

SAR Report

Applicant : ASUSTeK COMPUTER INC.
Applicant Address : 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Product Type : LTE module
Trade Name : FIBOCOM
Model Number : L850-GL
Applicable Standard : 47 CFR Part §2.1093
Received Date : Nov. 11, 2020
Test Period : Dec. 01 ~ Dec. 12, 2020
Issued Date : Jan. 25, 2021

Issued by

Approved By ..



(Kris Pan)

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C.)
Tel·· +886-3-2710188 / Fax·· +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

Note:

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
2. This report shall not be reproduced except in full, without the written approval of A Test Lab Technology Corporation.
3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.



Revision History

Rev.	Issued Date	Revisions	Revised By
00	Jan. 05, 2021	Initial Issue	Nicole Chu
01	Jan. 22, 2021	Revised 2 chapter (P5) Revised 3 chapter (P6) Revised 7.6 chapter (P28~29) Revised 7.7 chapter (P30) Revised 7.9 chapter (P124) Revised 7.10 chapter (P125) Revised 7.11 chapter (P127) Revised 11.5 chapter (P142~143, P146~147) Revised 11.6 chapter (P153) Revised 11.7 chapter (P154)	Nicole Chu
02	Jan. 25, 2021	Revised 2 chapter (P5) Revised 3 chapter (P6) Revised 7.6 chapter (P28~29) Revised 7.7 chapter (P30) Revised 7.9 chapter (P124) Revised 7.10 chapter (P125) Revised 7.11 chapter (P127) Revised 11.5 chapter (P142~143, P146~147) Revised 11.6 chapter (P153) Revised 11.7 chapter (P154) Revised Appendix B (P176)	Nicole Chu



Contents

1. General Information.....	4
1.1 Reference Applicable Standard	4
1.2 Test Site Environment.....	4
2. Summary of Maximum Reported SAR Value.....	5
3. Description of Equipment under Test (EUT)	6
4. Introduction.....	10
4.1 SAR Definition.....	10
5. SAR Measurement Setup.....	11
5.1 DASY E-Field Probe System.....	12
5.1.1 E-Field Probe Specification	12
5.2 Data Acquisition Electronic (DAE) System.....	13
5.3 Robot.....	13
5.4 Device Holder.....	14
5.5 Oval Flat Phantom - ELI.....	14
6. Tissue Simulating Liquids.....	15
6.1 The composition of the tissue simulating liquid	16
6.2 Liquid Parameters	16
6.3 Liquid Depth	19
7. SAR Testing with RF Transmitters	20
7.1 Positioning of the DUT in relation to the phantom.....	20
7.2 SAR Testing with WCDMA.....	21
7.3 SAR Testing with HSDPA / HSUPA.....	22
7.4 SAR Testing with LTE	24
7.5 SAR Testing with LTE	25
7.6 Proximity Sensor	28
7.6.1 Proximity Sensor Evaluation and Test	28
7.6.2 Procedures for determining proximity sensor triggering distances.....	28
7.6.3 Procedures for determining tablet tilt angle influences to proximity sensor triggering	29
7.7 Conducted Power Measurements	30
7.8 Power Reduction.....	86
7.9 Antenna location.....	124
7.10 Standalone SAR Test Exclusion Calculation.....	125
7.11 Simultaneous Transmitting Evaluate.....	127
7.11.1 Sum of 1-g SAR of all simultaneously transmitting	127
8. System Verification and Validation.....	131
8.1 Symmetric Dipoles for System Verification	131
8.2 Verification Summary	132
9. Test Equipment List.....	133
10. Measurement Uncertainty	134
11. Measurement Procedure	136
11.1 Spatial Peak SAR Evaluation.....	136
11.2 Area & Zoom Scan Procedures.....	137
11.3 Volume Scan Procedures.....	138
11.4 Power Drift Monitoring.....	138
11.5 Body SAR Measurement.....	139
11.6 SAR Variability Measurement	153
11.7 Spot Check.....	154
11.8 SAR Exposure Limit	155
12. References	156
Appendix A - System Performance Check.....	157
Appendix B - SAR Measurement Data	169
Appendix C - Calibration.....	196



1. General Information

1.1 Reference Applicable Standard

Standard	Description	Version
IEEE 1528	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques.	2013
ANSI/IEEE C95.1	American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 KHz to 100 GHz, New York.	1992
47 CFR Part §2.1093	Radiofrequency radiation exposure evaluation: portable devices.	-
KDB 248227 D01	SAR guidance for IEEE 802.11 (Wi-Fi) transmitters	v02r02
KDB 447498 D01	RF exposure procedures and equipment authorization policies for mobile and portable devices	v06
KDB 616217 D04	SAR evaluation considerations for laptop, notebook and tablet computers.	v01r02
KDB 865664 D01	SAR measurement requirement for 100 MHz to 6 GHz.	v01r04
KDB 865664 D02	RF exposure compliance reporting and documentation considerations.	v01r02
KDB 941225 D01	3G SAR measurement procedures	v03r01
KDB 941225 D05	SAR evaluation considerations for LTE devices	v02r05
KDB 941225 D05A	REL. 10 LTE SAR test guidance and KDB inquiries	v01r02
KDB 941225 D06	SAR evaluation procedures for portable devices with wireless router capabilities	v02r01

1.2 Test Site Environment

Items	Required (IEEE 1528-2013)	Actual
Temperature (C)	18-25	21-23



2. Summary of Maximum Reported SAR Value

Equipment Class	Mode	Highest Reported 1g SAR (W/kg)	
		Body standalone SAR _{1g} (W/kg)	
		Tablet/SKU 1	Notebook/SKU 2
Licensed	WCDMA Band II	0.98	0.82
	WCDMA Band IV	1.04	0.73
	WCDMA Band V	1.05	0.17
	LTE Band 2	0.93	0.67
	LTE Band 5	1.06	0.31
	LTE Band 7	1.1	0.40
	LTE Band 12/17	0.61	0.15
	LTE Band 13	1.08	0.21
	LTE Band 26	0.88	0.22
	LTE Band 4/66	1.00	0.51
	LTE Band 30	1.07	0.20
	LTE Band 38/41	0.91	0.29
DTS	WLAN2.4GHz Ant Main	0.13	0.63
	WLAN2.4GHz Ant Aux	0.15	0.40
U-NII	WLAN5GHz Ant Main	0.80	0.94
	WLAN5GHz Ant Aux	0.08	0.17
DSS	Bluetooth Ant Aux	0.06	0.32
Highest Simultaneous Transmission SAR		Highest Simultaneous Transmission 1g SAR (W/kg)	
		1.59	1.50

Note:

1. The SAR limit (Head & Body: SAR_{1g} 1.6 W/kg) for general population / uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.
2. The test procedures, as described in American National Standards, Institute ANSI/IEEE C95.1 ANSI/IEEE C95.3 (For IC) were employed and they specify the maximum exposure limit (SAR_{1g} 1.6 W/kg for Head & Body, SAR_{10g} 4.0 W/kg for Extremity) of tissue for portable devices being used within 20 cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this testreport.
3. This device has two kinds of SKU, SKU 1 is 360 convertible laptop computer, SKU 2 is laptop only. All circuit designs, circuit board and other related designs are electrically identical.
4. According to October 2014 TCB workshop SAR guidance for overlapping bands that support roaming using multiple frequency band indicator. This device supports LTE B12/17, LTE B4/66, B38/41 Since the supported frequency span falls completely within the supports frequency span, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was assessed B12/38/66.
5. WLAN of the SAR value reference to the FCC ID MSQ9560NG of the report no. 2012FS14. The Devices evaluated Spot Check, please see as below :11.7 Spot Check
6. SAR testing for WCDMA V, LTE 5/12/13/17 and 26 was performed on the maximum power mode

3. Description of Equipment under Test (EUT)

Applicant	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Manufacturer	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Product Type	LTE module
Trade Name	FIBOCOM
Model Number	L850-GL
FCC ID	MSQL850GL
IMEI No.	863212030510991
Class II Permissive Change	<p>(1) This is to request a Class II permissive change for FCC ID: MSQL850GL , originally granted on 2020/12/16</p> <p>Modification:</p> <p>-Change #1: Additional chassis added, ASUSTeK, model number: BR1100FK, B1100FK, BR1100CK, B1100CK</p> <p>Models differences: All models are electrically identical, different model names are for marketing purpose and the flip angle of panel, as below. BR1100FK, B1100FK is for 360 degree BR1100CK, B1100CK is for 180 degree</p> <p>-Change #2: This filing also addresses co-location with WLAN, BT module FCC ID: MSQ9560NG or with WLAN, BT module FCC ID: MSQAX201NG. The Original FCC testing on module under FCC ID: MSQL850GL was performed with an antenna of higher gain, and the antenna was connected to the module in an open environment. The current host platform under application uses an antenna with lower gain and is installed inside the host platform enclosure. The physical restraints introduced by the host platform should have resulted in equal or lower levels of radiated emissions. Therefore, additional Radiated emission testing is not necessary.</p> <p>-Change #3: Add two antennas which have the same antenna type as original grant, and each antenna gain is lower.</p>
Host Information	<p>Product Type: Notebook PC</p> <p>Trade Name: ASUS</p> <p>Model Name: BR1100FK, B1100FK, BR1100CK, B1100CK.</p> <p>All models are electrically identical, different model names are for marketing purpose and the flip angle of panel, as below. BR1100FK, B1100FK is for 360 degree BR1100CK, B1100CK is for 180 degree</p>



	Operate Modes	Operate Frequency (MHz)
Frequency Range	WCDMA Band II	1852.4 - 1907.6
	WCDMA Band IV	1712.4 - 1752.6
	WCDMA Band V	826.4 - 846.6
	LTE Band 2 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1850.7 - 1909.3
	LTE Band 4 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1710.7 - 1754.3
	LTE Band 5 (BW 1.4, 3, 5, 10 MHz)	824.7 - 848.3
	LTE Band 7 (BW 5, 10, 15, 20 MHz)	2502.5 - 2567.5
	LTE Band 12 (BW 1.4, 3, 5, 10 MHz)	699.7 - 715.3
	LTE Band 13 (BW 5, 10 MHz)	779.5 - 784.5
	LTE Band 17 (BW 5, 10 MHz)	706.5 - 713.15
	LTE Band 26 (BW 1.4, 3, 5, 10, 15 MHz)	814.7 - 848.3
	LTE Band 30 (BW 5, 10 MHz)	2307.5 - 2312.5
	LTE Band 38 (BW 5, 10, 15, 20 MHz)	2572.5 - 2617.5
	LTE Band 41 (BW 5, 10, 15, 20 MHz)	2498.5 - 2687.5
LTE Band 66 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1710.7 - 1779.3	
Modulations	WCDMA: RMC 12.2Kbps/HSPA+ LTE: QPSK/16QAM	
Device Category	Portable Device	
Application Type	Certification	

Note: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Antenna list

Antenna Source	ANT	Manufacturer	Part No. (Vendor)	Type	Max. Gain (dBi)		
					Band	NB	PAD
1	Chain A	SHENZHEN SOUTH STAR TECHNOLOGY CO., LTD	N19-0805-R0A	PIFA Antenna	WCDMA Band II	1.28	-0.67
					WCDMA Band IV	2.39	-2.22
					WCDMA Band V	0.24	-0.41
					LTE Band 2	1.28	-0.67
					LTE Band 4	2.39	-2.22
					LTE Band 5	0.24	-0.41
					LTE Band 7	2.18	1.90
					LTE Band 12	-1.57	-3.69
					LTE Band 13	-1.73	-3.05
					LTE Band 17	-1.57	-3.69
					LTE Band 26	0.24	-0.41
					LTE Band 30	2.55	1.81
					LTE Band 38	2.79	1.40
					LTE Band 41	2.79	1.90
	LTE Band 66	2.39	-2.22				
	Chain B	SHENZHEN SOUTH STAR TECHNOLOGY CO., LTD	N19-0805-R0A	PIFA Antenna	WCDMA Band II	4.21	1.69
					WCDMA Band IV	3.57	3.37
					WCDMA Band V	0.23	-1.71
					LTE Band 2	4.21	1.69
					LTE Band 4	3.57	3.37
					LTE Band 5	0.23	-1.71
					LTE Band 7	2.92	1.85
					LTE Band 12	-1.63	-2.73
					LTE Band 13	-1.73	-2.81
					LTE Band 17	-1.63	-2.73
					LTE Band 26	0.23	-1.71
LTE Band 30					3.70	3.10	
LTE Band 38	2.74	1.41					
LTE Band 41	2.92	1.85					
LTE Band 66	3.57	3.37					

Note :

1. Antenna Source 1 (SHENZHEN SOUTH STAR antenna) gain is worst case. We tested and recorded it in this report.
2. Antenna Source 1 (SHENZHEN SOUTH STAR antenna) and Antenna Source 2 (AWAN antenna) are the same type of antenna, only different in manufacturer.
3. The Chain A is connected to AUX port / Chain B is connected to Main port of module.



Antenna Source	ANT	Manufacturer	Part No. (Vendor)	Type	Max. Gain (dBi)		
					Band	NB	PAD
1	Chain A	AWAN	AXFMY-300000	PIFA Antenna	WCDMA Band II	-0.06	-1.36
					WCDMA Band IV	2.04	-2.34
					WCDMA Band V	-2.43	-2.82
					LTE Band 2	-0.06	-1.36
					LTE Band 4	2.04	-2.34
					LTE Band 5	-2.43	-2.82
					LTE Band 7	2.18	0.89
					LTE Band 12	-1.66	-4.02
					LTE Band 13	-1.98	-3.72
					LTE Band 17	-2.95	-4.02
					LTE Band 26	-2.43	-2.82
					LTE Band 30	0.52	-2.06
					LTE Band 38	0.88	1.27
					LTE Band 41	2.73	1.27
	LTE Band 66	2.04	-2.34				
	Chain B	AWAN	AXFMY-300000	PIFA Antenna	WCDMA Band II	1.28	-0.85
					WCDMA Band IV	2.02	-0.58
					WCDMA Band V	-0.46	-2.21
					LTE Band 2	1.28	-0.85
					LTE Band 4	2.02	-0.58
					LTE Band 5	-0.46	-2.21
					LTE Band 7	2.49	0.74
					LTE Band 12	-2.05	-4.17
					LTE Band 13	-2.29	-3.10
					LTE Band 17	-2.05	-4.17
					LTE Band 26	-0.46	-2.21
LTE Band 30					1.75	-0.98	
LTE Band 38	2.49	-0.95					
LTE Band 41	2.49	0.74					
LTE Band 66	2.02	-0.58					

Note :

1. Antenna Source 1 (SHENZHEN SOUTH STAR antenna) gain is worst case. We tested and recorded it in this report.
2. Antenna Source 1 (SHENZHEN SOUTH STAR antenna) and Antenna Source 2 (AWAN antenna) are the same type of antenna, only different in manufacturer.
3. The Chain A is connected to AUX port / Chain B is connected to Main port of module.

4. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user. The test procedures, as described in American National Standards, Institute C95.1-1999 [1] were employed and they specify the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

4.1 SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below :

$$\text{SAR} = \frac{d}{dt} \left(\frac{dw}{dm} \right) = \frac{d}{dt} \left(\frac{dw}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be related to the electrical field in the tissue by

$$\text{SAR} = \frac{\sigma |E|^2}{\rho}$$

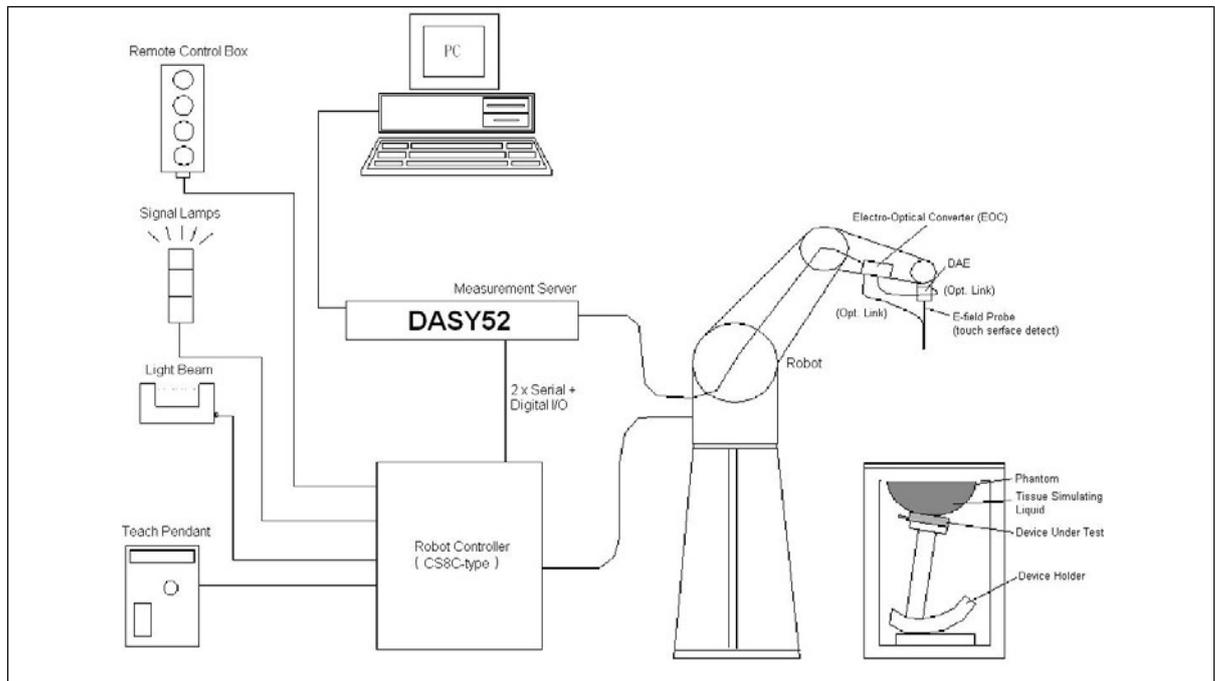
Where ..

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m³)

E = RMS electric field strength (V/m)

5. SAR Measurement Setup



The DASY52 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli TX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. An isotropic field probe optimized and calibrated for the targeted measurements.
3. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
5. The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
6. The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
7. A computer running Win7/Win8 professional operating system and the cDASY6 and DASY5 V5.2 software.
8. Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
9. The phantom, the device holder and other accessories according to the targeted measurement.
10. Tissue simulating liquid mixed according to the given recipes.
11. The validation dipole has been calibrated within and the system performance check has been successful.

5.1 DASY E-Field Probe System

The SAR measurements were conducted with the dosimetric probe (manufactured by SPEAG), designed in the classical triangular configuration [3] and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped when reaching the maximum.

