1	0	Band 13	10M	751	5230	23.29	23.09		
	CA_14A-30A	Band 14	10M	793	23330	QPSK	1	0	Band 30	10M	2355	9820	23.06	23.11		
		Band 30	10M	2310	27710	QPSK	1	0	Band 14	10M	763	5330	23.54	23.31		
	CA_14A-66A	Band 14	10M	793	23330	QPSK	1	0	Band 66	20M	2155	66886	23.05	23.11		
		Band 66	20M	1720	132072	QPSK	1	0	Band 14	10M	763	5330	23.26	23.09		
	CA_25A-26A	Band 25	20M	1860	26140	QPSK	1	0	Band 26	15M	876.5	8865	23.36	23.18		
		Band 26	15M	821.5	26765	QPSK	1	0	Band 25	20M	1962.5	8365	23.25	23.09		
	CA_25A-41A	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2593	40620	23.05	23.18		
		Band 41	20M	2636.5	41055	QPSK	1	0	Band 25	20M	1962.5	8365	23.10	22.89		
	CA_26A-41A	Band 26	15M	821.5	26765	QPSK	1	0	Band 41	20M	2593	40620	23.25	23.09		
		Band 41	20M	2636.5	41055	QPSK	1	0	Band 26	15M	876.5	8865	23.05	22.89		
	CA_29A-30A	Band 30	10M	2310	27710	QPSK	1	0	Band 29	10M	722.5	9715	23.51	23.31		
		Band 29	10M	722.5	9715	QPSK	1	0	Band 29	10M	722.5	9715	23.25	23.09		
	CA_29A-66A	Band 66	20M	1720	132072	QPSK	1	0	Band 66	20M	2155	66886	23.45	23.31		
		Band 30	10M	2310	27710	QPSK	1	0	Band 30	10M	2355	9820	22.98	23.09		
	CA_30A-66A	Band 66	20M	1720	132072	QPSK	1	0	Band 2	20M	1959.8	898	23.42	23.30		
		Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	883.9	2549	23.55	23.38		
	Intra-Band	Contiguous	CA_5B	Band 5	10M	829	20450	QPSK	1	0	Band 7	5M	2678.2	3332	23.24	23.06
			CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	23.15	23.07
CA_12B			Band 12	5M	707.5	23095	QPSK	1	0	Band 12	10M	744.7	5167	23.11	22.98	
CA_41C			Band 41	20M	2636.5	41055	QPSK	1	0	Band 41	20M	2656.3	41253	23.10	22.89	
CA_66B			Band 66	15M	1717.5	132047	QPSK	1	0	Band 66	5M	2121.8	66554	23.16	22.96	
Non-Contiguous		CA_66C	Band 66	20M	1720	132072	QPSK	1	0	Band 66	20M	2139.8	66734	23.30	23.09	
		CA_2A-2A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	23.49	23.30	
		CA_4A-4A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	23.13	23.08	
		CA_5A-5A	Band 5	10M	829	20450	QPSK	1	0	Band 5	5M	891.5	2625	23.45	23.38	
		CA_7A-7A	Band 7	20M	2560	21350	QPSK	1	0	Band 7	5M	2622.5	2775	23.29	23.07	
Inter-Band	CA_66A-71A	CA_25A-25A	Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8695	23.31	23.18	
		CA_41A-41A	Band 41	20M	2636.5	41055	QPSK	1	0	Band 41	5M	2498.5	39675	23.00	22.89	
		CA_66A-66A	Band 66	20M	1720	132072	QPSK	1	0	Band 66	5M	2197.5	67311	23.23	23.09	
		CA_66A-71A	Band 66	20M	1720	132072	QPSK	1	0	Band 71	20M	637	68786	23.26	23.09	
		Band 71	20M	673	133222	QPSK	1	0	Band 66	20M	2139.8	66734	23.12	23.12		



2.4GHz WLAN		Full Power				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.78	22.50	100
		6	2437	20.84	22.50	
		11	2462	20.92	22.50	
	802.11g 6Mbps	1	2412	20.07	21.50	98.26
		6	2437	20.20	21.50	
		11	2462	20.17	21.50	
	802.11n-HT20 MCS0	1	2412	19.32	20.50	98.14
		6	2437	19.42	20.50	
		11	2462	19.52	20.50	

2.4GHz WLAN		Receiver On				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.53	17.00	100
		6	2437	16.41	17.00	
		11	2462	16.35	17.00	
	802.11g 6Mbps	1	2412	Not Required	17.00	98.26
		6	2437		17.00	
		11	2462		17.00	
	802.11n-HT20 MCS0	1	2412	Not Required	17.00	98.14
		6	2437		17.00	
		11	2462		17.00	