5.1.1 E-Field Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in brain tissue (rotation around probe axis) ± 0.5 dB in brain tissue (rotation normal probe axis)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Calibration	ISO/IEC 17025 calibration service available
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>EX3DV4 E-Field Probe</p> </div> <div style="text-align: center;">  <p>Probe setup on robot</p> </div> </div>	

5.2 Data Acquisition Electronic (DAE) System

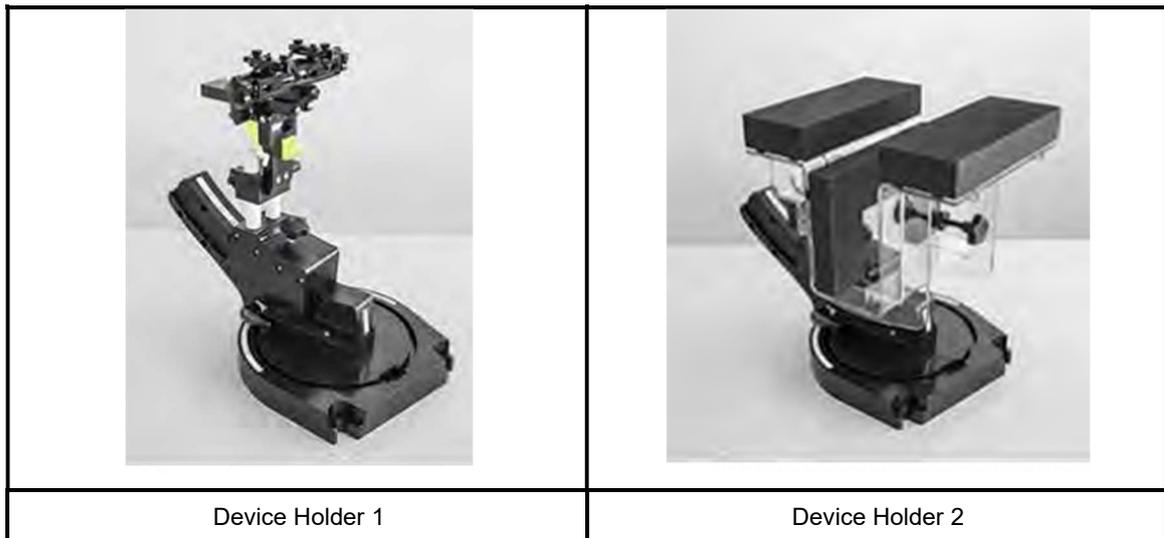
Model	DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4 mV, 400 mV)	
Input Offset Voltage	< 5 μ V (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

5.3 Robot

Positioner	Stäubli Unimation Corp.	
Robot Model	TX90XL	
Number of Axes	6	
Norminal Load	5 kg	
Reach	1450 mm	
Repeatability	\pm 0.035 mm	

5.4 Device Holder

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon=3$ and loss tangent $\delta=0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



5.5 Oval Flat Phantom - ELI

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (Oval Flat) phantom defined in IEEE 1528-2013, CENELEC 50361 and IEC 62209-2. It enables the dosimetric evaluation of wireless portable device usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 30 liters
Dimensions	190×600×400 mm (H×L×W)
Table 1. Specification of ELI	



6. Tissue Simulating Liquids

IEEE SCC-34/SC-2 in 1528 recommended Tissue Dielectric Parameters

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in human head. Other head and body tissue parameters that have not been specified in 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equation and extrapolated according to the head parameter specified in 1528.

Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 - 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ϵ_r = relative permittivity, σ = conductivity and $\rho = 1000 \text{ kg/m}^3$)

Table 2. Tissue dielectric parameters for head and body phantoms

6.1 The composition of the tissue simulating liquid

Ingredients (% by weight)	Frequency (MHz)												Frequency (GHz)	
	750		835		1750		1900		2450		2600		5 GHz	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	39.28	51.30	41.45	52.40	54.50	40.20	54.90	40.40	62.70	73.20	60.30	71.40	65.5	78.6
Salt (NaCl)	1.47	1.42	1.45	1.50	0.17	0.49	0.18	0.50	0.50	0.10	0.60	0.20	0.00	0.00
Sugar	58.15	46.18	56.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEC	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bactericide	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.2	10.7
DGBE	0.00	0.00	0.00	0.00	45.33	59.31	44.92	59.10	36.80	26.70	39.10	28.40	0.00	0.00
Diethylene Glycol Mono-hexlether	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.3	10.7
Dielectric Constant	41.88	54.60	42.54	56.10	40.10	53.60	39.90	54.00	39.80	52.50	39.80	52.50	35.1~ 36.2	47.9~ 49.3
Conductivity (S/m)	0.90	0.97	0.91	0.95	1.39	1.49	1.42	1.45	1.88	1.78	1.88	1.78	4.45~ 5.48	5.07~ 6.23

6.2 Liquid Parameters

- The dielectric parameters of the liquids were verified prior to the SAR evaluation using an DAKS 3.5 Probe Kit.
- The SAR testing with IEC tissue parameters as an alternative option to Head and body parameters. We used head TSL for body SAR tests. There are some limitations though:
 - The mixing and matching of head TSL and body TSL for body SAR testing in a single application are not permitted. For example, we cannot start testing body SAR with head TSL and then switch to testing Body SAR with Body TSL.
 - The TSL used for body SAR testing can be changed via a Permissive Change. However, if the body SAR increases and the original Body SAR was > 1.2 W/kg, additional SAR measurements may be required.

Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	ϵ_r (Delta) (%)	Limit (%)	Date
			σ	ϵ_r	σ	ϵ_r				
22.2	Head	2510 MHz	1.89	39.343	1.86	39.12	1.26	0.57	±5	Dec. 01, 2020
22.2	Head	2535 MHz	1.91	39.297	1.89	39.09	1.11	0.53	±5	Dec. 01, 2020
22.2	Head	2560 MHz	1.93	39.195	1.92	39.05	0.86	0.37	±5	Dec. 01, 2020
22.2	Head	2580 MHz	1.96	39.101	1.94	39.03	0.84	0.18	±5	Dec. 01, 2020
22.2	Head	2595 MHz	1.97	39.043	1.95	39.01	0.97	0.08	±5	Dec. 01, 2020
22.2	Head	2610 MHz	1.99	38.998	1.97	38.99	1.06	0.02	±5	Dec. 01, 2020
22.2	Head	2506 MHz	1.88	39.351	1.86	39.13	1.23	0.56	±5	Dec. 01, 2020
22.2	Head	2510 MHz	1.89	39.343	1.86	39.12	1.26	0.57	±5	Dec. 01, 2020
22.2	Head	2549.5 MHz	1.93	39.241	1.91	39.07	0.84	0.44	±5	Dec. 01, 2020



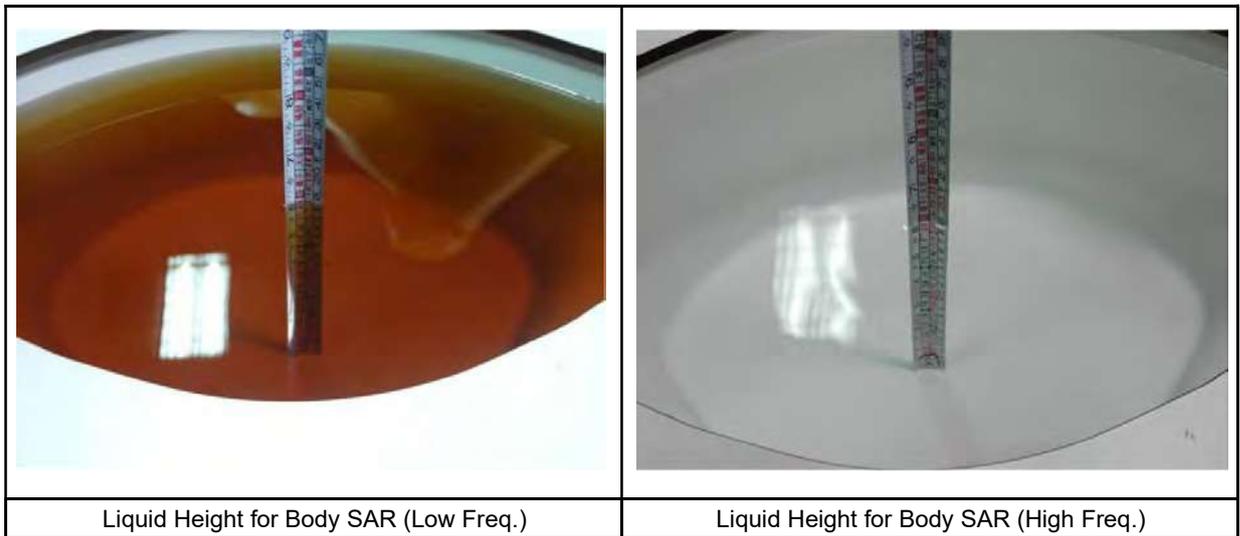
Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	ϵ_r (Delta) (%)	Limit (%)	Date
			σ	ϵ_r	σ	ϵ_r				
22.2	Head	2595 MHz	1.97	39.043	1.95	39.01	0.97	0.08	±5	Dec. 01, 2020
22.2	Head	2636.5 MHz	2.02	38.925	2.00	38.96	1.00	-0.09	±5	Dec. 01, 2020
22.2	Head	2680 MHz	2.07	38.797	2.05	38.90	1.11	-0.26	±5	Dec. 01, 2020
22.4	Head	2510 MHz	1.88	39.253	1.86	39.12	0.76	0.34	±5	Dec. 02, 2020
22.4	Head	2535 MHz	1.90	39.208	1.89	39.09	0.58	0.30	±5	Dec. 02, 2020
22.4	Head	2560 MHz	1.92	39.106	1.92	39.05	0.36	0.14	±5	Dec. 02, 2020
22.4	Head	2580 MHz	1.95	39.012	1.94	39.03	0.34	-0.05	±5	Dec. 02, 2020
22.4	Head	2595 MHz	1.96	38.954	1.95	39.01	0.46	-0.14	±5	Dec. 02, 2020
22.4	Head	2610 MHz	1.98	38.909	1.97	38.99	0.57	-0.21	±5	Dec. 02, 2020
22.4	Head	2506 MHz	1.87	39.261	1.86	39.13	0.72	0.34	±5	Dec. 02, 2020
22.4	Head	2510 MHz	1.88	39.253	1.86	39.12	0.76	0.34	±5	Dec. 02, 2020
22.4	Head	2549.5 MHz	1.92	39.152	1.91	39.07	0.31	0.21	±5	Dec. 02, 2020
22.4	Head	2595 MHz	1.96	38.954	1.95	39.01	0.46	-0.14	±5	Dec. 02, 2020
22.4	Head	2636.5 MHz	2.01	38.836	2.00	38.96	0.50	-0.32	±5	Dec. 02, 2020
22.4	Head	2680 MHz	2.06	38.708	2.05	38.90	0.63	-0.49	±5	Dec. 02, 2020
22.7	Head	2310 MHz	1.68	40.215	1.68	39.44	0.00	1.97	±5	Dec. 03, 2020
22.7	Head	2355 MHz	1.73	40.049	1.72	39.36	0.93	1.75	±5	Dec. 03, 2020
22.5	Head	2310 MHz	1.67	40.142	1.68	39.44	-0.54	1.78	±5	Dec. 04, 2020
22.5	Head	2355 MHz	1.72	39.975	1.72	39.36	0.35	1.56	±5	Dec. 04, 2020
22.7	Head	1852.4 MHz	1.39	40.535	1.40	40.00	-1.00	1.34	±5	Dec. 05, 2020
22.7	Head	1880 MHz	1.41	40.406	1.40	40.00	0.87	1.02	±5	Dec. 05, 2020
22.7	Head	1907.6 MHz	1.44	40.333	1.40	40.00	2.52	0.83	±5	Dec. 05, 2020
22.7	Head	1860 MHz	1.39	40.490	1.40	40.00	-0.37	1.22	±5	Dec. 05, 2020
22.7	Head	1880 MHz	1.41	40.406	1.40	40.00	0.87	1.02	±5	Dec. 05, 2020
22.7	Head	1900 MHz	1.43	40.352	1.40	40.00	2.10	0.88	±5	Dec. 05, 2020
22.5	Head	1852.4 MHz	1.41	40.048	1.40	40.00	0.73	0.12	±5	Dec. 06, 2020
22.5	Head	1880 MHz	1.44	39.920	1.40	40.00	2.63	-0.20	±5	Dec. 06, 2020
22.5	Head	1907.6 MHz	1.46	39.846	1.40	40.00	4.31	-0.38	±5	Dec. 06, 2020
22.5	Head	1860 MHz	1.42	40.003	1.40	40.00	1.38	0.01	±5	Dec. 06, 2020
22.5	Head	1880 MHz	1.44	39.920	1.40	40.00	2.63	-0.20	±5	Dec. 06, 2020
22.5	Head	1900 MHz	1.45	39.865	1.40	40.00	3.88	-0.34	±5	Dec. 06, 2020
22.2	Head	1712.4 MHz	1.35	40.778	1.35	40.13	0.21	1.61	±5	Dec. 07, 2020
22.2	Head	1732.6 MHz	1.37	40.734	1.36	40.10	0.55	1.58	±5	Dec. 07, 2020
22.2	Head	1752.6 MHz	1.38	40.672	1.37	40.07	0.86	1.50	±5	Dec. 07, 2020
22.2	Head	1720 MHz	1.36	40.767	1.35	40.11	0.43	1.64	±5	Dec. 07, 2020
22.2	Head	1732.5 MHz	1.37	40.734	1.36	40.10	0.55	1.58	±5	Dec. 07, 2020
22.2	Head	1745 MHz	1.38	40.694	1.37	40.08	0.73	1.53	±5	Dec. 07, 2020
22.2	Head	1720 MHz	1.36	40.767	1.35	40.11	0.36	1.64	±5	Dec. 07, 2020
22.2	Head	1745 MHz	1.38	40.694	1.37	40.08	0.73	1.53	±5	Dec. 07, 2020
22.2	Head	1770 MHz	1.40	40.625	1.38	40.04	1.23	1.46	±5	Dec. 07, 2020
22.1	Head	1712.4 MHz	1.34	40.578	1.35	40.13	-0.63	1.12	±5	Dec. 08, 2020
22.1	Head	1732.6 MHz	1.36	40.535	1.36	40.10	-0.29	1.08	±5	Dec. 08, 2020
22.1	Head	1752.6 MHz	1.37	40.473	1.37	40.07	0.01	1.01	±5	Dec. 08, 2020



Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	ϵ_r (Delta) (%)	Limit (%)	Date
			σ	ϵ_r	σ	ϵ_r				
22.1	Head	1720 MHz	1.35	40.567	1.35	40.11	-0.42	1.14	±5	Dec. 08, 2020
22.1	Head	1732.5 MHz	1.36	40.535	1.36	40.10	-0.29	1.08	±5	Dec. 08, 2020
22.1	Head	1745 MHz	1.37	40.494	1.37	40.08	-0.12	1.03	±5	Dec. 08, 2020
22.1	Head	1720 MHz	1.35	40.567	1.35	40.11	-0.48	1.14	±5	Dec. 08, 2020
22.1	Head	1745 MHz	1.37	40.494	1.37	40.08	-0.12	1.03	±5	Dec. 08, 2020
22.1	Head	1770 MHz	1.39	40.425	1.38	40.04	0.38	0.96	±5	Dec. 08, 2020
22.3	Head	826.4 MHz	0.90	42.494	0.90	41.54	0.06	2.30	±5	Dec. 09, 2020
22.3	Head	836.4 MHz	0.91	42.354	0.90	41.50	0.84	2.06	±5	Dec. 09, 2020
22.3	Head	846.6 MHz	0.92	42.210	0.91	41.50	0.78	1.71	±5	Dec. 09, 2020
22.3	Head	829 MHz	0.90	42.458	0.90	41.53	0.36	2.23	±5	Dec. 09, 2020
22.3	Head	836.5 MHz	0.91	42.351	0.90	41.50	0.86	2.05	±5	Dec. 09, 2020
22.3	Head	844 MHz	0.92	42.241	0.91	41.50	0.83	1.79	±5	Dec. 09, 2020
22.3	Head	821.5 MHz	0.89	42.565	0.90	41.57	-0.38	2.39	±5	Dec. 09, 2020
22.3	Head	831.5 MHz	0.90	42.423	0.90	41.51	0.53	2.20	±5	Dec. 09, 2020
22.3	Head	841.5 MHz	0.91	42.276	0.91	41.50	0.87	1.87	±5	Dec. 09, 2020
22.4	Head	826.4 MHz	0.90	42.407	0.90	41.54	-0.29	2.09	±5	Dec. 10, 2020
22.4	Head	836.4 MHz	0.91	42.267	0.90	41.50	0.48	1.85	±5	Dec. 10, 2020
22.4	Head	846.6 MHz	0.92	42.123	0.91	41.50	0.42	1.50	±5	Dec. 10, 2020
22.4	Head	829 MHz	0.90	42.371	0.90	41.53	0.01	2.02	±5	Dec. 10, 2020
22.4	Head	836.5 MHz	0.91	42.265	0.90	41.50	0.50	1.84	±5	Dec. 10, 2020
22.4	Head	844 MHz	0.91	42.154	0.91	41.50	0.47	1.58	±5	Dec. 10, 2020
22.4	Head	821.5 MHz	0.89	42.478	0.90	41.57	-0.73	2.18	±5	Dec. 10, 2020
22.4	Head	831.5 MHz	0.90	42.336	0.90	41.51	0.17	1.99	±5	Dec. 10, 2020
22.4	Head	841.5 MHz	0.91	42.190	0.91	41.50	0.52	1.66	±5	Dec. 10, 2020
22.6	Head	704 MHz	0.86	43.252	0.89	42.15	-2.68	2.61	±5	Dec. 11, 2020
22.6	Head	707.5 MHz	0.87	43.199	0.89	42.12	-2.38	2.56	±5	Dec. 11, 2020
22.6	Head	711 MHz	0.87	43.148	0.89	42.11	-1.87	2.46	±5	Dec. 11, 2020
22.6	Head	782 MHz	0.92	42.155	0.89	41.75	2.80	0.97	±5	Dec. 11, 2020
22.6	Head	709 MHz	0.87	43.176	0.89	42.12	-2.09	2.51	±5	Dec. 11, 2020
22.6	Head	710 MHz	0.87	43.163	0.89	42.11	-1.98	2.50	±5	Dec. 11, 2020
22.6	Head	711 MHz	0.87	43.148	0.89	42.11	-1.87	2.46	±5	Dec. 11, 2020
22.5	Head	704 MHz	0.86	42.680	0.89	42.15	-3.23	1.26	±5	Dec. 12, 2020
22.5	Head	707.5 MHz	0.86	42.627	0.89	42.12	-2.93	1.20	±5	Dec. 12, 2020
22.5	Head	711 MHz	0.87	42.576	0.89	42.11	-2.43	1.11	±5	Dec. 12, 2020
22.5	Head	782 MHz	0.92	41.583	0.89	41.75	3.27	-0.40	±5	Dec. 12, 2020
22.5	Head	709 MHz	0.86	42.604	0.89	42.12	-2.65	1.15	±5	Dec. 12, 2020
22.5	Head	710 MHz	0.86	42.591	0.89	42.11	-2.54	1.14	±5	Dec. 12, 2020
22.5	Head	711 MHz	0.87	42.576	0.89	42.11	-2.43	1.11	±5	Dec. 12, 2020

6.3 Liquid Depth

According to KDB865664, the depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm. Which is shown in Figure 7 & 8.



7. SAR Testing with RF Transmitters

7.1 Positioning of the DUT in relation to the phantom

The following measurement procedure shall be according to RSS-102 Supplementary procedures (SPR-001): Unless the side(s)/edge(s) of the laptop type computer (laptop mode/tablet mode) containing the built-in antenna(s) was already tested against the flat phantom.

Industry Canada requires SAR measurements to be performed with the side(s)/edge(s) of the display screen containing the built-in antenna(s) pointing towards the flat phantom.

- i) If the integrated antenna(s) are located in the back side of the display screen, the back side shall be facing towards the flat phantom at a distance not exceeding 25 mm.
- ii) If the integrated antenna(s) are installed along the edge(s) of the display screen, the edge(s) shall be facing towards the flat phantom at a distance not exceeding 25 mm.

According to KDB616217 D04

- iii) When antennas are incorporated in the keyboard section of a laptop computer, SAR is required for the bottom surface of the keyboard. Provided tablet use conditions are not supported by the laptop computer, SAR tests for bystander exposure from the edges of the keyboard.
- iv) Some 2-in-1 tablets may operate with the display folded on top of the keyboard. Most recent tablets are designed with an interactive display that may not require a physical keyboard. Both configurations are used in similar manners and require SAR evaluation for the back surface and edges of the tablet. For keyboards that can be unfolded like a laptop, the procedures for laptop platform should also be applied.

7.2 SAR Testing with WCDMA

<General requirements>

1. The default test configuration is to measure SAR with an established radio link between the handset and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1.
2. SAR must be measured according to these maximum output conditions and requirements in KDB Publication 447498 D01.
3. **Head SAR:**
SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
4. **Body-Worn Accessory SAR:**
SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode.

<Setup >

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

Step1: set a Test Mode 1 loop back with a 12.2 kbps Reference Measurement Channel (RMC).

Step 2: set and send continuously up power control commands to the device.

Step 3: measure the power at the device antenna connector using the power meter with average detector and test SAR.

7.3 SAR Testing with HSDPA / HSUPA

<General requirements>

1. The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. Body exposure conditions generally apply to these devices, including handsets and data modems operating in various electronic devices.
2. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations without HSPA. The default test configuration is to establish a radio link between the DUT and a communication test set to configure a 12.2 kbps RMC (reference measurement channel) in Test Loop Mode 1.
3. SAR for HSPA is selectively measured with HS-DPCCH, EDPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest SAR configuration in WCDMA with 12.2 kbps RMC only. An FRC is configured according to HSDPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Subtest 5 requirements.

SAR for other HSPA sub-test configurations is also confirmed selectively according to output power, exposure conditions and E-DCH UE Category. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. The UE Categories for HSDPCCH and HSPA should be clearly identified in the SAR report. The following procedures are applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.

4. When voice transmission and head exposure conditions are applicable to a WCDMA/HSPA data device, head exposure is measured according to the 'Head SAR Measurements' procedures in the 'WCDMA Handsets' section of this document.
5. SAR for body exposure configurations are measured according to the 'Body SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. In addition, body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit.
6. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurements should be used to test for head exposure.
7. Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the β values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document.

<Setup >

HSDPA should be configured according to the UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Setup for Release 5 HSDPA							
Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1,2)}$	CM ⁽³⁾ (dB)	MRP ⁽³⁾ (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

- Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
- For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$ and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$
- CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
- For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

7.4 SAR Testing with LTE

<FDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , RB allocation number , RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

<TDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , TDD mode , RB allocation number , RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

For 3GPP table 4.2.1 as below, support configurations and worst-case UpPTS information into the table.

The EUT only supports the 40 % case, which is Table 4.2.2, configuration #1 below.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5ms	D	S	U	U	U	D	S	U	U	U
1	5ms	D	S	U	U	D	D	S	U	U	D
2	5ms	D	S	U	D	D	D	S	U	D	D
3	10ms	D	S	U	U	U	D	D	D	D	D
4	10ms	D	S	U	U	D	D	D	D	D	D
5	10ms	D	S	U	D	D	D	D	D	D	D
6	5ms	D	S	U	U	U	D	S	U	U	D

<Maximum power reduction (MPR) >

Identify the LTE voice/data requirements in each operating mode and exposure condition with respect to head and body test configurations, antenna locations, handset flip-cover or slide positions, antenna diversity conditions etc.

The voice and data transmission:

Data only device.

Identify if Maximum Power Reduction (MPR) is optional or mandatory, i.e. built-in by design:

Maximum Power Reduction (MPR) is mandatory, i.e. built-in by design.

A-MPR (additional MPR) must be disabled

A-MPR was disabled during testing.

Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
Channel bandwidth / Transmission bandwidth configuration (RB)							
Modulation	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20MHz	MPR (dB)
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

7.5 SAR Testing with LTE

<General requirements>

1. Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
3. When the highest reported SAR for 1 RB and 50% RB allocation are > 0.8 W/kg, SAR is measured for the highest output power channel in 100%RB.
4. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
5. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50% RB allocation.
6. For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
7. SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.
8. According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg, then SAR need to test.
9. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing; therefore, the requirement for H, M, and L channels may not fully apply.

<FDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , RB allocation number ,RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

<TDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , TDD mode , RB allocation number ,RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

For 3GPP table 4.2.1 as below, support configurations and worst-case UpPTS information into the table.

3GPP Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink			EUT Support Special subframe	Worst case UpPTS
	DwPTS	UpPTS		DwPTS	UpPTS			
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		
0	6592×Ts	2192×Ts	2560×Ts	7680×Ts	2192×Ts	2560×Ts	<input type="checkbox"/>	<input type="checkbox"/>
1	19760×Ts			20480×Ts			<input type="checkbox"/>	<input type="checkbox"/>
2	21952×Ts			23040×Ts			<input type="checkbox"/>	<input type="checkbox"/>
3	24144×Ts			25600×Ts			<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	26336×Ts			7680×Ts			<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	6592×Ts	4384×Ts	5120×Ts	20480×Ts	4384×Ts	5120×Ts	<input type="checkbox"/>	<input type="checkbox"/>
6	19760×Ts			23040×Ts			<input type="checkbox"/>	<input type="checkbox"/>
7	21952×Ts			12800×Ts			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	24144×Ts			-			<input type="checkbox"/>	<input type="checkbox"/>
9	13168×Ts			-			<input type="checkbox"/>	<input type="checkbox"/>
Duty cycle _(maximum)								43.33 %

The EUT only supports the 40 % case, which is Table 4.2.2, configuration #1 below.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number										Type of EUT
		0	1	2	3	4	5	6	7	8	9	
0	5ms	D	S	U	U	U	D	S	U	U	U	<input type="checkbox"/>
1	5ms	D	S	U	U	D	D	S	U	U	D	<input checked="" type="checkbox"/>
2	5ms	D	S	U	D	D	D	S	U	D	D	<input type="checkbox"/>
3	10ms	D	S	U	U	U	D	D	D	D	D	<input type="checkbox"/>
4	10ms	D	S	U	U	D	D	D	D	D	D	<input type="checkbox"/>
5	10ms	D	S	U	D	D	D	D	D	D	D	<input type="checkbox"/>
6	5ms	D	S	U	U	U	D	S	U	U	D	<input type="checkbox"/>

<Maximum power reduction (MPR) >

Identify the LTE voice/data requirements in each operating mode and exposure condition with respect to head and body test configurations, antenna locations, handset flip-cover or slide positions, antenna diversity conditions etc.

The voice and data transmission:

Data only device.

Identify if Maximum Power Reduction (MPR) is optional or mandatory, i.e. built-in by design:

Maximum Power Reduction (MPR) is mandatory, i.e. built-in by design.

A-MPR (additional MPR) must be disabled

A-MPR was disabled during testing.

Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
Channel bandwidth / Transmission bandwidth configuration (RB)							
Modulation	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20MHz	MPR (dB)
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5



7.6 Proximity Sensor

7.6.1 Proximity Sensor Evaluation and Test

The device supports WWAN, WLAN, and Bluetooth capabilities. It is designed with a proximity sensor which can trigger/not trigger power reduction for WCDMA and LTE on Side 1 of EUT for SAR compliance. Others RF capability (WLAN and Bluetooth) have no power reduction.

7.6.2 Procedures for determining proximity sensor triggering distances

The proximity sensor triggering distance was determined per KDB 616217 for rear face and applicable edge. Summary for power verification per distance was tabulated in the below table.

Depending on how the antenna and sensor are overlapping, Since The proximity sensor which is combined with antenna in one component, the procedure for proximity sensor coverage is not required.

Side 1(Near to Far)											
Gap (mm)	9	10	11	12	13	14	15	16	17	18	19
Band	on	on	on	on	on	on	off	off	off	off	off
WCDMA Band II	18.00	18.00	18.00	18.00	18.00	18.00	24.50	24.50	24.50	24.50	24.50
WCDMA Band IV	21.00	21.00	21.00	21.00	21.00	21.00	24.50	24.50	24.50	24.50	24.50
LTE Band2	18.00	18.00	18.00	18.00	18.00	18.00	24.00	24.00	24.00	24.00	24.00
LTE Band4	21.00	21.00	21.00	21.00	21.00	21.00	24.00	24.00	24.00	24.00	24.00
LTE Band7	16.50	16.50	16.50	16.50	16.50	16.50	24.00	24.00	24.00	24.00	24.00
LTE Band30	19.50	19.50	19.50	19.50	19.50	19.50	24.00	24.00	24.00	24.00	24.00
LTE Band38	18.00	18.00	18.00	18.00	18.00	18.00	24.00	24.00	24.00	24.00	24.00
LTE Band41	18.00	18.00	18.00	18.00	18.00	18.00	24.00	24.00	24.00	24.00	24.00
LTE Band66	21.00	21.00	21.00	21.00	21.00	21.00	24.00	24.00	24.00	24.00	24.00

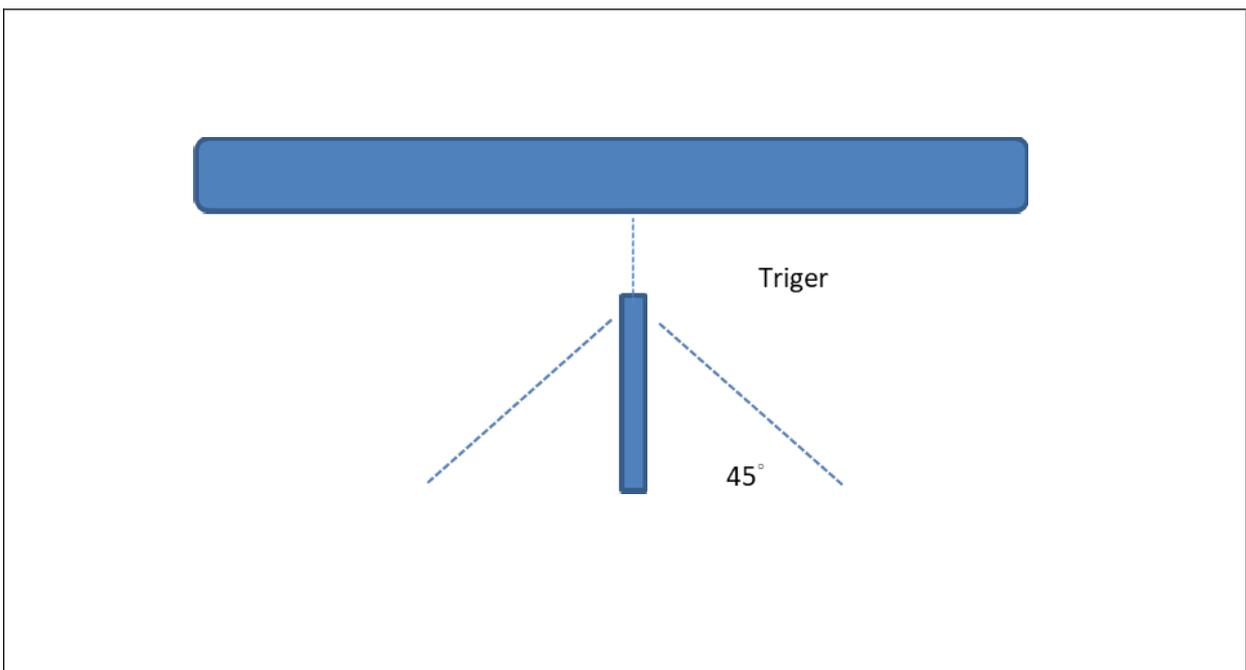
Side 1(Far to Near)											
Gap (mm)	19	18	17	16	15	14	13	12	11	10	9
Band	off	off	off	off	off	on	on	on	on	on	on
WCDMA Band II	24.50	24.50	24.50	24.50	24.50	18.00	18.00	18.00	18.00	18.00	18.00
WCDMA Band IV	24.50	24.50	24.50	24.50	24.50	21.00	21.00	21.00	21.00	21.00	21.00
LTE Band2	24.00	24.00	24.00	24.00	24.00	18.00	18.00	18.00	18.00	18.00	18.00
LTE Band4	24.00	24.00	24.00	24.00	24.00	21.00	21.00	21.00	21.00	21.00	21.00
LTE Band7	24.00	24.00	24.00	24.00	24.00	16.50	16.50	16.50	16.50	16.50	16.50
LTE Band30	24.00	24.00	24.00	24.00	24.00	19.50	19.50	19.50	19.50	19.50	19.50
LTE Band38	24.00	24.00	24.00	24.00	24.00	18.00	18.00	18.00	18.00	18.00	18.00
LTE Band41	24.00	24.00	24.00	24.00	24.00	18.00	18.00	18.00	18.00	18.00	18.00
LTE Band66	24.00	24.00	24.00	24.00	24.00	21.00	21.00	21.00	21.00	21.00	21.00

7.6.3 Procedures for determining tablet tilt angle influences to proximity sensor triggering

The influence of table tilt angles to proximity sensor triggering is determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at the smallest sensor triggering test distance determined in KDB 616217. Summary for proximity sensor tilt angle influence is shown in below table.

WWAN Antenna (Blue Area)_Trigger Distance Test (Top of tablet)		
Tablet Sensor Trigger Distance (mm)		
Actual Test	Far to Near	Near to Far
	14	15
Average trigger distance	14	14
Sensor on distance	14	14

WWAN Antenna (Blue Area)_Tablet tilt angle sensor trigger (Top of tablet)			
Angle change	Sensor Trigger Distance (mm)		
	Far to Near	Near to Far	Min trigger distance
0 degree	14	15	14
10 degree	Front toward to the phantom		14
20 degree			14
30 degree			14
40 degree			14
45 degree			14
-10 degree	Back toward to the phantom		14
-20 degree			14
-30 degree			14
-40 degree			14
-45 degree			14





7.7 Conducted Power Measurements

Band	Modulation	Date Rate or Sub-test	CH		Frequency	Avg Conducted power (dBm)	Tune up (dBm)
WCDMA II	RMC12.2K	---	Lowest	9262	1852.4	23.00	24.50
			Middle	9400	1880.0	23.28	24.50
			Highest	9538	1907.6	23.16	24.50
HSDPA II	QPSK	1	Lowest	9262	1852.4	22.90	24.50
			Middle	9400	1880.0	23.18	24.50
			Highest	9538	1907.6	23.06	24.50
		2	Lowest	9262	1852.4	22.90	24.50
			Middle	9400	1880.0	23.18	24.50
			Highest	9538	1907.6	23.06	24.50
		3	Lowest	9262	1852.4	22.40	24.00
			Middle	9400	1880.0	22.68	24.00
			Highest	9538	1907.6	22.56	24.00
		4	Lowest	9262	1852.4	22.40	24.00
			Middle	9400	1880.0	22.68	24.00
			Highest	9538	1907.6	22.56	24.00
HSUPA II	QPSK	1	Lowest	9262	1852.4	22.90	24.50
			Middle	9400	1880.0	23.18	24.50
			Highest	9538	1907.6	23.06	24.50
		2	Lowest	9262	1852.4	20.90	22.50
			Middle	9400	1880.0	21.18	22.50
			Highest	9538	1907.6	21.06	22.50
		3	Lowest	9262	1852.4	21.90	23.50
			Middle	9400	1880.0	22.18	23.50
			Highest	9538	1907.6	22.06	23.50
		4	Lowest	9262	1852.4	20.90	22.50
			Middle	9400	1880.0	21.18	22.50
			Highest	9538	1907.6	21.06	22.50
		5	Lowest	9262	1852.4	22.90	24.50
			Middle	9400	1880.0	23.18	24.50
			Highest	9538	1907.6	23.06	24.50



Band	Modulation	Date Rate or Sub-test	CH		Frequency (MHz)	Avg Conducted power (dBm)	Tune up (dBm)
WCDMA IV	RMC12.2K	---	Lowest	1312	1712.4	22.76	24.50
			Middle	1413	1732.6	22.88	24.50
			Highest	1513	1752.6	23.00	24.50
HSDPA IV	QPSK	1	Lowest	1312	1712.4	22.66	24.50
			Middle	1413	1732.6	22.78	24.50
			Highest	1513	1752.6	22.90	24.50
		2	Lowest	1312	1712.4	22.66	24.50
			Middle	1413	1732.6	22.78	24.50
			Highest	1513	1752.6	22.90	24.50
		3	Lowest	1312	1712.4	22.16	24.00
			Middle	1413	1732.6	22.28	24.00
			Highest	1513	1752.6	22.40	24.00
		4	Lowest	1312	1712.4	22.16	24.00
			Middle	1413	1732.6	22.28	24.00
			Highest	1513	1752.6	22.40	24.00
HSUPA IV	QPSK	1	Lowest	1312	1712.4	22.66	24.50
			Middle	1413	1732.6	22.78	24.50
			Highest	1513	1752.6	22.90	24.50
		2	Lowest	1312	1712.4	20.66	22.50
			Middle	1413	1732.6	20.78	22.50
			Highest	1513	1752.6	20.90	22.50
		3	Lowest	1312	1712.4	21.66	23.50
			Middle	1413	1732.6	21.78	23.50
			Highest	1513	1752.6	21.90	23.50
		4	Lowest	1312	1712.4	20.66	22.50
			Middle	1413	1732.6	20.78	22.50
			Highest	1513	1752.6	20.90	22.50
		5	Lowest	1312	1712.4	22.66	24.50
			Middle	1413	1732.6	22.78	24.50
			Highest	1513	1752.6	22.90	24.50