5GHz WLAN		Full Power				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.54	19.00	98.26
		40	5200	17.40	19.00	
		44	5220	17.20	19.00	
		48	5240	17.03	19.00	
	802.11n-HT20 MCS0	36	5180	17.77	19.00	98.14
		40	5200	17.68	19.00	
		44	5220	17.47	19.00	
		48	5240	17.27	19.00	
	802.11n-HT40 MCS0	38	5190	17.31	19.00	96.3
		46	5230	17.29	19.00	
	802.11ac-VHT20 MCS0	36	5180	17.73	19.00	98.15
		40	5200	17.74	19.00	
		44	5220	17.57	19.00	
		48	5240	17.43	19.00	
	802.11ac-VHT40 MCS0	38	5190	17.59	19.00	96.3
		46	5230	17.48	19.00	
802.11ac-VHT80 MCS0	42	5210	14.28	16.00	92.71	

5GHz WLAN		Receiver On				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	15.50	98.26
		40	5200		15.50	
		44	5220		15.50	
		48	5240		15.50	
	802.11n-HT20 MCS0	36	5180	Not Required	15.50	98.14
		40	5200		15.50	
		44	5220		15.50	
		48	5240		15.50	
	802.11n-HT40 MCS0	38	5190	Not Required	15.50	96.3
		46	5230		15.50	
	802.11ac-VHT20 MCS0	36	5180	Not Required	15.50	98.15
		40	5200		15.50	
		44	5220		15.50	
		48	5240		15.50	
	802.11ac-VHT40 MCS0	38	5190	Not Required	15.50	96.3
		46	5230		15.50	
802.11ac-VHT80 MCS0	42	5210	Not Required	15.50	92.71	

5GHz WLAN		Full Power				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.27	19.00	98.26
		56	5280	17.34	19.00	
		60	5300	17.59	19.00	
		64	5320	17.71	19.00	
	802.11n-HT20 MCS0	52	5260	17.16	19.00	98.14
		56	5280	17.14	19.00	
		60	5300	17.44	19.00	
		64	5320	17.57	19.00	
	802.11n-HT40 MCS0	54	5270	17.78	19.00	96.3
		62	5310	17.98	19.00	
	802.11ac-VHT20 MCS0	52	5260	17.17	19.00	98.15
		56	5280	17.06	19.00	
		60	5300	17.49	19.00	
		64	5320	17.40	19.00	
	802.11ac-VHT40 MCS0	54	5270	17.59	19.00	96.3
		62	5310	17.61	19.00	
802.11ac-VHT80 MCS0	58	5290	14.85	16.00	92.71	

5GHz WLAN		Receiver On				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	15.50	98.26
		56	5280		15.50	
		60	5300		15.50	
		64	5320		15.50	
	802.11n-HT20 MCS0	52	5260	Not Required	15.50	98.14
		56	5280		15.50	
		60	5300		15.50	
		64	5320		15.50	
	802.11n-HT40 MCS0	54	5270	Not Required	15.31	96.3
		62	5310		15.36	
	802.11ac-VHT20 MCS0	52	5260	Not Required	15.50	98.15
		56	5280		15.50	
		60	5300		15.50	
		64	5320		15.50	
	802.11ac-VHT40 MCS0	54	5270	Not Required	15.50	96.3
		62	5310		15.50	
802.11ac-VHT80 MCS0	58	5290	Not Required	15.50	92.71	

5GHz WLAN		Full Power				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.33	19.00	98.26
		116	5580	16.71	18.00	
		132	5660	17.73	19.00	
		140	5700	18.00	19.00	
	802.11n-HT20 MCS0	100	5500	17.58	19.00	98.14
		116	5580	17.19	19.00	
		132	5660	18.10	19.00	
		140	5700	18.14	19.00	
	802.11n-HT40 MCS0	102	5510	17.57	19.00	96.3
		110	5550	17.56	19.00	
		134	5670	18.46	19.00	
	802.11ac-VHT20 MCS0	100	5500	17.68	19.00	98.15
		116	5580	17.23	19.00	
		132	5660	18.00	19.00	
		140	5700	18.07	19.00	
	802.11ac-VHT40 MCS0	102	5510	18.10	19.00	96.3
110		5550	16.97	18.00		
802.11ac-VHT80 MCS0	134	5670	18.71	19.00	92.71	

5GHz WLAN		Receiver On				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not Required	17.00	98.26
		116	5580		17.00	
		132	5660		17.00	
		140	5700		17.00	
	802.11n-HT20 MCS0	100	5500	Not Required	17.00	98.14
		116	5580		17.00	
		132	5660		17.00	
		140	5700		17.00	
	802.11n-HT40 MCS0	102	5510	Not Required	16.15	96.3
		110	5550		16.19	
		134	5670		16.51	
	802.11ac-VHT20 MCS0	100	5500	Not Required	17.00	98.15
		116	5580		17.00	
		132	5660		17.00	
		140	5700		17.00	
	802.11ac-VHT40 MCS0	102	5510	Not Required	17.00	96.3
110		5550	17.00			
802.11ac-VHT80 MCS0	134	5670	Not Required	17.00	92.71	