Band	Modulation	Date Rate or Sub-test	CH		Frequency (MHz)	Avg Conducted power (dBm)	Tune up (dBm)
WCDMA V	RMC12.2K	---	Lowest	4132	826.4	23.38	24.50
			Middle	4182	836.4	23.50	24.50
			Highest	4233	846.6	23.46	24.50
HSDPA V	QPSK	1	Lowest	4132	826.4	23.28	24.50
			Middle	4182	836.4	23.40	24.50
			Highest	4233	846.6	23.36	24.50
		2	Lowest	4132	826.4	23.28	24.50
			Middle	41832	836.4	23.40	24.50
			Highest	4233	846.6	23.36	24.50
		3	Lowest	4132	826.4	22.78	24.00
			Middle	4182	836.4	22.90	24.00
			Highest	4233	846.6	22.86	24.00
		4	Lowest	4132	826.4	22.78	24.00
			Middle	4182	836.4	22.90	24.00
			Highest	4233	846.6	22.86	24.00
HSUPA V	QPSK	1	Lowest	4132	826.4	23.28	24.50
			Middle	4182	836.4	23.40	24.50
			Highest	4233	846.6	23.36	24.50
		2	Lowest	4132	826.4	21.28	22.50
			Middle	4182	836.4	21.40	22.50
			Highest	4233	846.6	21.36	22.50
		3	Lowest	4132	826.4	22.28	23.50
			Middle	4182	836.4	22.40	23.50
			Highest	4233	846.6	22.36	23.50
		4	Lowest	4132	826.4	21.28	22.50
			Middle	4182	836.4	21.40	22.50
			Highest	4233	846.6	21.36	22.50
		5	Lowest	4132	826.4	23.28	24.50
			Middle	4182	836.4	23.40	24.50
			Highest	4233	846.6	23.36	24.50



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.79	18607	1850.7	QPSK	1.4MHz	1	0
	22.72	18607	1850.7	QPSK	1.4MHz	1	2
	22.74	18607	1850.7	QPSK	1.4MHz	1	5
	22.77	18607	1850.7	QPSK	1.4MHz	3	0
	22.75	18607	1850.7	QPSK	1.4MHz	3	1
	22.77	18607	1850.7	QPSK	1.4MHz	3	3
	21.78	18607	1850.7	QPSK	1.4MHz	6	0
	23.21	18900	1880	QPSK	1.4MHz	1	0
	23.18	18900	1880	QPSK	1.4MHz	1	2
	23.18	18900	1880	QPSK	1.4MHz	1	5
	22.99	18900	1880	QPSK	1.4MHz	3	0
	22.99	18900	1880	QPSK	1.4MHz	3	1
	22.95	18900	1880	QPSK	1.4MHz	3	3
	22.14	18900	1880	QPSK	1.4MHz	6	0
	22.95	19193	1909.3	QPSK	1.4MHz	1	0
	22.85	19193	1909.3	QPSK	1.4MHz	1	2
	22.81	19193	1909.3	QPSK	1.4MHz	1	5
	22.84	19193	1909.3	QPSK	1.4MHz	3	0
	22.83	19193	1909.3	QPSK	1.4MHz	3	1
	22.80	19193	1909.3	QPSK	1.4MHz	3	3
	21.84	19193	1909.3	QPSK	1.4MHz	6	0
	21.98	18607	1850.7	16QAM	1.4MHz	1	0
	21.94	18607	1850.7	16QAM	1.4MHz	1	2
	22.02	18607	1850.7	16QAM	1.4MHz	1	5
	21.72	18607	1850.7	16QAM	1.4MHz	3	0
	21.72	18607	1850.7	16QAM	1.4MHz	3	1
	21.70	18607	1850.7	16QAM	1.4MHz	3	3
	20.81	18607	1850.7	16QAM	1.4MHz	6	0
	22.42	18900	1880	16QAM	1.4MHz	1	0
	22.47	18900	1880	16QAM	1.4MHz	1	2
	22.48	18900	1880	16QAM	1.4MHz	1	5
	21.96	18900	1880	16QAM	1.4MHz	3	0
	21.97	18900	1880	16QAM	1.4MHz	3	1
	20.96	18900	1880	16QAM	1.4MHz	3	3
	21.24	18900	1880	16QAM	1.4MHz	6	0
	22.15	19193	1909.3	16QAM	1.4MHz	1	0
	22.09	19193	1909.3	16QAM	1.4MHz	1	2
	21.98	19193	1909.3	16QAM	1.4MHz	1	5
	21.93	19193	1909.3	16QAM	1.4MHz	3	0
	21.87	19193	1909.3	16QAM	1.4MHz	3	1
21.90	19193	1909.3	16QAM	1.4MHz	3	3	
20.93	19193	1909.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.79	18615	1851.5	QPSK	3MHz	1	0
	22.80	18615	1851.5	QPSK	3MHz	1	7
	22.70	18615	1851.5	QPSK	3MHz	1	14
	21.76	18615	1851.5	QPSK	3MHz	8	0
	21.75	18615	1851.5	QPSK	3MHz	8	3
	21.73	18615	1851.5	QPSK	3MHz	8	7
	21.75	18615	1851.5	QPSK	3MHz	15	0
	23.16	18900	1880	QPSK	3MHz	1	0
	23.14	18900	1880	QPSK	3MHz	1	7
	23.12	18900	1880	QPSK	3MHz	1	14
	22.19	18900	1880	QPSK	3MHz	8	0
	22.17	18900	1880	QPSK	3MHz	8	3
	22.12	18900	1880	QPSK	3MHz	8	7
	22.19	18900	1880	QPSK	3MHz	15	0
	22.98	19185	1908.5	QPSK	3MHz	1	0
	22.96	19185	1908.5	QPSK	3MHz	1	7
	22.80	19185	1908.5	QPSK	3MHz	1	14
	22.00	19185	1908.5	QPSK	3MHz	8	0
	21.95	19185	1908.5	QPSK	3MHz	8	3
	21.87	19185	1908.5	QPSK	3MHz	8	7
	21.91	19185	1908.5	QPSK	3MHz	15	0
	22.03	18615	1851.5	16QAM	3MHz	1	0
	22.03	18615	1851.5	16QAM	3MHz	1	7
	21.94	18615	1851.5	16QAM	3MHz	1	14
	20.80	18615	1851.5	16QAM	3MHz	8	0
	20.76	18615	1851.5	16QAM	3MHz	8	3
	20.77	18615	1851.5	16QAM	3MHz	8	7
	20.78	18615	1851.5	16QAM	3MHz	15	0
	22.40	18900	1880	16QAM	3MHz	1	0
	22.39	18900	1880	16QAM	3MHz	1	7
	22.39	18900	1880	16QAM	3MHz	1	14
	21.24	18900	1880	16QAM	3MHz	8	0
	21.26	18900	1880	16QAM	3MHz	8	3
	21.19	18900	1880	16QAM	3MHz	8	7
	21.17	18900	1880	16QAM	3MHz	15	0
	22.18	19185	1908.5	16QAM	3MHz	1	0
	22.16	19185	1908.5	16QAM	3MHz	1	7
	21.95	19185	1908.5	16QAM	3MHz	1	14
	20.98	19185	1908.5	16QAM	3MHz	8	0
	20.96	19185	1908.5	16QAM	3MHz	8	3
20.95	19185	1908.5	16QAM	3MHz	8	7	
20.97	19185	1908.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.84	18625	1852.5	QPSK	5MHz	1	0
	22.74	18625	1852.5	QPSK	5MHz	1	12
	22.63	18625	1852.5	QPSK	5MHz	1	24
	21.77	18625	1852.5	QPSK	5MHz	12	0
	21.73	18625	1852.5	QPSK	5MHz	12	6
	21.65	18625	1852.5	QPSK	5MHz	12	13
	21.75	18625	1852.5	QPSK	5MHz	25	0
	23.21	18900	1880	QPSK	5MHz	1	0
	23.16	18900	1880	QPSK	5MHz	1	12
	23.15	18900	1880	QPSK	5MHz	1	24
	22.21	18900	1880	QPSK	5MHz	12	0
	22.20	18900	1880	QPSK	5MHz	12	6
	22.15	18900	1880	QPSK	5MHz	12	13
	22.14	18900	1880	QPSK	5MHz	25	0
	23.15	19175	1907.5	QPSK	5MHz	1	0
	23.00	19175	1907.5	QPSK	5MHz	1	12
	22.84	19175	1907.5	QPSK	5MHz	1	24
	22.05	19175	1907.5	QPSK	5MHz	12	0
	21.94	19175	1907.5	QPSK	5MHz	12	6
	21.87	19175	1907.5	QPSK	5MHz	12	13
	21.96	19175	1907.5	QPSK	5MHz	25	0
	21.99	18625	1852.5	16QAM	5MHz	1	0
	21.93	18625	1852.5	16QAM	5MHz	1	12
	21.84	18625	1852.5	16QAM	5MHz	1	24
	20.81	18625	1852.5	16QAM	5MHz	12	0
	20.78	18625	1852.5	16QAM	5MHz	12	6
	20.67	18625	1852.5	16QAM	5MHz	12	13
	20.76	18625	1852.5	16QAM	5MHz	25	0
	22.41	18900	1880	16QAM	5MHz	1	0
	22.29	18900	1880	16QAM	5MHz	1	12
	22.36	18900	1880	16QAM	5MHz	1	24
	21.30	18900	1880	16QAM	5MHz	12	0
	21.30	18900	1880	16QAM	5MHz	12	6
	21.25	18900	1880	16QAM	5MHz	12	13
	21.19	18900	1880	16QAM	5MHz	25	0
	22.36	19175	1907.5	16QAM	5MHz	1	0
	22.23	19175	1907.5	16QAM	5MHz	1	12
	22.10	19175	1907.5	16QAM	5MHz	1	24
	21.11	19175	1907.5	16QAM	5MHz	12	0
	20.99	19175	1907.5	16QAM	5MHz	12	6
20.94	19175	1907.5	16QAM	5MHz	12	11	
20.94	19175	1907.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.99	18650	1855	QPSK	10MHz	1	0
	22.72	18650	1855	QPSK	10MHz	1	24
	22.72	18650	1855	QPSK	10MHz	1	49
	21.84	18650	1855	QPSK	10MHz	25	0
	21.70	18650	1855	QPSK	10MHz	25	12
	21.70	18650	1855	QPSK	10MHz	25	25
	21.69	18650	1855	QPSK	10MHz	50	0
	23.26	18900	1880	QPSK	10MHz	1	0
	23.30	18900	1880	QPSK	10MHz	1	24
	23.23	18900	1880	QPSK	10MHz	1	49
	22.26	18900	1880	QPSK	10MHz	25	0
	22.29	18900	1880	QPSK	10MHz	25	12
	22.20	18900	1880	QPSK	10MHz	25	25
	22.18	18900	1880	QPSK	10MHz	50	0
	23.11	19150	1905	QPSK	10MHz	1	0
	23.19	19150	1905	QPSK	10MHz	1	24
	23.00	19150	1905	QPSK	10MHz	1	49
	22.17	19150	1905	QPSK	10MHz	25	0
	22.20	19150	1905	QPSK	10MHz	25	12
	22.12	19150	1905	QPSK	10MHz	25	25
	22.20	19150	1905	QPSK	10MHz	50	0
	22.16	18650	1855	16QAM	10MHz	1	0
	21.88	18650	1855	16QAM	10MHz	1	24
	21.92	18650	1855	16QAM	10MHz	1	49
	20.90	18650	1855	16QAM	10MHz	25	0
	20.78	18650	1855	16QAM	10MHz	25	12
	20.76	18650	1855	16QAM	10MHz	25	25
	20.71	18650	1855	16QAM	10MHz	50	0
	22.42	18900	1880	16QAM	10MHz	1	0
	22.44	18900	1880	16QAM	10MHz	1	24
	22.30	18900	1880	16QAM	10MHz	1	49
	21.29	18900	1880	16QAM	10MHz	25	0
	21.34	18900	1880	16QAM	10MHz	25	12
	21.28	18900	1880	16QAM	10MHz	25	25
	21.26	18900	1880	16QAM	10MHz	50	0
	22.25	19150	1905	16QAM	10MHz	1	0
	22.36	19150	1905	16QAM	10MHz	1	24
	22.18	19150	1905	16QAM	10MHz	1	49
	21.22	19150	1905	16QAM	10MHz	25	0
	21.23	19150	1905	16QAM	10MHz	25	12
21.17	19150	1905	16QAM	10MHz	25	25	
21.22	19150	1905	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.98	18675	1857.5	QPSK	15MHz	1	0
	22.76	18675	1857.5	QPSK	15MHz	1	37
	22.78	18675	1857.5	QPSK	15MHz	1	74
	21.78	18675	1857.5	QPSK	15MHz	36	0
	21.73	18675	1857.5	QPSK	15MHz	36	19
	21.75	18675	1857.5	QPSK	15MHz	36	39
	21.77	18675	1857.5	QPSK	15MHz	75	0
	23.14	18900	1880	QPSK	15MHz	1	0
	23.24	18900	1880	QPSK	15MHz	1	37
	23.21	18900	1880	QPSK	15MHz	1	74
	22.24	18900	1880	QPSK	15MHz	36	0
	22.31	18900	1880	QPSK	15MHz	36	19
	22.21	18900	1880	QPSK	15MHz	36	39
	22.25	18900	1880	QPSK	15MHz	75	0
	22.89	19125	1902.5	QPSK	15MHz	1	0
	23.16	19125	1902.5	QPSK	15MHz	1	37
	22.97	19125	1902.5	QPSK	15MHz	1	74
	21.94	19125	1902.5	QPSK	15MHz	36	0
	22.13	19125	1902.5	QPSK	15MHz	36	19
	22.19	19125	1902.5	QPSK	15MHz	36	39
	22.26	19125	1902.5	QPSK	15MHz	75	0
	22.11	18675	1857.5	16QAM	15MHz	1	0
	21.91	18675	1857.5	16QAM	15MHz	1	37
	21.95	18675	1857.5	16QAM	15MHz	1	74
	20.85	18675	1857.5	16QAM	15MHz	36	0
	20.79	18675	1857.5	16QAM	15MHz	36	19
	20.79	18675	1857.5	16QAM	15MHz	36	39
	20.80	18675	1857.5	16QAM	15MHz	75	0
	22.36	18900	1880	16QAM	15MHz	1	0
	22.47	18900	1880	16QAM	15MHz	1	37
	22.44	18900	1880	16QAM	15MHz	1	74
	21.29	18900	1880	16QAM	15MHz	36	0
	21.37	18900	1880	16QAM	15MHz	36	19
	21.27	18900	1880	16QAM	15MHz	36	39
	21.25	18900	1880	16QAM	15MHz	75	0
	22.07	19125	1902.5	16QAM	15MHz	1	0
	22.32	19125	1902.5	16QAM	15MHz	1	37
	22.17	19125	1902.5	16QAM	15MHz	1	74
	20.98	19125	1902.5	16QAM	15MHz	36	0
	21.22	19125	1902.5	16QAM	15MHz	36	19
21.26	19125	1902.5	16QAM	15MHz	36	39	
21.27	19125	1902.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	22.68	18700	1860	QPSK	20MHz	1	0
	22.34	18700	1860	QPSK	20MHz	1	49
	22.73	18700	1860	QPSK	20MHz	1	99
	21.50	18700	1860	QPSK	20MHz	50	0
	21.41	18700	1860	QPSK	20MHz	50	25
	21.49	18700	1860	QPSK	20MHz	50	50
	21.62	18700	1860	QPSK	20MHz	100	0
	22.83	18900	1880	QPSK	20MHz	1	0
	23.03	18900	1880	QPSK	20MHz	1	49
	22.81	18900	1880	QPSK	20MHz	1	99
	21.99	18900	1880	QPSK	20MHz	50	0
	21.99	18900	1880	QPSK	20MHz	50	25
	21.94	18900	1880	QPSK	20MHz	50	50
	22.08	18900	1880	QPSK	20MHz	100	0
	22.81	19100	1900	QPSK	20MHz	1	0
	22.78	19100	1900	QPSK	20MHz	1	49
	22.78	19100	1900	QPSK	20MHz	1	99
	21.67	19100	1900	QPSK	20MHz	50	0
	21.81	19100	1900	QPSK	20MHz	50	25
	21.94	19100	1900	QPSK	20MHz	50	50
	22.07	19100	1900	QPSK	20MHz	100	0
	21.88	18700	1860	16QAM	20MHz	1	0
	21.57	18700	1860	16QAM	20MHz	1	49
	21.90	18700	1860	16QAM	20MHz	1	99
	20.53	18700	1860	16QAM	20MHz	50	0
	20.46	18700	1860	16QAM	20MHz	50	25
	20.54	18700	1860	16QAM	20MHz	50	50
	20.68	18700	1860	16QAM	20MHz	100	0
	22.04	18900	1880	16QAM	20MHz	1	0
	22.21	18900	1880	16QAM	20MHz	1	49
	22.05	18900	1880	16QAM	20MHz	1	99
	21.05	18900	1880	16QAM	20MHz	50	0
	21.05	18900	1880	16QAM	20MHz	50	25
20.99	18900	1880	16QAM	20MHz	50	50	
21.14	18900	1880	16QAM	20MHz	100	0	
21.94	19100	1900	16QAM	20MHz	1	0	
21.89	19100	1900	16QAM	20MHz	1	49	
21.99	19100	1900	16QAM	20MHz	1	99	
20.66	19100	1900	16QAM	20MHz	50	0	
20.81	19100	1900	16QAM	20MHz	50	25	
20.98	19100	1900	16QAM	20MHz	50	50	
21.14	19100	1900	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.61	19957	1710.7	QPSK	1.4MHz	1	0
	22.59	19957	1710.7	QPSK	1.4MHz	1	2
	22.64	19957	1710.7	QPSK	1.4MHz	1	5
	22.61	19957	1710.7	QPSK	1.4MHz	3	0
	22.62	19957	1710.7	QPSK	1.4MHz	3	1
	22.64	19957	1710.7	QPSK	1.4MHz	3	3
	21.62	19957	1710.7	QPSK	1.4MHz	6	0
	22.55	20175	1732.5	QPSK	1.4MHz	1	0
	22.50	20175	1732.5	QPSK	1.4MHz	1	2
	22.53	20175	1732.5	QPSK	1.4MHz	1	5
	22.55	20175	1732.5	QPSK	1.4MHz	3	0
	22.54	20175	1732.5	QPSK	1.4MHz	3	1
	22.53	20175	1732.5	QPSK	1.4MHz	3	3
	21.57	20175	1732.5	QPSK	1.4MHz	6	0
	22.92	20393	1754.3	QPSK	1.4MHz	1	0
	22.90	20393	1754.3	QPSK	1.4MHz	1	2
	22.94	20393	1754.3	QPSK	1.4MHz	1	5
	22.93	20393	1754.3	QPSK	1.4MHz	3	0
	22.86	20393	1754.3	QPSK	1.4MHz	3	1
	22.88	20393	1754.3	QPSK	1.4MHz	3	3
	21.89	20393	1754.3	QPSK	1.4MHz	6	0
	21.79	19957	1710.7	16QAM	1.4MHz	1	0
	21.89	19957	1710.7	16QAM	1.4MHz	1	2
	21.84	19957	1710.7	16QAM	1.4MHz	1	5
	21.60	19957	1710.7	16QAM	1.4MHz	3	0
	21.62	19957	1710.7	16QAM	1.4MHz	3	1
	21.66	19957	1710.7	16QAM	1.4MHz	3	3
	20.69	19957	1710.7	16QAM	1.4MHz	6	0
	21.81	20175	1732.5	16QAM	1.4MHz	1	0
	21.77	20175	1732.5	16QAM	1.4MHz	1	2
	21.82	20175	1732.5	16QAM	1.4MHz	1	5
	21.71	20175	1732.5	16QAM	1.4MHz	3	0
	21.69	20175	1732.5	16QAM	1.4MHz	3	1
	21.67	20175	1732.5	16QAM	1.4MHz	3	3
	20.64	20175	1732.5	16QAM	1.4MHz	6	0
	22.14	20393	1754.3	16QAM	1.4MHz	1	0
	22.09	20393	1754.3	16QAM	1.4MHz	1	2
	22.14	20393	1754.3	16QAM	1.4MHz	1	5
	21.95	20393	1754.3	16QAM	1.4MHz	3	0
	21.91	20393	1754.3	16QAM	1.4MHz	3	1
21.94	20393	1754.3	16QAM	1.4MHz	3	3	
20.97	20393	1754.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.59	19965	1711.5	QPSK	3MHz	1	0
	22.65	19965	1711.5	QPSK	3MHz	1	7
	22.71	19965	1711.5	QPSK	3MHz	1	14
	21.61	19965	1711.5	QPSK	3MHz	8	0
	21.62	19965	1711.5	QPSK	3MHz	8	3
	21.71	19965	1711.5	QPSK	3MHz	8	7
	21.64	19965	1711.5	QPSK	3MHz	15	0
	22.54	20175	1732.5	QPSK	3MHz	1	0
	22.53	20175	1732.5	QPSK	3MHz	1	7
	22.44	20175	1732.5	QPSK	3MHz	1	14
	21.56	20175	1732.5	QPSK	3MHz	8	0
	21.53	20175	1732.5	QPSK	3MHz	8	3
	21.51	20175	1732.5	QPSK	3MHz	8	7
	21.55	20175	1732.5	QPSK	3MHz	15	0
	22.79	20385	1753.5	QPSK	3MHz	1	0
	22.87	20385	1753.5	QPSK	3MHz	1	7
	22.87	20385	1753.5	QPSK	3MHz	1	14
	21.86	20385	1753.5	QPSK	3MHz	8	0
	21.86	20385	1753.5	QPSK	3MHz	8	3
	21.89	20385	1753.5	QPSK	3MHz	8	7
	21.90	20385	1753.5	QPSK	3MHz	15	0
	21.78	19965	1711.5	16QAM	3MHz	1	0
	21.79	19965	1711.5	16QAM	3MHz	1	7
	21.94	19965	1711.5	16QAM	3MHz	1	14
	20.63	19965	1711.5	16QAM	3MHz	8	0
	20.62	19965	1711.5	16QAM	3MHz	8	3
	20.71	19965	1711.5	16QAM	3MHz	8	7
	20.66	19965	1711.5	16QAM	3MHz	15	0
	21.76	20175	1732.5	16QAM	3MHz	1	0
	21.76	20175	1732.5	16QAM	3MHz	1	7
	21.67	20175	1732.5	16QAM	3MHz	1	14
	20.64	20175	1732.5	16QAM	3MHz	8	0
	20.60	20175	1732.5	16QAM	3MHz	8	3
	20.57	20175	1732.5	16QAM	3MHz	8	7
	20.59	20175	1732.5	16QAM	3MHz	15	0
	21.97	20385	1753.5	16QAM	3MHz	1	0
	22.11	20385	1753.5	16QAM	3MHz	1	7
	22.03	20385	1753.5	16QAM	3MHz	1	14
	20.91	20385	1753.5	16QAM	3MHz	8	0
	20.90	20385	1753.5	16QAM	3MHz	8	3
20.94	20385	1753.5	16QAM	3MHz	8	7	
20.90	20385	1753.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.63	19975	1712.5	QPSK	5MHz	1	0
	22.71	19975	1712.5	QPSK	5MHz	1	12
	22.82	19975	1712.5	QPSK	5MHz	1	24
	21.61	19975	1712.5	QPSK	5MHz	12	0
	21.68	19975	1712.5	QPSK	5MHz	12	6
	21.74	19975	1712.5	QPSK	5MHz	12	13
	21.71	19975	1712.5	QPSK	5MHz	25	0
	22.66	20175	1732.5	QPSK	5MHz	1	0
	22.56	20175	1732.5	QPSK	5MHz	1	12
	22.50	20175	1732.5	QPSK	5MHz	1	24
	21.57	20175	1732.5	QPSK	5MHz	12	0
	21.51	20175	1732.5	QPSK	5MHz	12	6
	21.50	20175	1732.5	QPSK	5MHz	12	13
	21.55	20175	1732.5	QPSK	5MHz	25	0
	22.87	20375	1752.5	QPSK	5MHz	1	0
	22.87	20375	1752.5	QPSK	5MHz	1	12
	22.96	20375	1752.5	QPSK	5MHz	1	24