5GHz WLAN		Full Power				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.17	19.00	98.26
		157	5785	18.21	19.00	
		165	5825	18.25	19.00	
	802.11n-HT20 MCS0	149	5745	17.16	19.00	98.14
		157	5785	17.17	19.00	
		165	5825	17.07	19.00	
	802.11n-HT40 MCS0	151	5755	17.72	18.50	96.3
		159	5795	17.85	18.50	
	802.11ac-VHT20 MCS0	149	5745	17.06	19.00	98.15
		157	5785	17.26	19.00	
		165	5825	17.01	19.00	
	802.11ac-VHT40 MCS0	151	5755	17.22	18.50	96.3
159		5795	17.18	18.50		
802.11ac-VHT80 MCS0	155	5775	17.26	18.50	92.71	

5GHz WLAN		Receiver On				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not Required	18.00	98.26
		157	5785		17.75	
		165	5825		17.77	
	802.11n-HT20 MCS0	149	5745	Not Required	18.00	98.14
		157	5785		18.00	
		165	5825		18.00	
	802.11n-HT40 MCS0	151	5755	Not Required	17.50	96.3
		159	5795		17.50	
	802.11ac-VHT20 MCS0	149	5745	Not Required	18.00	98.15
		157	5785		18.00	
		165	5825		18.00	
	802.11ac-VHT40 MCS0	151	5755	Not Required	17.50	96.3
159		5795	17.50			
802.11ac-VHT80 MCS0	155	5775	Not Required	17.50	92.71	



2.4GHz WLAN		Sensor On/Hotspot On				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11b 1Mbps	1	2412	19.66	20	100	
	6	2437	19.39	20		
	11	2462	19.44	20		
802.11g 6Mbps	1	2412	Not Required	20	98.26	
	6	2437		20		
	11	2462		20		
802.11n-HT20 MCS0	1	2412	Not Required	20	98.14	
	6	2437		20		
	11	2462		20		

2.4GHz WLAN		Simultaneous-handheld				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11b 1Mbps	1	2412	20.78	22.5	100	
	6	2437	20.84	22.5		
	11	2462	20.92	22.5		
802.11g 6Mbps	1	2412	20.07	21.5	98.26	
	6	2437	20.20	21.5		
	11	2462	20.17	21.5		
802.11n-HT20 MCS0	1	2412	19.32	20.5	98.14	
	6	2437	19.42	20.5		
	11	2462	19.52	20.5		

5GHz WLAN		Sensor On/Hotspot On				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	Not Required	14.50	98.26	
	40	5200		14.50		
	44	5220		14.50		
	48	5240		14.50		
802.11n-HT20 MCS0	36	5180	Not Required	14.50	98.14	
	40	5200		14.50		
	44	5220		14.50		
	48	5240		14.50		
802.11n-HT40 MCS0	38	5190	14.36	14.50	96.3	
	46	5230	14.09	14.50		
802.11ac-VHT20 MCS0	36	5180	Not Required	14.50	98.15	
	40	5200		14.50		
	44	5220		14.50		
	48	5240		14.50		
802.11ac-VHT40 MCS0	38	5190	14.50	14.50	96.3	
	46	5230	14.50	14.50		
802.11ac-VHT80 MCS0	42	5210	14.00	14.00	92.71	

5GHz WLAN		Simultaneous-handheld				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	17.54	18.50	98.26	
	40	5200	17.40	18.50		
	44	5220	17.20	18.50		
	48	5240	17.03	18.50		
802.11n-HT20 MCS0	36	5180	17.77	18.50	98.14	
	40	5200	17.68	18.50		
	44	5220	17.47	18.50		
	48	5240	17.27	18.50		
802.11n-HT40 MCS0	38	5190	17.31	18.50	96.3	
	46	5230	17.29	18.50		
802.11ac-VHT20 MCS0	36	5180	17.73	18.50	98.15	
	40	5200	17.74	18.50		
	44	5220	17.57	18.50		
	48	5240	17.43	18.50		
802.11ac-VHT40 MCS0	38	5190	17.59	18.50	96.3	
	46	5230	17.48	18.50		
802.11ac-VHT80 MCS0	42	5210	14.28	16.00	92.71	

5GHz WLAN		Sensor On				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	Not Required	14.50	98.26	
	56	5280		14.50		
	60	5300		14.50		
	64	5320		14.50		
802.11n-HT20 MCS0	52	5260	Not Required	14.50	98.14	
	56	5280		14.50		
	60	5300		14.50		
	64	5320		14.50		
802.11n-HT40 MCS0	54	5270	13.48	14.50	96.3	
	62	5310	13.49	14.50		
802.11ac-VHT20 MCS0	52	5260	Not Required	14.50	98.15	
	56	5280		14.50		
	60	5300		14.50		
	64	5320		14.50		
802.11ac-VHT40 MCS0	54	5270	14.50	14.50	96.3	
	62	5310	14.50	14.50		
802.11ac-VHT80 MCS0	58	5290	14.00	14.00	92.71	