	21.80	20375	1752.5	QPSK	5MHz	12	0
	21.85	20375	1752.5	QPSK	5MHz	12	6
	21.91	20375	1752.5	QPSK	5MHz	12	13
	21.88	20375	1752.5	QPSK	5MHz	25	0
	21.78	19975	1712.5	16QAM	5MHz	1	0
	21.87	19975	1712.5	16QAM	5MHz	1	12
	21.97	19975	1712.5	16QAM	5MHz	1	24
	20.64	19975	1712.5	16QAM	5MHz	12	0
	20.75	19975	1712.5	16QAM	5MHz	12	6
	20.82	19975	1712.5	16QAM	5MHz	12	13
	20.75	19975	1712.5	16QAM	5MHz	25	0
	21.89	20175	1732.5	16QAM	5MHz	1	0
	21.78	20175	1732.5	16QAM	5MHz	1	12
	21.69	20175	1732.5	16QAM	5MHz	1	24
	20.69	20175	1732.5	16QAM	5MHz	12	0
	20.66	20175	1732.5	16QAM	5MHz	12	6
	20.59	20175	1732.5	16QAM	5MHz	12	13
	20.61	20175	1732.5	16QAM	5MHz	25	0
	22.05	20375	1752.5	16QAM	5MHz	1	0
	22.10	20375	1752.5	16QAM	5MHz	1	12
	22.12	20375	1752.5	16QAM	5MHz	1	24
	20.86	20375	1752.5	16QAM	5MHz	12	0
	20.90	20375	1752.5	16QAM	5MHz	12	6
20.95	20375	1752.5	16QAM	5MHz	12	11	
20.89	20375	1752.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.70	20000	1715	QPSK	10MHz	1	0
	22.83	20000	1715	QPSK	10MHz	1	24
	22.91	20000	1715	QPSK	10MHz	1	49
	21.79	20000	1715	QPSK	10MHz	25	0
	21.84	20000	1715	QPSK	10MHz	25	12
	21.93	20000	1715	QPSK	10MHz	25	25
	21.83	20000	1715	QPSK	10MHz	50	0
	22.74	20175	1732.5	QPSK	10MHz	1	0
	22.57	20175	1732.5	QPSK	10MHz	1	24
	22.50	20175	1732.5	QPSK	10MHz	1	49
	21.62	20175	1732.5	QPSK	10MHz	25	0
	21.54	20175	1732.5	QPSK	10MHz	25	12
	21.47	20175	1732.5	QPSK	10MHz	25	25
	21.51	20175	1732.5	QPSK	10MHz	50	0
	22.73	20350	1750	QPSK	10MHz	1	0
	22.85	20350	1750	QPSK	10MHz	1	24
	22.99	20350	1750	QPSK	10MHz	1	49
	21.79	20350	1750	QPSK	10MHz	25	0
	21.84	20350	1750	QPSK	10MHz	25	12
	21.89	20350	1750	QPSK	10MHz	25	25
	21.84	20350	1750	QPSK	10MHz	50	0
	21.85	20000	1715	16QAM	10MHz	1	0
	22.02	20000	1715	16QAM	10MHz	1	24
	22.07	20000	1715	16QAM	10MHz	1	49
	20.81	20000	1715	16QAM	10MHz	25	0
	20.87	20000	1715	16QAM	10MHz	25	12
	21.01	20000	1715	16QAM	10MHz	25	25
	20.89	20000	1715	16QAM	10MHz	50	0
	21.91	20175	1732.5	16QAM	10MHz	1	0
	21.76	20175	1732.5	16QAM	10MHz	1	24
	21.77	20175	1732.5	16QAM	10MHz	1	49
	20.74	20175	1732.5	16QAM	10MHz	25	0
	20.66	20175	1732.5	16QAM	10MHz	25	12
	20.59	20175	1732.5	16QAM	10MHz	25	25
	20.59	20175	1732.5	16QAM	10MHz	50	0
	21.94	20350	1750	16QAM	10MHz	1	0
	21.97	20350	1750	16QAM	10MHz	1	24
	22.18	20350	1750	16QAM	10MHz	1	49
	20.88	20350	1750	16QAM	10MHz	25	0
	20.89	20350	1750	16QAM	10MHz	25	12
20.93	20350	1750	16QAM	10MHz	25	25	
20.84	20350	1750	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.65	20025	1717.5	QPSK	15MHz	1	0
	22.91	20025	1717.5	QPSK	15MHz	1	37
	22.73	20025	1717.5	QPSK	15MHz	1	74
	21.83	20025	1717.5	QPSK	15MHz	36	0
	21.92	20025	1717.5	QPSK	15MHz	36	19
	21.83	20025	1717.5	QPSK	15MHz	36	39
	21.94	20025	1717.5	QPSK	15MHz	75	0
	22.69	20175	1732.5	QPSK	15MHz	1	0
	22.53	20175	1732.5	QPSK	15MHz	1	37
	22.48	20175	1732.5	QPSK	15MHz	1	74
	21.60	20175	1732.5	QPSK	15MHz	36	0
	21.56	20175	1732.5	QPSK	15MHz	36	19
	21.52	20175	1732.5	QPSK	15MHz	36	39
	21.53	20175	1732.5	QPSK	15MHz	75	0
	22.53	20325	1747.5	QPSK	15MHz	1	0
	22.76	20325	1747.5	QPSK	15MHz	1	37
	22.90	20325	1747.5	QPSK	15MHz	1	74
	21.59	20325	1747.5	QPSK	15MHz	36	0
	21.74	20325	1747.5	QPSK	15MHz	36	19
	21.75	20325	1747.5	QPSK	15MHz	36	39
	21.81	20325	1747.5	QPSK	15MHz	75	0
	21.79	20025	1717.5	16QAM	15MHz	1	0
	22.03	20025	1717.5	16QAM	15MHz	1	37
	21.88	20025	1717.5	16QAM	15MHz	1	74
	20.88	20025	1717.5	16QAM	15MHz	36	0
	20.96	20025	1717.5	16QAM	15MHz	36	19
	20.87	20025	1717.5	16QAM	15MHz	36	39
	20.94	20025	1717.5	16QAM	15MHz	75	0
	21.87	20175	1732.5	16QAM	15MHz	1	0
	21.73	20175	1732.5	16QAM	15MHz	1	37
	21.65	20175	1732.5	16QAM	15MHz	1	74
	20.68	20175	1732.5	16QAM	15MHz	36	0
	20.61	20175	1732.5	16QAM	15MHz	36	19
	20.59	20175	1732.5	16QAM	15MHz	36	39
	20.62	20175	1732.5	16QAM	15MHz	75	0
	21.70	20325	1747.5	16QAM	15MHz	1	0
	22.04	20325	1747.5	16QAM	15MHz	1	37
	22.09	20325	1747.5	16QAM	15MHz	1	74
	20.65	20325	1747.5	16QAM	15MHz	36	0
	20.84	20325	1747.5	16QAM	15MHz	36	19
20.83	20325	1747.5	16QAM	15MHz	36	39	
20.86	20325	1747.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	22.77	20050	1720	QPSK	20MHz	1	0
	22.89	20050	1720	QPSK	20MHz	1	49
	22.65	20050	1720	QPSK	20MHz	1	99
	21.85	20050	1720	QPSK	20MHz	50	0
	21.77	20050	1720	QPSK	20MHz	50	25
	21.69	20050	1720	QPSK	20MHz	50	50
	21.86	20050	1720	QPSK	20MHz	100	0
	22.85	20175	1732.5	QPSK	20MHz	1	0
	22.52	20175	1732.5	QPSK	20MHz	1	49
	22.51	20175	1732.5	QPSK	20MHz	1	99
	21.62	20175	1732.5	QPSK	20MHz	50	0
	21.52	20175	1732.5	QPSK	20MHz	50	25
	21.48	20175	1732.5	QPSK	20MHz	50	50
	21.63	20175	1732.5	QPSK	20MHz	100	0
	22.58	20300	1745	QPSK	20MHz	1	0
	22.59	20300	1745	QPSK	20MHz	1	49
	22.95	20300	1745	QPSK	20MHz	1	99
	21.53	20300	1745	QPSK	20MHz	50	0
	21.60	20300	1745	QPSK	20MHz	50	25
	21.76	20300	1745	QPSK	20MHz	50	50
	21.78	20300	1745	QPSK	20MHz	100	0
	21.94	20050	1720	16QAM	20MHz	1	0
	22.07	20050	1720	16QAM	20MHz	1	49
	21.77	20050	1720	16QAM	20MHz	1	99
	20.87	20050	1720	16QAM	20MHz	50	0
	20.80	20050	1720	16QAM	20MHz	50	25
	20.73	20050	1720	16QAM	20MHz	50	50
	20.95	20050	1720	16QAM	20MHz	100	0
	21.90	20175	1732.5	16QAM	20MHz	1	0
	21.72	20175	1732.5	16QAM	20MHz	1	49
	21.68	20175	1732.5	16QAM	20MHz	1	99
	20.61	20175	1732.5	16QAM	20MHz	50	0
	20.52	20175	1732.5	16QAM	20MHz	50	25
	20.47	20175	1732.5	16QAM	20MHz	50	50
	20.62	20175	1732.5	16QAM	20MHz	100	0
	21.81	20300	1745	16QAM	20MHz	1	0
	21.67	20300	1745	16QAM	20MHz	1	49
	22.09	20300	1745	16QAM	20MHz	1	99
	20.54	20300	1745	16QAM	20MHz	50	0
	20.61	20300	1745	16QAM	20MHz	50	25
20.77	20300	1745	16QAM	20MHz	50	50	
20.82	20300	1745	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 5	22.18	20407	824.7	QPSK	1.4MHz	1	0
	22.18	20407	824.7	QPSK	1.4MHz	1	2
	22.24	20407	824.7	QPSK	1.4MHz	1	5
	22.22	20407	824.7	QPSK	1.4MHz	3	0
	22.21	20407	824.7	QPSK	1.4MHz	3	1
	22.19	20407	824.7	QPSK	1.4MHz	3	3
	21.19	20407	824.7	QPSK	1.4MHz	6	0
	22.20	20525	836.5	QPSK	1.4MHz	1	0
	22.16	20525	836.5	QPSK	1.4MHz	1	2
	22.21	20525	836.5	QPSK	1.4MHz	1	5
	22.18	20525	836.5	QPSK	1.4MHz	3	0
	22.18	20525	836.5	QPSK	1.4MHz	3	1
	22.20	20525	836.5	QPSK	1.4MHz	3	3
	21.19	20525	836.5	QPSK	1.4MHz	6	0
	22.25	20643	848.3	QPSK	1.4MHz	1	0
	22.24	20643	848.3	QPSK	1.4MHz	1	2
	22.29	20643	848.3	QPSK	1.4MHz	1	5
	22.24	20643	848.3	QPSK	1.4MHz	3	0
	22.25	20643	848.3	QPSK	1.4MHz	3	1
	22.26	20643	848.3	QPSK	1.4MHz	3	3
	21.28	20643	848.3	QPSK	1.4MHz	6	0
	21.48	20407	824.7	16QAM	1.4MHz	1	0
	21.48	20407	824.7	16QAM	1.4MHz	1	2
	21.54	20407	824.7	16QAM	1.4MHz	1	5
	21.32	20407	824.7	16QAM	1.4MHz	3	0
	21.29	20407	824.7	16QAM	1.4MHz	3	1
	21.25	20407	824.7	16QAM	1.4MHz	3	3
	20.27	20407	824.7	16QAM	1.4MHz	6	0
	21.57	20525	836.5	16QAM	1.4MHz	1	0
	21.52	20525	836.5	16QAM	1.4MHz	1	2
	21.55	20525	836.5	16QAM	1.4MHz	1	5
	21.34	20525	836.5	16QAM	1.4MHz	3	0
	21.34	20525	836.5	16QAM	1.4MHz	3	1
	21.37	20525	836.5	16QAM	1.4MHz	3	3
	20.25	20525	836.5	16QAM	1.4MHz	6	0
	21.60	20643	848.3	16QAM	1.4MHz	1	0
	21.58	20643	848.3	16QAM	1.4MHz	1	2
	21.63	20643	848.3	16QAM	1.4MHz	1	5
	21.40	20643	848.3	16QAM	1.4MHz	3	0
	21.35	20643	848.3	16QAM	1.4MHz	3	1
21.38	20643	848.3	16QAM	1.4MHz	3	3	
20.36	20643	848.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 5	22.10	20415	825.5	QPSK	3MHz	1	0
	22.20	20415	825.5	QPSK	3MHz	1	7
	22.14	20415	825.5	QPSK	3MHz	1	14
	21.17	20415	825.5	QPSK	3MHz	8	0
	21.19	20415	825.5	QPSK	3MHz	8	3
	21.19	20415	825.5	QPSK	3MHz	8	7
	21.21	20415	825.5	QPSK	3MHz	15	0
	22.15	20525	836.5	QPSK	3MHz	1	0
	22.18	20525	836.5	QPSK	3MHz	1	7
	22.06	20525	836.5	QPSK	3MHz	1	14
	21.19	20525	836.5	QPSK	3MHz	8	0
	21.19	20525	836.5	QPSK	3MHz	8	3
	21.13	20525	836.5	QPSK	3MHz	8	7
	21.19	20525	836.5	QPSK	3MHz	15	0
	22.14	20635	847.5	QPSK	3MHz	1	0
	22.20	20635	847.5	QPSK	3MHz	1	7
	22.20	20635	847.5	QPSK	3MHz	1	14
	21.23	20635	847.5	QPSK	3MHz	8	0
	21.18	20635	847.5	QPSK	3MHz	8	3
	21.22	20635	847.5	QPSK	3MHz	8	7
	21.22	20635	847.5	QPSK	3MHz	15	0
	21.43	20415	825.5	16QAM	3MHz	1	0
	21.53	20415	825.5	16QAM	3MHz	1	7
	21.50	20415	825.5	16QAM	3MHz	1	14
	20.21	20415	825.5	16QAM	3MHz	8	0
	20.24	20415	825.5	16QAM	3MHz	8	3
	20.23	20415	825.5	16QAM	3MHz	8	7
	20.24	20415	825.5	16QAM	3MHz	15	0
	21.50	20525	836.5	16QAM	3MHz	1	0
	21.52	20525	836.5	16QAM	3MHz	1	7
	21.43	20525	836.5	16QAM	3MHz	1	14
	20.26	20525	836.5	16QAM	3MHz	8	0
	20.25	20525	836.5	16QAM	3MHz	8	3
	20.19	20525	836.5	16QAM	3MHz	8	7
	20.23	20525	836.5	16QAM	3MHz	15	0
	21.47	20635	847.5	16QAM	3MHz	1	0
	21.54	20635	847.5	16QAM	3MHz	1	7
	21.55	20635	847.5	16QAM	3MHz	1	14
	20.28	20635	847.5	16QAM	3MHz	8	0
	20.24	20635	847.5	16QAM	3MHz	8	3
20.28	20635	847.5	16QAM	3MHz	8	7	
20.26	20635	847.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 5	22.25	20425	826.5	QPSK	5MHz	1	0
	22.19	20425	826.5	QPSK	5MHz	1	12
	22.32	20425	826.5	QPSK	5MHz	1	24
	21.26	20425	826.5	QPSK	5MHz	12	0
	21.24	20425	826.5	QPSK	5MHz	12	6
	21.26	20425	826.5	QPSK	5MHz	12	13
	21.23	20425	826.5	QPSK	5MHz	25	0
	22.20	20525	836.5	QPSK	5MHz	1	0
	22.16	20525	836.5	QPSK	5MHz	1	12
	22.18	20525	836.5	QPSK	5MHz	1	24
	21.23	20525	836.5	QPSK	5MHz	12	0
	21.21	20525	836.5	QPSK	5MHz	12	6
	21.15	20525	836.5	QPSK	5MHz	12	13
	21.21	20525	836.5	QPSK	5MHz	25	0
	22.10	20625	846.5	QPSK	5MHz	1	0
	22.19	20625	846.5	QPSK	5MHz	1	12
	22.28	20625	846.5	QPSK	5MHz	1	24
	21.18	20625	846.5	QPSK	5MHz	12	0
	21.24	20625	846.5	QPSK	5MHz	12	6
	21.26	20625	846.5	QPSK	5MHz	12	13
	21.27	20625	846.5	QPSK	5MHz	25	0
	21.60	20425	826.5	16QAM	5MHz	1	0
	21.55	20425	826.5	16QAM	5MHz	1	12
	21.67	20425	826.5	16QAM	5MHz	1	24
	20.27	20425	826.5	16QAM	5MHz	12	0
	20.24	20425	826.5	16QAM	5MHz	12	6
	20.24	20425	826.5	16QAM	5MHz	12	13
	20.25	20425	826.5	16QAM	5MHz	25	0
	21.56	20525	836.5	16QAM	5MHz	1	0
	21.52	20525	836.5	16QAM	5MHz	1	12
	21.55	20525	836.5	16QAM	5MHz	1	24
	20.31	20525	836.5	16QAM	5MHz	12	0
	20.31	20525	836.5	16QAM	5MHz	12	6
	20.23	20525	836.5	16QAM	5MHz	12	13
	20.30	20525	836.5	16QAM	5MHz	25	0
	21.41	20625	846.5	16QAM	5MHz	1	0
	21.50	20625	846.5	16QAM	5MHz	1	12
	21.61	20625	846.5	16QAM	5MHz	1	24
	20.17	20625	846.5	16QAM	5MHz	12	0
	20.23	20625	846.5	16QAM	5MHz	12	6
20.29	20625	846.5	16QAM	5MHz	12	11	
20.29	20625	846.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 5	22.28	20450	829	QPSK	10MHz	1	0
	22.33	20450	829	QPSK	10MHz	1	24
	22.38	20450	829	QPSK	10MHz	1	49
	21.30	20450	829	QPSK	10MHz	25	0
	21.37	20450	829	QPSK	10MHz	25	12
	21.44	20450	829	QPSK	10MHz	25	25
	21.43	20450	829	QPSK	10MHz	50	0
	22.62	20525	836.5	QPSK	10MHz	1	0
	22.24	20525	836.5	QPSK	10MHz	1	24
	22.26	20525	836.5	QPSK	10MHz	1	49
	21.58	20525	836.5	QPSK	10MHz	25	0
	21.24	20525	836.5	QPSK	10MHz	25	12
	21.21	20525	836.5	QPSK	10MHz	25	25
	21.52	20525	836.5	QPSK	10MHz	50	0
	22.13	20600	844	QPSK	10MHz	1	0
	22.09	20600	844	QPSK	10MHz	1	24
	22.33	20600	844	QPSK	10MHz	1	49
	21.19	20600	844	QPSK	10MHz	25	0
	21.16	20600	844	QPSK	10MHz	25	12
	21.33	20600	844	QPSK	10MHz	25	25
	21.33	20600	844	QPSK	10MHz	50	0
	21.63	20450	829	16QAM	10MHz	1	0
	21.63	20450	829	16QAM	10MHz	1	24
	21.72	20450	829	16QAM	10MHz	1	49
	20.37	20450	829	16QAM	10MHz	25	0
	20.45	20450	829	16QAM	10MHz	25	12
	20.50	20450	829	16QAM	10MHz	25	25
	20.47	20450	829	16QAM	10MHz	50	0
	21.63	20525	836.5	16QAM	10MHz	1	0
	21.54	20525	836.5	16QAM	10MHz	1	24
	21.55	20525	836.5	16QAM	10MHz	1	49
	20.33	20525	836.5	16QAM	10MHz	25	0
	20.33	20525	836.5	16QAM	10MHz	25	12
	20.32	20525	836.5	16QAM	10MHz	25	25
	20.29	20525	836.5	16QAM	10MHz	50	0
	21.44	20600	844	16QAM	10MHz	1	0
	21.41	20600	844	16QAM	10MHz	1	24
	21.69	20600	844	16QAM	10MHz	1	49
	20.28	20600	844	16QAM	10MHz	25	0
	20.26	20600	844	16QAM	10MHz	25	12
20.39	20600	844	16QAM	10MHz	25	25	
20.37	20600	844	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	23.32	20775	2502.5	QPSK	5MHz	1	0
	23.25	20775	2502.5	QPSK	5MHz	1	12
	23.34	20775	2502.5	QPSK	5MHz	1	24
	22.41	20775	2502.5	QPSK	5MHz	12	0
	22.34	20775	2502.5	QPSK	5MHz	12	6
	22.35	20775	2502.5	QPSK	5MHz	12	13
	22.36	20775	2502.5	QPSK	5MHz	25	0
	23.50	21100	2535	QPSK	5MHz	1	0
	23.44	21100	2535	QPSK	5MHz	1	12
	23.47	21100	2535	QPSK	5MHz	1	24
	22.55	21100	2535	QPSK	5MHz	12	0
	22.54	21100	2535	QPSK	5MHz	12	6
	22.55	21100	2535	QPSK	5MHz	12	13
	22.55	21100	2535	QPSK	5MHz	25	0
	23.58	21425	2567.5	QPSK	5MHz	1	0
	23.46	21425	2567.5	QPSK	5MHz	1	12
	23.45	21425	2567.5	QPSK	5MHz	1	24
	22.57	21425	2567.5	QPSK	5MHz	12	0
	22.57	21425	2567.5	QPSK	5MHz	12	6
	22.53	21425	2567.5	QPSK	5MHz	12	13
	22.58	21425	2567.5	QPSK	5MHz	25	0
	22.49	20775	2502.5	16QAM	5MHz	1	0
	22.44	20775	2502.5	16QAM	5MHz	1	12
	22.53	20775	2502.5	16QAM	5MHz	1	24
	21.39	20775	2502.5	16QAM	5MHz	12	0
	21.31	20775	2502.5	16QAM	5MHz	12	6
	21.34	20775	2502.5	16QAM	5MHz	12	13
	21.36	20775	2502.5	16QAM	5MHz	25	0
	22.64	21100	2535	16QAM	5MHz	1	0
	22.65	21100	2535	16QAM	5MHz	1	12
	22.65	21100	2535	16QAM	5MHz	1	24
	21.54	21100	2535	16QAM	5MHz	12	0
	21.53	21100	2535	16QAM	5MHz	12	6
	21.58	21100	2535	16QAM	5MHz	12	13
	21.61	21100	2535	16QAM	5MHz	25	0