5GHz WLAN		Simultaneous-handheld				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	17.27	18.00	98.26	
	56	5280	17.34	18.00		
	60	5300	17.59	18.00		
	64	5320	17.71	18.00		
802.11n-HT20 MCS0	52	5260	17.16	18.00	98.14	
	56	5280	17.14	18.00		
	60	5300	17.44	18.00		
	64	5320	17.57	18.00		
802.11n-HT40 MCS0	54	5270	17.78	18.00	96.3	
	62	5310	17.98	18.00		
802.11ac-VHT20 MCS0	52	5260	17.17	18.00	98.15	
	56	5280	17.06	18.00		
	60	5300	17.49	18.00		
	64	5320	17.40	18.00		
802.11ac-VHT40 MCS0	54	5270	17.59	18.00	96.3	
	62	5310	17.81	18.00		
802.11ac-VHT80 MCS0	58	5290	14.85	16	92.71	

5GHz WLAN		Sensor On				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	Not Required	15.00	98.26	
	116	5580		15.00		
	132	5660		15.00		
	140	5700		15.00		
802.11n-HT20 MCS0	100	5500	Not Required	15.00	98.14	
	116	5580		15.00		
	132	5660		15.00		
	140	5700		15.00		
802.11n-HT40 MCS0	102	5510	14.46	15.00	96.3	
	110	5550	14.63	15.00		
	134	5670	14.69	15.00		
802.11ac-VHT20 MCS0	100	5500	Not Required	15.00	98.15	
	116	5580		15.00		
	132	5660		15.00		
	140	5700		15.00		
802.11ac-VHT40 MCS0	102	5510	14.50	15.00	96.3	
	110	5550	14.50	15.00		
	134	5670	14.50	15.00		
802.11ac-VHT80 MCS0	106	5530	14.5	14.5	92.71	

5GHz WLAN		Simultaneous-handheld				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	Not Required	18.50	98.26	
	116	5580		18.50		
	132	5660		18.50		
	140	5700		18.50		
802.11n-HT20 MCS0	100	5500	Not Required	18.50	98.14	
	116	5580		18.50		
	132	5660		18.50		
	140	5700		18.50		
802.11n-HT40 MCS0	102	5510	17.57	18.50	96.3	
	110	5550	17.56	18.50		
	134	5670	18.46	18.50		
802.11ac-VHT20 MCS0	100	5500	Not Required	18.50	98.15	
	116	5580		18.50		
	132	5660		18.50		
	140	5700		18.50		
802.11ac-VHT40 MCS0	102	5510	17.57	18.50	96.3	
	110	5550	17.56	18.50		
	134	5670	18.46	18.50		
802.11ac-VHT80 MCS0	106	5530	14.5	16	92.71	

5GHz WLAN		Sensor On/Hotspot On				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	149	5745	14.38	14.50	98.26	
	157	5785	14.26	14.50		
	165	5825	14.45	14.50		
802.11n-HT20 MCS0	149	5745	Not Required	14.50	98.14	
	157	5785		14.50		
	165	5825		14.50		
802.11n-HT40 MCS0	151	5755	14.00	14.00	96.3	
	159	5795	14.00	14.00		
802.11ac-VHT20 MCS0	149	5745	Not Required	14.50	98.15	
	157	5785		14.50		
	165	5825		14.50		
802.11ac-VHT40 MCS0	151	5755	14.00	14.00	96.3	
	159	5795	14.00	14.00		
802.11ac-VHT80 MCS0	155	5775	14.00	14.00	92.71	

5GHz WLAN		Simultaneous-handheld				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	149	5745	18.17	18.50	98.26	
	157	5785	18.21	18.50		
	165	5825	18.25	18.50		
802.11n-HT20 MCS0	149	5745	17.16	18.50	98.14	
	157	5785	17.17	18.50		
	165	5825	17.07	18.50		
802.11n-HT40 MCS0	151	5755	17.72	18.00	96.3	
	159	5795	17.85	18.00		
802.11ac-VHT20 MCS0	149	5745	17.06	18.50	98.15	
	157	5785	17.26	18.50		
	165	5825	17.01	18.50		
802.11ac-VHT40 MCS0	151	5755	17.22	18.00	96.3	
	159	5795	17.18	18.00		
802.11ac-VHT80 MCS0	155	5775	17.26	18.00	92.71	



BT 2.0

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	7.67	5.26	5.31
	CH 39	2441	7.20	4.39	4.26
	CH 76	2480	7.84	5.18	5.49
Tune-up Limit			9	6	6

BT 4.0

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
LE	CH 00	2402	7.51
	CH 19	2440	7.13
	CH 39	2480	7.58
Tune-up Limit			9

BT 5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)
			1Mbps
LE	CH 00	2402	7.59
	CH 19	2440	7.11
	CH 39	2480	7.66
Tune-up Limit			9



Appendix F. Supplemental Tuner Head & Body SAR Results

The results are shown as follows.

Head

Mode	Service/Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)										
									Auto-Tune	0	15	30	45	60	75	90	105	120	135
GSM850	GPRS 3 Tx slots	189	836.4	-	-	Right Cheek	0mm	0.424	0.511	0.033	0.439	0.359	0.011	0.353	0.117	0.014	0.471	0.040	0.007
GSM1900	GPRS 3 Tx slots	661	1880	-	-	Left Cheek	0mm	0.077	0.109	0.017	0.066	0.083	0.046	0.070	0.036	0.037	0.077	0.027	0.021
WCDMA V	RMC 12.2Kbps	4233	846.6	-	-	Right Cheek	0mm	0.385	0.465	0.067	0.334	0.330	0.107	0.349	0.292	0.060	0.407	0.224	0.068
WCDMA II	RMC 12.2Kbps	9262	1852.4	-	-	Right Cheek	0mm	0.141	0.207	0.070	0.067	0.176	0.063	0.049	0.122	0.132	0.030	0.034	0.026
WCDMA IV	RMC 12.2Kbps	1312	1712.4	-	-	Right Cheek	0mm	0.172	0.233	0.240	0.230	0.085	0.039	0.042	0.209	0.169	0.040	0.022	0.020
CDMA2000 BC10	RC3 SO55	684	823.1	-	-	Right Cheek	0mm	0.391	0.478	0.226	0.080	0.557	0.300	0.154	0.390	0.320	0.019	0.453	0.200
CDMA2000 BC0	RC3 SO55	384	836.52	-	-	Right Cheek	0mm	0.396	0.492	0.225	0.148	0.014	0.442	0.190	0.045	0.392	0.062	0.009	0.308
CDMA2000 BC1	RC3 SO55	1175	1906.75	-	-	Right Cheek	0mm	0.122	0.162	0.037	0.040	0.116	0.144	0.095	0.142	0.067	0.155	0.065	0.048
LTE Band 71	20MQPSK	133322	683	1	0	Left Cheek	0mm	0.183	0.209	0.100	0.089	0.042	0.009	0.039	0.118	0.024	0.014	0.094	0.005
LTE Band 12	10MQPSK	23095	707.5	1	0	Right Cheek	0mm	0.264	0.303	0.074	0.181	0.049	0.157	0.042	0.182	0.015	0.030	0.051	
LTE Band 13	10MQPSK	23230	782	1	0	Right Cheek	0mm	0.247	0.288	0.241	0.271	0.100	0.032	0.119	0.212	0.266	0.100	0.061	
LTE Band 14	10MQPSK	23330	793	1	0	Left Cheek	0mm	0.231	0.269	0.156	0.205	0.097	0.026	0.098	0.169	0.168	0.182	0.056	
LTE Band 26	15MQPSK	26865	831.5	1	0	Right Cheek	0mm	0.206	0.226	0.179	0.074	0.211	0.097	0.188	0.215	0.193	0.013	0.124	
LTE Band 66	20MQPSK	132572	1770	1	0	Right Cheek	0mm	0.191	0.257	0.204	0.184	0.184	0.148	0.172	0.132	0.095	0.044	0.075	
LTE Band 25	20MQPSK	26590	1905	1	0	Right Cheek	0mm	0.124	0.162	0.142	0.175	0.140	0.154	0.082	0.188	0.168	0.083	0.181	

Body

Mode	Service/Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)										
									Auto-Tune	0	15	30	45	60	75	90	105	120	135
GSM850	GPRS 3 Tx slots	189	836.4	-	-	Back	5mm	1.02	1.330	0.109	1.153	0.991	0.725	1.125	0.376	0.042	1.316	0.117	0.871
GSM1900	GPRS 3 Tx slots	810	1909.8	-	-	Bottom Side	5mm	1.2	1.600	0.524	1.568	1.588	1.101	1.530	0.927	1.027	1.586	0.646	0.498
WCDMA V	RMC 12.2Kbps	4182	836.4	-	-	Back	5mm	1.25	2.270	0.308	1.617	1.506	0.527	1.624	1.293	0.920	1.994	1.048	0.320
WCDMA II	RMC 12.2Kbps	9538	1907.6	-	-	Bottom Side	5mm	1.18	1.600	0.757	0.718	1.550	0.833	0.742	1.247	1.325	0.523	0.463	0.381
WCDMA IV	RMC 12.2Kbps	1513	1752.6	-	-	Bottom Side	5mm	0.893	1.190	0.995	0.986	0.541	0.244	0.251	1.073	0.968	0.249	0.143	0.125
CDMA2000 BC10	RC3 SO32 (F+SCH)	684	823.10	-	-	Back	5mm	1.21	1.540	0.685	0.212	1.302	0.901	0.389	0.981	0.882	0.061	1.316	0.710
CDMA2000 BC0	RTAP 153.6Kbps	384	836.52	-	-	Back	5mm	1.22	1.600	0.832	0.559	0.060	1.811	0.741	0.153	1.366	0.277	0.040	1.374
CDMA2000 BC1	RTAP 153.6Kbps	25	1851.25	-	-	Bottom Side	5mm	1.04	1.400	0.491	0.521	1.085	1.213	0.911	1.396	0.805	1.195	0.708	0.544
LTE Band 71	20MQPSK	133322	883	1	0	Back	5mm	0.645	1.130	0.607	0.526	0.092	0.748	0.587	0.452	0.962	0.284	0.072	0.399
LTE Band 12	10MQPSK	23095	707.5	1	0	Back	5mm	0.759	1.300	0.188	0.476	0.175	0.042	0.443	0.428	0.232	0.299	0.111	
LTE Band 13	10MQPSK	23230	782	1	0	Back	5mm	0.881	1.460	0.513	0.881	0.571	0.129	0.841	0.840	0.571	0.591	0.304	
LTE Band 14	10MQPSK	23330	793	1	0	Back	5mm	0.81	1.330	0.756	1.105	0.357	0.180	0.873	1.087	0.918	1.307	0.454	
LTE Band 26	15MQPSK	26865	831.5	1	0	Back	5mm	1.19	2.100	0.943	0.603	1.063	0.463	0.119	1.336	1.119	0.096	0.648	
LTE Band 66	20MQPSK	132572	1770	50	0	Back	5mm	1.12	1.410	0.864	0.736	0.760	0.588	1.001	0.535	0.398	0.202	0.305	
LTE Band 25	20MQPSK	26590	1905	50	0	Back	5mm	0.948	1.200	0.801	0.946	0.769	0.625	0.460	0.963	0.869	0.373	0.836	