	22.77	21425	2567.5	16QAM	5MHz	1	0
	22.67	21425	2567.5	16QAM	5MHz	1	12
	22.66	21425	2567.5	16QAM	5MHz	1	24
	21.59	21425	2567.5	16QAM	5MHz	12	0
	21.59	21425	2567.5	16QAM	5MHz	12	6
21.54	21425	2567.5	16QAM	5MHz	12	11	
21.61	21425	2567.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	23.30	20800	2505	QPSK	10MHz	1	0
	23.27	20800	2505	QPSK	10MHz	1	24
	23.41	20800	2505	QPSK	10MHz	1	49
	22.34	20800	2505	QPSK	10MHz	25	0
	22.44	20800	2505	QPSK	10MHz	25	12
	22.52	20800	2505	QPSK	10MHz	25	25
	22.43	20800	2505	QPSK	10MHz	50	0
	23.43	21100	2535	QPSK	10MHz	1	0
	23.43	21100	2535	QPSK	10MHz	1	24
	23.42	21100	2535	QPSK	10MHz	1	49
	22.55	21100	2535	QPSK	10MHz	25	0
	22.54	21100	2535	QPSK	10MHz	25	12
	22.56	21100	2535	QPSK	10MHz	25	25
	22.52	21100	2535	QPSK	10MHz	50	0
	23.54	21400	2565	QPSK	10MHz	1	0
	23.58	21400	2565	QPSK	10MHz	1	24
	23.48	21400	2565	QPSK	10MHz	1	49
	22.65	21400	2565	QPSK	10MHz	25	0
	22.68	21400	2565	QPSK	10MHz	25	12
	22.65	21400	2565	QPSK	10MHz	25	25
	22.68	21400	2565	QPSK	10MHz	50	0
	22.50	20800	2505	16QAM	10MHz	1	0
	22.46	20800	2505	16QAM	10MHz	1	24
	22.60	20800	2505	16QAM	10MHz	1	49
	21.41	20800	2505	16QAM	10MHz	25	0
	21.46	20800	2505	16QAM	10MHz	25	12
	21.54	20800	2505	16QAM	10MHz	25	25
	21.43	20800	2505	16QAM	10MHz	50	0
	22.63	21100	2535	16QAM	10MHz	1	0
	22.55	21100	2535	16QAM	10MHz	1	24
	22.56	21100	2535	16QAM	10MHz	1	49
	21.61	21100	2535	16QAM	10MHz	25	0
	21.64	21100	2535	16QAM	10MHz	25	12
	21.64	21100	2535	16QAM	10MHz	25	25
	21.59	21100	2535	16QAM	10MHz	50	0
	22.69	21400	2565	16QAM	10MHz	1	0
	22.74	21400	2565	16QAM	10MHz	1	24
	22.68	21400	2565	16QAM	10MHz	1	49
	21.71	21400	2565	16QAM	10MHz	25	0
	21.74	21400	2565	16QAM	10MHz	25	12
21.72	21400	2565	16QAM	10MHz	25	25	
21.71	21400	2565	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	23.30	20825	2507.5	QPSK	15MHz	1	0
	23.34	20825	2507.5	QPSK	15MHz	1	37
	23.52	20825	2507.5	QPSK	15MHz	1	74
	22.34	20825	2507.5	QPSK	15MHz	36	0
	22.49	20825	2507.5	QPSK	15MHz	36	19
	22.52	20825	2507.5	QPSK	15MHz	36	39
	22.51	20825	2507.5	QPSK	15MHz	75	0
	23.44	21100	2535	QPSK	15MHz	1	0
	23.47	21100	2535	QPSK	15MHz	1	37
	23.43	21100	2535	QPSK	15MHz	1	74
	22.53	21100	2535	QPSK	15MHz	36	0
	22.54	21100	2535	QPSK	15MHz	36	19
	22.46	21100	2535	QPSK	15MHz	36	39
	22.57	21100	2535	QPSK	15MHz	75	0
	23.54	21375	2562.5	QPSK	15MHz	1	0
	23.54	21375	2562.5	QPSK	15MHz	1	37
	23.47	21375	2562.5	QPSK	15MHz	1	74
	22.58	21375	2562.5	QPSK	15MHz	36	0
	22.65	21375	2562.5	QPSK	15MHz	36	19
	22.65	21375	2562.5	QPSK	15MHz	36	39
	22.68	21375	2562.5	QPSK	15MHz	75	0
	22.44	20825	2507.5	16QAM	15MHz	1	0
	22.55	20825	2507.5	16QAM	15MHz	1	37
	22.72	20825	2507.5	16QAM	15MHz	1	74
	21.35	20825	2507.5	16QAM	15MHz	36	0
	21.50	20825	2507.5	16QAM	15MHz	36	19
	21.53	20825	2507.5	16QAM	15MHz	36	39
	21.50	20825	2507.5	16QAM	15MHz	75	0
	22.57	21100	2535	16QAM	15MHz	1	0
	22.62	21100	2535	16QAM	15MHz	1	37
	22.62	21100	2535	16QAM	15MHz	1	74
	21.56	21100	2535	16QAM	15MHz	36	0
	21.60	21100	2535	16QAM	15MHz	36	19
	21.53	21100	2535	16QAM	15MHz	36	39
	21.60	21100	2535	16QAM	15MHz	75	0
	22.66	21375	2562.5	16QAM	15MHz	1	0
	22.71	21375	2562.5	16QAM	15MHz	1	37
	22.67	21375	2562.5	16QAM	15MHz	1	74
	21.63	21375	2562.5	16QAM	15MHz	36	0
	21.69	21375	2562.5	16QAM	15MHz	36	19
21.67	21375	2562.5	16QAM	15MHz	36	39	
21.70	21375	2562.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	23.31	20850	2510	QPSK	20MHz	1	0
	23.30	20850	2510	QPSK	20MHz	1	49
	23.58	20850	2510	QPSK	20MHz	1	99
	22.37	20850	2510	QPSK	20MHz	50	0
	22.44	20850	2510	QPSK	20MHz	50	25
	22.59	20850	2510	QPSK	20MHz	50	50
	22.56	20850	2510	QPSK	20MHz	100	0
	23.42	21100	2535	QPSK	20MHz	1	0
	23.41	21100	2535	QPSK	20MHz	1	49
	23.54	21100	2535	QPSK	20MHz	1	99
	22.55	21100	2535	QPSK	20MHz	50	0
	22.54	21100	2535	QPSK	20MHz	50	25
	22.49	21100	2535	QPSK	20MHz	50	50
	22.67	21100	2535	QPSK	20MHz	100	0
	23.47	21350	2560	QPSK	20MHz	1	0
	23.49	21350	2560	QPSK	20MHz	1	49
	23.52	21350	2560	QPSK	20MHz	1	99
	22.59	21350	2560	QPSK	20MHz	50	0
	22.58	21350	2560	QPSK	20MHz	50	25
	22.68	21350	2560	QPSK	20MHz	50	50
	22.72	21350	2560	QPSK	20MHz	100	0
	22.45	20850	2510	16QAM	20MHz	1	0
	22.51	20850	2510	16QAM	20MHz	1	49
	22.77	20850	2510	16QAM	20MHz	1	99
	21.38	20850	2510	16QAM	20MHz	50	0
	21.50	20850	2510	16QAM	20MHz	50	25
	21.64	20850	2510	16QAM	20MHz	50	50
	21.60	20850	2510	16QAM	20MHz	100	0
	22.61	21100	2535	16QAM	20MHz	1	0
	22.59	21100	2535	16QAM	20MHz	1	49
	22.74	21100	2535	16QAM	20MHz	1	99
	21.54	21100	2535	16QAM	20MHz	50	0
	21.53	21100	2535	16QAM	20MHz	50	25
	21.49	21100	2535	16QAM	20MHz	50	50
	21.65	21100	2535	16QAM	20MHz	100	0
	22.65	21350	2560	16QAM	20MHz	1	0
	22.64	21350	2560	16QAM	20MHz	1	49
	22.68	21350	2560	16QAM	20MHz	1	99
	21.61	21350	2560	16QAM	20MHz	50	0
	21.60	21350	2560	16QAM	20MHz	50	25
21.69	21350	2560	16QAM	20MHz	50	50	
21.72	21350	2560	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 12	22.96	23017	699.7	QPSK	1.4MHz	1	0
	22.97	23017	699.7	QPSK	1.4MHz	1	2
	23.03	23017	699.7	QPSK	1.4MHz	1	5
	22.95	23017	699.7	QPSK	1.4MHz	3	0
	22.96	23017	699.7	QPSK	1.4MHz	3	1
	22.90	23017	699.7	QPSK	1.4MHz	3	3
	21.99	23017	699.7	QPSK	1.4MHz	6	0
	22.91	23095	707.5	QPSK	1.4MHz	1	0
	22.86	23095	707.5	QPSK	1.4MHz	1	2
	22.91	23095	707.5	QPSK	1.4MHz	1	5
	22.89	23095	707.5	QPSK	1.4MHz	3	0
	22.88	23095	707.5	QPSK	1.4MHz	3	1
	22.88	23095	707.5	QPSK	1.4MHz	3	3
	21.89	23095	707.5	QPSK	1.4MHz	6	0
	22.91	23173	715.3	QPSK	1.4MHz	1	0
	22.86	23173	715.3	QPSK	1.4MHz	1	2
	22.88	23173	715.3	QPSK	1.4MHz	1	5
	22.89	23173	715.3	QPSK	1.4MHz	3	0
	22.86	23173	715.3	QPSK	1.4MHz	3	1
	22.88	23173	715.3	QPSK	1.4MHz	3	3
	21.88	23173	715.3	QPSK	1.4MHz	6	0
	22.32	23017	699.7	16QAM	1.4MHz	1	0
	22.29	23017	699.7	16QAM	1.4MHz	1	2
	22.35	23017	699.7	16QAM	1.4MHz	1	5
	21.88	23017	699.7	16QAM	1.4MHz	3	0
	21.89	23017	699.7	16QAM	1.4MHz	3	1
	21.96	23017	699.7	16QAM	1.4MHz	3	3
	20.88	23017	699.7	16QAM	1.4MHz	6	0
	21.94	23095	707.5	16QAM	1.4MHz	1	0
	22.01	23095	707.5	16QAM	1.4MHz	1	2
	22.05	23095	707.5	16QAM	1.4MHz	1	5
	21.80	23095	707.5	16QAM	1.4MHz	3	0
	21.79	23095	707.5	16QAM	1.4MHz	3	1
	21.78	23095	707.5	16QAM	1.4MHz	3	3
	20.77	23095	707.5	16QAM	1.4MHz	6	0
	22.07	23173	715.3	16QAM	1.4MHz	1	0
	22.02	23173	715.3	16QAM	1.4MHz	1	2
	22.00	23173	715.3	16QAM	1.4MHz	1	5
	21.82	23173	715.3	16QAM	1.4MHz	3	0
	21.79	23173	715.3	16QAM	1.4MHz	3	1
21.85	23173	715.3	16QAM	1.4MHz	3	3	
20.78	23173	715.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 12	22.94	23025	700.5	QPSK	3MHz	1	0
	23.07	23025	700.5	QPSK	3MHz	1	7
	23.09	23025	700.5	QPSK	3MHz	1	14
	22.01	23025	700.5	QPSK	3MHz	8	0
	22.04	23025	700.5	QPSK	3MHz	8	3
	22.11	23025	700.5	QPSK	3MHz	8	7
	22.05	23025	700.5	QPSK	3MHz	15	0
	22.88	23095	707.5	QPSK	3MHz	1	0
	22.92	23095	707.5	QPSK	3MHz	1	7
	22.93	23095	707.5	QPSK	3MHz	1	14
	21.90	23095	707.5	QPSK	3MHz	8	0
	21.91	23095	707.5	QPSK	3MHz	8	3
	21.96	23095	707.5	QPSK	3MHz	8	7
	21.91	23095	707.5	QPSK	3MHz	15	0
	22.97	23165	714.5	QPSK	3MHz	1	0
	22.99	23165	714.5	QPSK	3MHz	1	7
	22.88	23165	714.5	QPSK	3MHz	1	14
	21.98	23165	714.5	QPSK	3MHz	8	0
	21.96	23165	714.5	QPSK	3MHz	8	3
	21.92	23165	714.5	QPSK	3MHz	8	7
	21.99	23165	714.5	QPSK	3MHz	15	0
	22.25	23025	700.5	16QAM	3MHz	1	0
	22.41	23025	700.5	16QAM	3MHz	1	7
	22.42	23025	700.5	16QAM	3MHz	1	14
	21.06	23025	700.5	16QAM	3MHz	8	0
	21.10	23025	700.5	16QAM	3MHz	8	3
	21.18	23025	700.5	16QAM	3MHz	8	7
	21.12	23025	700.5	16QAM	3MHz	15	0
	22.11	23095	707.5	16QAM	3MHz	1	0
	22.17	23095	707.5	16QAM	3MHz	1	7
	22.20	23095	707.5	16QAM	3MHz	1	14
	20.92	23095	707.5	16QAM	3MHz	8	0
	20.94	23095	707.5	16QAM	3MHz	8	3
	21.03	23095	707.5	16QAM	3MHz	8	7
	20.97	23095	707.5	16QAM	3MHz	15	0
	22.33	23165	714.5	16QAM	3MHz	1	0
	22.33	23165	714.5	16QAM	3MHz	1	7
	22.19	23165	714.5	16QAM	3MHz	1	14
	21.07	23165	714.5	16QAM	3MHz	8	0
	21.08	23165	714.5	16QAM	3MHz	8	3
21.05	23165	714.5	16QAM	3MHz	8	7	
21.04	23165	714.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 12	23.00	23035	701.5	QPSK	5MHz	1	0
	23.11	23035	701.5	QPSK	5MHz	1	12
	23.19	23035	701.5	QPSK	5MHz	1	24
	22.06	23035	701.5	QPSK	5MHz	12	0
	22.16	23035	701.5	QPSK	5MHz	12	6
	22.15	23035	701.5	QPSK	5MHz	12	13
	22.09	23035	701.5	QPSK	5MHz	25	0
	22.99	23095	707.5	QPSK	5MHz	1	0
	22.96	23095	707.5	QPSK	5MHz	1	12
	23.03	23095	707.5	QPSK	5MHz	1	24
	21.99	23095	707.5	QPSK	5MHz	12	0
	22.02	23095	707.5	QPSK	5MHz	12	6
	22.05	23095	707.5	QPSK	5MHz	12	13
	22.05	23095	707.5	QPSK	5MHz	25	0
	23.06	23155	713.5	QPSK	5MHz	1	0
	23.04	23155	713.5	QPSK	5MHz	1	12
	23.01	23155	713.5	QPSK	5MHz	1	24
	22.03	23155	713.5	QPSK	5MHz	12	0
	22.06	23155	713.5	QPSK	5MHz	12	6
	22.05	23155	713.5	QPSK	5MHz	12	13
	22.02	23155	713.5	QPSK	5MHz	25	0
	22.36	23035	701.5	16QAM	5MHz	1	0
	22.44	23035	701.5	16QAM	5MHz	1	12
	22.51	23035	701.5	16QAM	5MHz	1	24
	21.14	23035	701.5	16QAM	5MHz	12	0
	21.22	23035	701.5	16QAM	5MHz	12	6
	21.20	23035	701.5	16QAM	5MHz	12	13
	21.14	23035	701.5	16QAM	5MHz	25	0
	22.35	23095	707.5	16QAM	5MHz	1	0
	22.27	23095	707.5	16QAM	5MHz	1	12
	22.36	23095	707.5	16QAM	5MHz	1	24
	21.02	23095	707.5	16QAM	5MHz	12	0
	21.06	23095	707.5	16QAM	5MHz	12	6
	21.11	23095	707.5	16QAM	5MHz	12	13
	21.04	23095	707.5	16QAM	5MHz	25	0
	22.42	23155	713.5	16QAM	5MHz	1	0
	22.38	23155	713.5	16QAM	5MHz	1	12
	22.33	23155	713.5	16QAM	5MHz	1	24
	21.08	23155	713.5	16QAM	5MHz	12	0
	21.08	23155	713.5	16QAM	5MHz	12	6
21.12	23155	713.5	16QAM	5MHz	12	11	
21.08	23155	713.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 12	23.34	23060	704	QPSK	10MHz	1	0
	23.54	23060	704	QPSK	10MHz	1	24
	23.52	23060	704	QPSK	10MHz	1	49
	22.45	23060	704	QPSK	10MHz	25	0
	22.52	23060	704	QPSK	10MHz	25	12
	22.44	23060	704	QPSK	10MHz	25	25
	22.42	23060	704	QPSK	10MHz	50	0
	23.39	23095	707.5	QPSK	10MHz	1	0
	23.27	23095	707.5	QPSK	10MHz	1	24
	23.47	23095	707.5	QPSK	10MHz	1	49
	22.27	23095	707.5	QPSK	10MHz	25	0
	22.30	23095	707.5	QPSK	10MHz	25	12
	22.33	23095	707.5	QPSK	10MHz	25	25
	22.32	23095	707.5	QPSK	10MHz	50	0
	23.17	23130	711	QPSK	10MHz	1	0
	23.18	23130	711	QPSK	10MHz	1	24
	23.30	23130	711	QPSK	10MHz	1	49
	22.22	23130	711	QPSK	10MHz	25	0
	22.26	23130	711	QPSK	10MHz	25	12
	22.29	23130	711	QPSK	10MHz	25	25
	22.54	23130	711	QPSK	10MHz	50	0
	22.65	23060	704	16QAM	10MHz	1	0
	22.81	23060	704	16QAM	10MHz	1	24
	22.78	23060	704	16QAM	10MHz	1	49
	21.56	23060	704	16QAM	10MHz	25	0
	21.62	23060	704	16QAM	10MHz	25	12
	21.48	23060	704	16QAM	10MHz	25	25
	21.49	23060	704	16QAM	10MHz	50	0
	22.67	23095	707.5	16QAM	10MHz	1	0
	22.49	23095	707.5	16QAM	10MHz	1	24
	22.81	23095	707.5	16QAM	10MHz	1	49
	21.35	23095	707.5	16QAM	10MHz	25	0
	21.36	23095	707.5	16QAM	10MHz	25	12
	21.40	23095	707.5	16QAM	10MHz	25	25
	21.39	23095	707.5	16QAM	10MHz	50	0
	22.43	23130	711	16QAM	10MHz	1	0
	22.50	23130	711	16QAM	10MHz	1	24
	22.51	23130	711	16QAM	10MHz	1	49
	21.28	23130	711	16QAM	10MHz	25	0
	21.31	23130	711	16QAM	10MHz	25	12
21.36	23130	711	16QAM	10MHz	25	25	
21.51	23130	711	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 13	23.51	23205	779.5	QPSK	5MHz	1	0
	23.36	23205	779.5	QPSK	5MHz	1	12
	23.52	23205	779.5	QPSK	5MHz	1	24
	22.41	23205	779.5	QPSK	5MHz	12	0
	22.35	23205	779.5	QPSK	5MHz	12	6
	22.39	23205	779.5	QPSK	5MHz	12	13
	22.36	23205	779.5	QPSK	5MHz	25	0
	23.36	23230	782	QPSK	5MHz	1	0
	23.53	23230	782	QPSK	5MHz	1	12
	23.53	23230	782	QPSK	5MHz	1	24
	22.36	23230	782	QPSK	5MHz	12	0
	22.45	23230	782	QPSK	5MHz	12	6
	22.46	23230	782	QPSK	5MHz	12	13
	22.57	23230	782	QPSK	5MHz	25	0
	23.57	23255	784.5	QPSK	5MHz	1	0
	23.51	23255	784.5	QPSK	5MHz	1	12
	23.55	23255	784.5	QPSK	5MHz	1	24
	22.46	23255	784.5	QPSK	5MHz	12	0
	22.46	23255	784.5	QPSK	5MHz	12	6
	22.46	23255	784.5	QPSK	5MHz	12	13
	22.48	23255	784.5	QPSK	5MHz	25	0
	22.74	23205	779.5	16QAM	5MHz	1	0
	22.69	23205	779.5	16QAM	5MHz	1	12
	22.84	23205	779.5	16QAM	5MHz	1	24
	21.47	23205	779.5	16QAM	5MHz	12	0
	21.41	23205	779.5	16QAM	5MHz	12	6
	21.44	23205	779.5	16QAM	5MHz	12	13
	21.32	23205	779.5	16QAM	5MHz	25	0
	22.78	23230	782	16QAM	5MHz	1	0
	22.94	23230	782	16QAM	5MHz	1	12
	22.85	23230	782	16QAM	5MHz	1	24
	21.45	23230	782	16QAM	5MHz	12	0
	21.49	23230	782	16QAM	5MHz	12	6
	21.56	23230	782	16QAM	5MHz	12	13
	21.59	23230	782	16QAM	5MHz	25	0
	22.90	23255	784.5	16QAM	5MHz	1	0
	22.79	23255	784.5	16QAM	5MHz	1	12
	22.83	23255	784.5	16QAM	5MHz	1	24
	21.59	23255	784.5	16QAM	5MHz	12	0
	21.55	23255	784.5	16QAM	5MHz	12	6
21.56	23255	784.5	16QAM	5MHz	12	11	
21.51	23255	784.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 13	23.48	23230	782	QPSK	10MHz	1	0
	23.50	23230	782	QPSK	10MHz	1	24
	23.57	23230	782	QPSK	10MHz	1	49
	22.42	23230	782	QPSK	10MHz	25	0
	22.53	23230	782	QPSK	10MHz	25	12
	22.54	23230	782	QPSK	10MHz	25	25
	22.78	23230	782	QPSK	10MHz	50	0
	22.70	23230	782	16QAM	10MHz	1	0
	22.82	23230	782	16QAM	10MHz	1	24
	22.91	23230	782	16QAM	10MHz	1	49
	21.46	23230	782	16QAM	10MHz	25	0
	21.65	23230	782	16QAM	10MHz	25	12
	21.64	23230	782	16QAM	10MHz	25	25
	21.89	23230	782	16QAM	10MHz	50	0