Body with SAR higher than 1.2W/Kg

Mode	Service Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)																					
									Auto-Tune	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
GSM850	GPRS 3 Tx slots	189	836.4	-	-	Back	5mm	1.02	1.33	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
										0.109	0.178	0.269	0.630	0.796	0.809	0.901	0.771	0.572	0.180	0.398	0.737	0.871	1.093	1.138	1.153	1.124	0.909	0.133	0.211	0.308
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.713	0.693	0.923	0.920	0.904	0.685	0.661	0.430	0.641	0.901	1.210	1.259	1.274	1.256	1.028	0.300	0.031	0.047	0.163	0.450	0.634
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.148	1.301	0.754	0.725	0.072	0.170	0.248	0.520	0.702	1.057	1.197	0.996	0.023	0.038	0.054	0.207	0.492	0.707	1.125	1.254	0.871
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.836	0.686	0.197	0.262	0.555	0.722	0.995	1.096	1.000	0.937	0.959	0.690	0.376	0.622	1.030	1.206	1.204	0.690	0.665	0.136	0.332
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										0.490	0.927	1.123	1.246	1.299	1.014	0.042	0.068	0.104	0.412	0.870	1.077	1.268	1.270	0.915	0.794	0.163	0.380	0.536	0.963	1.139
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										1.318	1.325	1.077	0.611	0.676	0.923	0.985	0.202	0.310	0.613	0.844	0.918	0.015	0.034	0.060	0.117	0.247	0.344	0.571	0.796	0.933
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.127	0.018	0.028	0.036	0.220	0.321	0.600	0.798	0.876	0.871	0.040	0.092	0.174	0.272	0.366	0.557	0.669	0.830			
GSM1900	GPRS 3 Tx slots	810	1900.8	-	-	Bottom Side	5mm	1.2	1.6	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
										0.494	0.524	0.542	0.572	0.591	0.590	0.593	0.602	0.608	1.411	1.479	1.516	1.519	1.556	1.560	1.566	1.568	1.585	0.560	0.586	0.598
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.840	0.657	0.650	0.660	0.668	0.671	1.541	1.590	1.595	1.585	1.588	1.587	1.589	1.593	1.597	1.225	1.369	1.460	1.522	1.520	1.524
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.498	1.474	1.429	1.003	1.101	1.147	1.162	1.191	1.191	1.192	1.212	1.208	1.198	1.373	1.474	1.553	1.556	1.548	1.548	1.530	1.490
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.895	0.889	0.880	0.884	0.883	0.873	0.877	0.878	0.875	0.808	0.925	0.950	0.944	0.927	0.929	0.904	0.921	0.910	1.557	1.579	1.589
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										1.585	1.561	1.561	1.568	1.570	1.566	1.008	1.027	1.035	1.028	1.017	1.008	1.016	1.005	1.582	1.583	1.591	1.583	1.599	1.594	1.580
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										1.590	1.596	1.594	1.562	0.757	0.903	1.358	1.405	1.420	1.505	1.540	1.592	0.514	0.577	0.620	0.623	0.646	0.655	0.668	0.672	0.687
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.566	0.722	0.837	1.135	1.280	1.291	1.387	1.399	1.448	0.484	0.498	0.592	0.501	0.501	0.498	0.499	0.499	0.504			
WCDMA V	RMC 12.2Kops	4182	836.4	-	-	Back	5mm	1.25	2.27	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
										0.164	0.223	0.308	0.639	0.668	0.654	1.085	1.134	1.119	0.263	0.479	0.796	0.833	1.235	1.350	1.407	1.575	1.617	0.196	0.263	0.346
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.705	0.943	1.039	1.189	1.252	1.292	0.315	0.558	0.900	1.060	1.383	1.506	1.694	1.777	1.813	0.066	0.106	0.157	0.543	1.092	1.392
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.835	1.951	1.442	0.105	0.237	0.279	1.301	1.582	1.994	2.147	2.138	0.079	0.123	0.183	0.607	1.172	1.469	1.615	2.046	1.624	
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.127	0.281	0.605	0.821	1.388	1.650	2.016	2.140	1.988	0.113	0.174	0.252	0.735	1.140	1.293	1.497	1.557	1.328	0.171	0.374	0.766
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										0.997	1.432	1.600	1.951	2.005	1.820	0.129	0.201	0.290	0.836	1.270	1.454	1.687	1.762	1.568	0.205	0.443	0.796	1.131	1.660	1.851
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										2.072	2.146	1.994	0.039	0.058	0.085	0.299	0.401	0.889	1.514	1.822	1.621	0.053	0.122	0.283	0.404	0.797	1.048	1.530	1.772	1.907
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.842	0.665	0.096	0.335	0.711	0.974	1.520	1.820	1.787	0.061	0.143	0.320	0.450	0.665	1.106	1.533	1.735	1.890			
WCDMA II	RMC 12.2Kops	9538	1907.6	-	-	Bottom Side	5mm	1.18	1.6	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
										0.628	0.664	0.691	0.757	0.775	0.777	0.793	0.795	0.810	1.545	1.591	1.511	1.513	1.530	1.533	1.532	1.536	1.540	0.716	0.761	0.788
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.850	0.878	0.881	0.897	0.900	0.916	1.544	1.507	1.578	1.560	1.558	1.536	1.525	1.066	1.245	1.350	1.543	1.585	1.600		
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.538	1.545	1.561	0.844	0.846	0.835	0.833	0.831	0.827	0.823	0.823	0.818	1.046	1.182	1.273	1.443	1.509	1.512	1.442	1.558	1.573
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.742	0.681	0.645	0.632	0.612	0.610	0.598	0.594	0.583	1.096	1.145	1.159	1.206	1.242	1.238	1.247	1.251	1.248	1.529	1.530	1.519
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										1.522	1.511	1.515	1.511	1.508	1.502	1.183	1.237	1.269	1.325	1.344	1.346	1.355	1.355	1.360	1.346	1.301	1.279	1.214	1.189	1.188
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										1.174	1.169	1.153	0.523	0.631	0.718	0.934	1.030	1.058	1.123	1.149	1.219	0.473	0.472	0.469	0.447	0.464	0.463	0.463	0.462	0.464
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.511	0.596	0.666	0.825	0.907	0.919	0.962	0.987	1.037	0.455	0.414	0.388	0.381	0.367	0.366	0.358	0.356	0.349			
WCDMA IV	RMC 12.2Kops	1513	1752.6	-	-	Bottom Side	5mm	0.893	1.19	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
										0.853	0.891	0.915	0.971	0.995	0.994	1.004	1.012	1.025	0.884	0.872	0.826	0.814	0.792	0.787	0.777	0.773	0.760	0.959	0.986	1.005
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										1.044	1.060	1.060	1.061	1.069	1.100	1.080	0.834	0.826	0.886	0.876	0.853	0.851	0.841	0.834	0.468	0.506	0.533	0.587	0.611	0.617
										42	43	44	45	46	47	48	49	50	51	52	53									



Mode	Service Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)																					
									Auto-Tune																					
									0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
CDMA2000 BC1	RTTAP 153.6Kbps	25	1851.25	-	-	Bottom Side	5mm	1.04	1.4	0.370	0.397	0.417	0.458	0.474	0.475	0.487	0.491	0.492	0.474	1.120	1.176	1.191	1.223	1.224	1.242	1.248	1.262	0.411	0.439	0.457
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.501	0.521	0.521	0.534	0.539	0.547	1.373	1.328	1.389	1.376	1.386	1.389	1.392	1.397	1.397	0.961	1.085	1.154	1.213	1.208	1.208
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.193	1.183	1.160	0.961	1.131	1.149	1.194	1.195	1.187	1.203	1.213	1.225	0.992	1.090	1.168	1.224	1.265	1.263	1.259	1.252	1.238
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.889	0.888	0.908	0.905	0.911	0.908	0.913	0.914	0.915	0.917	0.883	0.701	0.729	0.729	0.734	0.737	0.736	0.736	0.736	1.396	1.394
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										1.360	1.389	1.386	1.400	1.400	0.707	0.707	0.741	0.781	0.791	0.802	0.801	0.805	0.805	0.805	1.391	1.394	1.353	1.358	1.355	1.356
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										1.355	1.362	1.371	1.374	0.745	0.879	1.195	1.195	1.357	1.392	1.328	1.367	0.530	0.602	0.652	0.666	0.693	0.699	0.710	0.721	0.739
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.567	0.708	0.823	1.105	1.234	1.243	1.305	1.328	1.369	0.523	0.523	0.533	0.534	0.538	0.541	0.543	0.544	0.546			

Mode	Service Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)																					
									Auto-Tune																					
									0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
LTE Band 26	QPSK15M	26865	831.5	1	0	Back	5mm	1.22	2.23	0.166	0.232	0.301	0.562	0.754	0.817	0.910	0.948	1.050	0.278	0.490	0.796	0.893	1.136	1.224	1.356	1.409	1.579	0.529	0.209	0.279
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.360	0.681	0.879	0.931	1.100	1.236	0.363	0.601	0.820	1.063	1.160	1.432	1.577	1.636	1.826	0.370	0.108	0.163	0.556	1.103	1.402
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										1.842	1.960	1.463	0.117	0.247	0.545	0.748	1.324	1.612	2.034	2.223	2.031	0.263	0.120	0.191	0.638	1.211	1.490	1.982	2.116	1.687
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.138	0.296	0.607	0.845	1.442	1.714	2.095	2.210	2.118	0.117	0.187	0.268	0.772	1.186	1.301	1.433	1.446	1.303	0.182	0.393	0.788
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										1.040	1.553	1.752	1.934	1.883	1.844	1.137	0.211	0.303	0.846	1.320	1.454	1.605	1.633	1.498	0.220	0.466	0.908	1.162	1.682	1.877
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										2.110	2.177	2.065	0.040	0.052	0.091	0.305	0.671	0.937	1.521	1.829	1.750	0.058	0.131	0.296	0.422	0.738	1.056	1.548	1.788	1.986
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.944	0.068	0.102	0.338	0.702	0.991	1.542	1.839	1.780	0.066	0.150	0.319	0.496	0.667	1.102	1.506	1.706	1.940			

Mode	Service Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)																					
									Auto-Tune																					
									0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
LTE Band 66	QPSK20M	132972	1770	50	0	Back	5mm	1.12	1.41	0.977	1.030	1.066	1.147	1.172	1.176	1.195	1.204	1.231	1.377	1.280	1.231	1.211	1.199	1.170	1.156	1.152	1.140	1.142	1.180	1.214
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										1.295	1.315	1.316	1.320	1.332	1.352	1.012	0.925	0.870	0.851	0.820	0.820	0.806	0.797	0.778	0.622	0.686	0.732	0.839	0.895	0.900
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										0.931	0.944	0.982	0.471	0.406	0.368	0.359	0.340	0.339	0.330	0.325	0.316	0.584	0.622	0.650	0.707	0.734	0.739	0.782	0.759	0.776
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.423	0.337	0.292	0.280	0.260	0.257	0.247	0.243	0.233	1.168	1.295	1.296	1.313	1.355	1.364	1.396	1.406	0.884	0.795	0.738	0.722
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										0.893	0.688	0.673	0.671	0.654	0.642	1.167	1.210	1.245	1.321	1.341	1.348	1.368	1.377	1.393	0.706	0.601	0.540	0.525	0.499	0.495
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										0.480	0.575	0.460	0.294	0.324	0.348	0.402	0.429	0.434	0.450	0.457	0.480	0.297	0.251	0.228	0.219	0.211	0.206	0.199	0.196	0.191
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.293	0.312	0.329	0.354	0.367	0.370	0.377	0.381	0.383	0.299	0.227	0.192	0.184	0.188	0.167	0.160	0.158	0.149			

Mode	Service Modulation	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)																					
									Auto-Tune																					
									0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
LTE Band 25	QPSK20M	26590	1905	50	0	Back	5mm	0.948	1.2	0.075	0.100	0.122	0.165	0.181	0.180	0.192	0.199	0.205	0.795	0.862	0.910	0.926	0.966	0.963	0.979	0.983	1.000	0.114	0.142	0.165
										21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
										0.208	0.229	0.229	0.241	0.247	0.255	1.119	1.151	1.183	1.182	1.196	1.199	1.197	1.111	1.115	0.849	0.785	0.861	0.963	0.951	0.949
										42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
										0.948	0.934	0.920	0.630	0.722	0.782	0.792	0.819	0.823	0.837	0.844	0.857	0.856	0.788	0.871	0.904	1.001	0.997	0.990	0.987	
										63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
										0.526	0.540	0.547	0.545	0.544	0.544	0.545	0.540	0.540	0.368	0.400	0.422	0.430	0.458	0.457	0.460	0.458	0.454	1.033	1.115	1.151
										84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
										1.175	1.167	1.100	1.198	1.191	1.197	0.430	0.481	0.485	0.516	0.533	0.532	0.533	0.534	0.540	0.831	1.115	1.126	1.130	1.140	1.143
										105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
										1.136	1.136	1.135	0.260	0.402	0.532	0.851	0.990	1.008	1.071	1.105	1.144	0.196	0.253	0.294	0.304	0.419	0.425	0.439	0.448	0.464
										126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143			
										0.312	0.463	0.583	0.883	0.884	1.046	1.114	1.146	1.199	0.240	0.250	0.254	0.254	0.256	0.256	0.256	0.256	0.259			