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 17	23.19	23755	706.5	QPSK	5MHz	1	0
	23.03	23755	706.5	QPSK	5MHz	1	12
	23.17	23755	706.5	QPSK	5MHz	1	24
	22.06	23755	706.5	QPSK	5MHz	12	0
	22.04	23755	706.5	QPSK	5MHz	12	6
	22.12	23755	706.5	QPSK	5MHz	12	13
	22.04	23755	706.5	QPSK	5MHz	25	0
	23.04	23790	710	QPSK	5MHz	1	0
	23.12	23790	710	QPSK	5MHz	1	12
	23.24	23790	710	QPSK	5MHz	1	24
	22.08	23790	710	QPSK	5MHz	12	0
	22.05	23790	710	QPSK	5MHz	12	6
	22.19	23790	710	QPSK	5MHz	12	13
	22.16	23790	710	QPSK	5MHz	25	0
	23.18	23825	713.5	QPSK	5MHz	1	0
	23.18	23825	713.5	QPSK	5MHz	1	12
	23.09	23825	713.5	QPSK	5MHz	1	24
	22.18	23825	713.5	QPSK	5MHz	12	0
	22.13	23825	713.5	QPSK	5MHz	12	6
	22.07	23825	713.5	QPSK	5MHz	12	13
	22.12	23825	713.5	QPSK	5MHz	25	0
	22.44	23755	706.5	16QAM	5MHz	1	0
	22.27	23755	706.5	16QAM	5MHz	1	12
	22.46	23755	706.5	16QAM	5MHz	1	24
	21.13	23755	706.5	16QAM	5MHz	12	0
	21.13	23755	706.5	16QAM	5MHz	12	6
	21.17	23755	706.5	16QAM	5MHz	12	13
	21.06	23755	706.5	16QAM	5MHz	25	0
	22.36	23790	710	16QAM	5MHz	1	0
	22.43	23790	710	16QAM	5MHz	1	12
	22.60	23790	710	16QAM	5MHz	1	24
	21.17	23790	710	16QAM	5MHz	12	0
	21.15	23790	710	16QAM	5MHz	12	6
	21.28	23790	710	16QAM	5MHz	12	13
	21.19	23790	710	16QAM	5MHz	25	0
	22.51	23825	713.5	16QAM	5MHz	1	0
	22.47	23825	713.5	16QAM	5MHz	1	12
	22.42	23825	713.5	16QAM	5MHz	1	24
	21.23	23825	713.5	16QAM	5MHz	12	0
	21.21	23825	713.5	16QAM	5MHz	12	6
21.23	23825	713.5	16QAM	5MHz	12	11	
21.14	23825	713.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 17	23.16	23780	709	QPSK	10MHz	1	0
	23.10	23780	709	QPSK	10MHz	1	24
	23.33	23780	709	QPSK	10MHz	1	49
	22.08	23780	709	QPSK	10MHz	25	0
	22.18	23780	709	QPSK	10MHz	25	12
	22.35	23780	709	QPSK	10MHz	25	25
	22.33	23780	709	QPSK	10MHz	50	0
	23.07	23790	710	QPSK	10MHz	1	0
	23.10	23790	710	QPSK	10MHz	1	24
	23.30	23790	710	QPSK	10MHz	1	49
	22.12	23790	710	QPSK	10MHz	25	0
	22.18	23790	710	QPSK	10MHz	25	12
	22.34	23790	710	QPSK	10MHz	25	25
	22.39	23790	710	QPSK	10MHz	50	0
	23.01	23800	711	QPSK	10MHz	1	0
	23.19	23800	711	QPSK	10MHz	1	24
	23.18	23800	711	QPSK	10MHz	1	49
	22.19	23800	711	QPSK	10MHz	25	0
	22.26	23800	711	QPSK	10MHz	25	12
	22.30	23800	711	QPSK	10MHz	25	25
	22.44	23800	711	QPSK	10MHz	50	0
	22.51	23780	709	16QAM	10MHz	1	0
	22.45	23780	709	16QAM	10MHz	1	24
	22.64	23780	709	16QAM	10MHz	1	49
	21.20	23780	709	16QAM	10MHz	25	0
	21.28	23780	709	16QAM	10MHz	25	12
	21.45	23780	709	16QAM	10MHz	25	25
	21.34	23780	709	16QAM	10MHz	50	0
	22.39	23790	710	16QAM	10MHz	1	0
	22.44	23790	710	16QAM	10MHz	1	24
	22.59	23790	710	16QAM	10MHz	1	49
	21.22	23790	710	16QAM	10MHz	25	0
	21.23	23790	710	16QAM	10MHz	25	12
	21.38	23790	710	16QAM	10MHz	25	25
	21.42	23790	710	16QAM	10MHz	50	0
	22.30	23800	711	16QAM	10MHz	1	0
	22.50	23800	711	16QAM	10MHz	1	24
	22.44	23800	711	16QAM	10MHz	1	49
	21.25	23800	711	16QAM	10MHz	25	0
	21.31	23800	711	16QAM	10MHz	25	12
21.35	23800	711	16QAM	10MHz	25	25	
21.46	23800	711	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 26	23.14	26697	814.7	QPSK	1.4MHz	1	0
	23.13	26697	814.7	QPSK	1.4MHz	1	2
	23.21	26697	814.7	QPSK	1.4MHz	1	5
	23.15	26697	814.7	QPSK	1.4MHz	3	0
	23.15	26697	814.7	QPSK	1.4MHz	3	1
	23.19	26697	814.7	QPSK	1.4MHz	3	3
	22.17	26697	814.7	QPSK	1.4MHz	6	0
	23.37	26865	831.5	QPSK	1.4MHz	1	0
	23.34	26865	831.5	QPSK	1.4MHz	1	2
	23.38	26865	831.5	QPSK	1.4MHz	1	5
	23.35	26865	831.5	QPSK	1.4MHz	3	0
	23.35	26865	831.5	QPSK	1.4MHz	3	1
	23.37	26865	831.5	QPSK	1.4MHz	3	3
	22.36	26865	831.5	QPSK	1.4MHz	6	0
	23.35	27033	848.3	QPSK	1.4MHz	1	0
	23.31	27033	848.3	QPSK	1.4MHz	1	2
	23.37	27033	848.3	QPSK	1.4MHz	1	5
	23.35	27033	848.3	QPSK	1.4MHz	3	0
	23.34	27033	848.3	QPSK	1.4MHz	3	1
	23.33	27033	848.3	QPSK	1.4MHz	3	3
	22.28	27033	848.3	QPSK	1.4MHz	6	0
	22.46	26697	814.7	16QAM	1.4MHz	1	0
	22.45	26697	814.7	16QAM	1.4MHz	1	2
	22.53	26697	814.7	16QAM	1.4MHz	1	5
	22.29	26697	814.7	16QAM	1.4MHz	3	0
	22.29	26697	814.7	16QAM	1.4MHz	3	1
	22.27	26697	814.7	16QAM	1.4MHz	3	3
	21.24	26697	814.7	16QAM	1.4MHz	6	0
	22.69	26865	831.5	16QAM	1.4MHz	1	0
	22.64	26865	831.5	16QAM	1.4MHz	1	2
	22.68	26865	831.5	16QAM	1.4MHz	1	5
	22.45	26865	831.5	16QAM	1.4MHz	3	0
	22.47	26865	831.5	16QAM	1.4MHz	3	1
	22.50	26865	831.5	16QAM	1.4MHz	3	3
	21.42	26865	831.5	16QAM	1.4MHz	6	0
	22.66	27033	848.3	16QAM	1.4MHz	1	0
	22.64	27033	848.3	16QAM	1.4MHz	1	2
	22.63	27033	848.3	16QAM	1.4MHz	1	5
	22.41	27033	848.3	16QAM	1.4MHz	3	0
	22.38	27033	848.3	16QAM	1.4MHz	3	1
22.38	27033	848.3	16QAM	1.4MHz	3	3	
21.39	27033	848.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 26	23.14	26705	815.5	QPSK	3MHz	1	0
	23.26	26705	815.5	QPSK	3MHz	1	7
	23.19	26705	815.5	QPSK	3MHz	1	14
	22.14	26705	815.5	QPSK	3MHz	8	0
	22.18	26705	815.5	QPSK	3MHz	8	3
	22.22	26705	815.5	QPSK	3MHz	8	7
	22.19	26705	815.5	QPSK	3MHz	15	0
	23.32	26865	831.5	QPSK	3MHz	1	0
	23.36	26865	831.5	QPSK	3MHz	1	7
	23.28	26865	831.5	QPSK	3MHz	1	14
	22.36	26865	831.5	QPSK	3MHz	8	0
	22.32	26865	831.5	QPSK	3MHz	8	3
	22.36	26865	831.5	QPSK	3MHz	8	7
	22.33	26865	831.5	QPSK	3MHz	15	0
	23.28	27025	847.5	QPSK	3MHz	1	0
	23.36	27025	847.5	QPSK	3MHz	1	7
	23.36	27025	847.5	QPSK	3MHz	1	14
	22.33	27025	847.5	QPSK	3MHz	8	0
	22.27	27025	847.5	QPSK	3MHz	8	3
	22.30	27025	847.5	QPSK	3MHz	8	7
	22.27	27025	847.5	QPSK	3MHz	15	0
	22.39	26705	815.5	16QAM	3MHz	1	0
	22.54	26705	815.5	16QAM	3MHz	1	7
	22.50	26705	815.5	16QAM	3MHz	1	14
	21.20	26705	815.5	16QAM	3MHz	8	0
	21.23	26705	815.5	16QAM	3MHz	8	3
	21.29	26705	815.5	16QAM	3MHz	8	7
	21.21	26705	815.5	16QAM	3MHz	15	0
	22.59	26865	831.5	16QAM	3MHz	1	0
	22.64	26865	831.5	16QAM	3MHz	1	7
	22.58	26865	831.5	16QAM	3MHz	1	14
	21.48	26865	831.5	16QAM	3MHz	8	0
	21.47	26865	831.5	16QAM	3MHz	8	3
	21.49	26865	831.5	16QAM	3MHz	8	7
	21.43	26865	831.5	16QAM	3MHz	15	0
	22.48	27025	847.5	16QAM	3MHz	1	0
	22.58	27025	847.5	16QAM	3MHz	1	7
	22.60	27025	847.5	16QAM	3MHz	1	14
	21.39	27025	847.5	16QAM	3MHz	8	0
	21.36	27025	847.5	16QAM	3MHz	8	3
21.41	27025	847.5	16QAM	3MHz	8	7	
21.32	27025	847.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 26	23.14	26715	816.5	QPSK	5MHz	1	0
	23.19	26715	816.5	QPSK	5MHz	1	12
	23.26	26715	816.5	QPSK	5MHz	1	24
	22.11	26715	816.5	QPSK	5MHz	12	0
	22.15	26715	816.5	QPSK	5MHz	12	6
	22.20	26715	816.5	QPSK	5MHz	12	13
	22.23	26715	816.5	QPSK	5MHz	25	0
	23.33	26865	831.5	QPSK	5MHz	1	0
	23.31	26865	831.5	QPSK	5MHz	1	12
	23.32	26865	831.5	QPSK	5MHz	1	24
	22.37	26865	831.5	QPSK	5MHz	12	0
	22.31	26865	831.5	QPSK	5MHz	12	6
	22.32	26865	831.5	QPSK	5MHz	12	13
	22.35	26865	831.5	QPSK	5MHz	25	0
	23.19	27015	846.5	QPSK	5MHz	1	0
	23.30	27015	846.5	QPSK	5MHz	1	12
	23.38	27015	846.5	QPSK	5MHz	1	24
	22.28	27015	846.5	QPSK	5MHz	12	0
	22.34	27015	846.5	QPSK	5MHz	12	6
	22.36	27015	846.5	QPSK	5MHz	12	13
	22.36	27015	846.5	QPSK	5MHz	25	0
	22.43	26715	816.5	16QAM	5MHz	1	0
	22.49	26715	816.5	16QAM	5MHz	1	12
	22.56	26715	816.5	16QAM	5MHz	1	24
	21.24	26715	816.5	16QAM	5MHz	12	0
	21.28	26715	816.5	16QAM	5MHz	12	6
	21.32	26715	816.5	16QAM	5MHz	12	13
	21.25	26715	816.5	16QAM	5MHz	25	0
	22.63	26865	831.5	16QAM	5MHz	1	0
	22.59	26865	831.5	16QAM	5MHz	1	12
	22.65	26865	831.5	16QAM	5MHz	1	24
	21.42	26865	831.5	16QAM	5MHz	12	0
	21.41	26865	831.5	16QAM	5MHz	12	6
	21.44	26865	831.5	16QAM	5MHz	12	13
	21.45	26865	831.5	16QAM	5MHz	25	0
	22.47	27015	846.5	16QAM	5MHz	1	0
	22.56	27015	846.5	16QAM	5MHz	1	12
	22.68	27015	846.5	16QAM	5MHz	1	24
	21.29	27015	846.5	16QAM	5MHz	12	0
	21.35	27015	846.5	16QAM	5MHz	12	6
21.39	27015	846.5	16QAM	5MHz	12	11	
21.41	27015	846.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 26	23.21	26740	819	QPSK	10MHz	1	0
	23.15	26740	819	QPSK	10MHz	1	24
	23.34	26740	819	QPSK	10MHz	1	49
	22.29	26740	819	QPSK	10MHz	25	0
	22.20	26740	819	QPSK	10MHz	25	12
	22.23	26740	819	QPSK	10MHz	25	25
	22.25	26740	819	QPSK	10MHz	50	0
	23.30	26865	831.5	QPSK	10MHz	1	0
	23.37	26865	831.5	QPSK	10MHz	1	24
	23.37	26865	831.5	QPSK	10MHz	1	49
	22.41	26865	831.5	QPSK	10MHz	25	0
	22.42	26865	831.5	QPSK	10MHz	25	12
	22.40	26865	831.5	QPSK	10MHz	25	25
	22.39	26865	831.5	QPSK	10MHz	50	0
	23.23	26990	844	QPSK	10MHz	1	0
	23.22	26990	844	QPSK	10MHz	1	24
	23.46	26990	844	QPSK	10MHz	1	49
	22.32	26990	844	QPSK	10MHz	25	0
	22.28	26990	844	QPSK	10MHz	25	12
	22.42	26990	844	QPSK	10MHz	25	25
	22.44	26990	844	QPSK	10MHz	50	0
	22.61	26740	819	16QAM	10MHz	1	0
	22.51	26740	819	16QAM	10MHz	1	24
	22.71	26740	819	16QAM	10MHz	1	49
	21.39	26740	819	16QAM	10MHz	25	0
	21.33	26740	819	16QAM	10MHz	25	12
	21.31	26740	819	16QAM	10MHz	25	25
	21.32	26740	819	16QAM	10MHz	50	0
	22.53	26865	831.5	16QAM	10MHz	1	0
	22.65	26865	831.5	16QAM	10MHz	1	24
	22.67	26865	831.5	16QAM	10MHz	1	49
	21.51	26865	831.5	16QAM	10MHz	25	0
	21.56	26865	831.5	16QAM	10MHz	25	12
	21.57	26865	831.5	16QAM	10MHz	25	25
	21.53	26865	831.5	16QAM	10MHz	50	0
	22.57	26990	844	16QAM	10MHz	1	0
	22.53	26990	844	16QAM	10MHz	1	24
	22.77	26990	844	16QAM	10MHz	1	49
	21.39	26990	844	16QAM	10MHz	25	0
	21.36	26990	844	16QAM	10MHz	25	12
21.52	26990	844	16QAM	10MHz	25	25	
21.45	26990	844	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 26	23.23	26765	821.5	QPSK	15MHz	1	0
	23.24	26765	821.5	QPSK	15MHz	1	37
	23.48	26765	821.5	QPSK	15MHz	1	74
	22.35	26765	821.5	QPSK	15MHz	36	0
	22.30	26765	821.5	QPSK	15MHz	36	19
	22.44	26765	821.5	QPSK	15MHz	36	39
	22.36	26765	821.5	QPSK	15MHz	75	0
	23.30	26865	831.5	QPSK	15MHz	1	0
	23.41	26865	831.5	QPSK	15MHz	1	37
	23.22	26865	831.5	QPSK	15MHz	1	74
	22.30	26865	831.5	QPSK	15MHz	36	0
	22.39	26865	831.5	QPSK	15MHz	36	19
	22.34	26865	831.5	QPSK	15MHz	36	39
	22.50	26865	831.5	QPSK	15MHz	75	0
	23.24	26965	841.5	QPSK	15MHz	1	0
	23.26	26965	841.5	QPSK	15MHz	1	37
	23.37	26965	841.5	QPSK	15MHz	1	74
	22.19	26965	841.5	QPSK	15MHz	36	0
	22.25	26965	841.5	QPSK	15MHz	36	19
	22.36	26965	841.5	QPSK	15MHz	36	39
	22.48	26965	841.5	QPSK	15MHz	75	0
	22.54	26765	821.5	16QAM	15MHz	1	0
	22.55	26765	821.5	16QAM	15MHz	1	37
	22.72	26765	821.5	16QAM	15MHz	1	74
	21.35	26765	821.5	16QAM	15MHz	36	0
	21.30	26765	821.5	16QAM	15MHz	36	19
	21.46	26765	821.5	16QAM	15MHz	36	39
	21.40	26765	821.5	16QAM	15MHz	75	0
	22.58	26865	831.5	16QAM	15MHz	1	0
	22.66	26865	831.5	16QAM	15MHz	1	37
	22.63	26865	831.5	16QAM	15MHz	1	74
	21.36	26865	831.5	16QAM	15MHz	36	0
	21.48	26865	831.5	16QAM	15MHz	36	19
	21.42	26865	831.5	16QAM	15MHz	36	39
	21.57	26865	831.5	16QAM	15MHz	75	0
	22.56	26965	841.5	16QAM	15MHz	1	0
	22.56	26965	841.5	16QAM	15MHz	1	37
	22.72	26965	841.5	16QAM	15MHz	1	74
	21.26	26965	841.5	16QAM	15MHz	36	0
	21.29	26965	841.5	16QAM	15MHz	36	19
21.43	26965	841.5	16QAM	15MHz	36	39	
21.52	26965	841.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 30	23.79	27685	2307.5	QPSK	5MHz	1	0
	23.57	27685	2307.5	QPSK	5MHz	1	12
	23.56	27685	2307.5	QPSK	5MHz	1	24
	22.71	27685	2307.5	QPSK	5MHz	12	0
	22.57	27685	2307.5	QPSK	5MHz	12	6
	22.56	27685	2307.5	QPSK	5MHz	12	13
	22.58	27685	2307.5	QPSK	5MHz	25	0
	23.56	27710	2310	QPSK	5MHz	1	0
	23.58	27710	2310	QPSK	5MHz	1	12
	23.50	27710	2310	QPSK	5MHz	1	24
	22.57	27710	2310	QPSK	5MHz	12	0
	22.59	27710	2310	QPSK	5MHz	12	6
	22.57	27710	2310	QPSK	5MHz	12	13
	22.68	27710	2310	QPSK	5MHz	25	0
	23.62	27735	2312.5	QPSK	5MHz	1	0
	23.54	27735	2312.5	QPSK	5MHz	1	12
	23.63	27735	2312.5	QPSK	5MHz	1	24
	22.54	27735	2312.5	QPSK	5MHz	12	0
	22.51	27735	2312.5	QPSK	5MHz	12	6
	22.62	27735	2312.5	QPSK	5MHz	12	13
	22.59	27735	2312.5	QPSK	5MHz	25	0
	22.91	27685	2307.5	16QAM	5MHz	1	0
	22.69	27685	2307.5	16QAM	5MHz	1	12
	22.76	27685	2307.5	16QAM	5MHz	1	24
	21.71	27685	2307.5	16QAM	5MHz	12	0
	21.57	27685	2307.5	16QAM	5MHz	12	6
	21.56	27685	2307.5	16QAM	5MHz	12	13
	21.61	27685	2307.5	16QAM	5MHz	25	0
	22.78	27710	2310	16QAM	5MHz	1	0
	22.83	27710	2310	16QAM	5MHz	1	12
	22.75	27710	2310	16QAM	5MHz	1	24
	21.61	27710	2310	16QAM	5MHz	12	0
	21.62	27710	2310	16QAM	5MHz	12	6
	21.61	27710	2310	16QAM	5MHz	12	13
	21.69	27710	2310	16QAM	5MHz	25	0
	22.79	27735	2312.5	16QAM	5MHz	1	0
	22.76	27735	2312.5	16QAM	5MHz	1	12
	22.85	27735	2312.5	16QAM	5MHz	1	24
	21.57	27735	2312.5	16QAM	5MHz	12	0
	21.52	27735	2312.5	16QAM	5MHz	12	6
21.65	27735	2312.5	16QAM	5MHz	12	11	
21.61	27735	2312.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 30	23.89	27710	2310	QPSK	10MHz	1	0
	23.69	27710	2310	QPSK	10MHz	1	24
	23.83	27710	2310	QPSK	10MHz	1	49
	22.81	27710	2310	QPSK	10MHz	25	0
	22.79	27710	2310	QPSK	10MHz	25	12
	22.74	27710	2310	QPSK	10MHz	25	25
	22.86	27710	2310	QPSK	10MHz	50	0
	22.96	27710	2310	16QAM	10MHz	1	0
	22.90	27710	2310	16QAM	10MHz	1	24
	22.95	27710	2310	16QAM	10MHz	1	49
	21.83	27710	2310	16QAM	10MHz	25	0
	21.85	27710	2310	16QAM	10MHz	25	12
	21.82	27710	2310	16QAM	10MHz	25	25
21.94	27710	2310	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	23.23	37775	2572.5	QPSK	5MHz	1	0
	23.22	37775	2572.5	QPSK	5MHz	1	12
	23.25	37775	2572.5	QPSK	5MHz	1	24
	22.29	37775	2572.5	QPSK	5MHz	12	0
	22.26	37775	2572.5	QPSK	5MHz	12	6
	22.29	37775	2572.5	QPSK	5MHz	12	13
	22.23	37775	2572.5	QPSK	5MHz	25	0
	23.41	38000	2595	QPSK	5MHz	1	0
	23.37	38000	2595	QPSK	5MHz	1	12
	23.37	38000	2595	QPSK	5MHz	1	24
	22.48	38000	2595	QPSK	5MHz	12	0
	22.47	38000	2595	QPSK	5MHz	12	6
	22.49	38000	2595	QPSK	5MHz	12	13
	22.43	38000	2595	QPSK	5MHz	25	0
	23.33	38225	2617.5	QPSK	5MHz	1	0
	23.29	38225	2617.5	QPSK	5MHz	1	12
	23.27	38225	2617.5	QPSK	5MHz	1	24
	22.39	38225	2617.5	QPSK	5MHz	12	0
	22.38	38225	2617.5	QPSK	5MHz	12	6
	22.39	38225	2617.5	QPSK	5MHz	12	13
	22.33	38225	2617.5	QPSK	5MHz	25	0
	22.24	37775	2572.5	16QAM	5MHz	1	0
	22.22	37775	2572.5	16QAM	5MHz	1	12
	22.28	37775	2572.5	16QAM	5MHz	1	24
	21.32	37775	2572.5	16QAM	5MHz	12	0
	21.31	37775	2572.5	16QAM	5MHz	12	6
	21.33	37775	2572.5	16QAM	5MHz	12	13
	21.27	37775	2572.5	16QAM	5MHz	25	0
	22.45	38000	2595	16QAM	5MHz	1	0
	22.41	38000	2595	16QAM	5MHz	1	12
	22.45	38000	2595	16QAM	5MHz	1	24
	21.48	38000	2595	16QAM	5MHz	12	0
	21.47	38000	2595	16QAM	5MHz	12	6
	21.50	38000	2595	16QAM	5MHz	12	13
	21.45	38000	2595	16QAM	5MHz	25	0
	22.34	38225	2617.5	16QAM	5MHz	1	0
	22.31	38225	2617.5	16QAM	5MHz	1	12
	22.33	38225	2617.5	16QAM	5MHz	1	24
	21.47	38225	2617.5	16QAM	5MHz	12	0
	21.46	38225	2617.5	16QAM	5MHz	12	6
21.47	38225	2617.5	16QAM	5MHz	12	11	
21.42	38225	2617.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	23.43	37800	2575	QPSK	10MHz	1	0
	23.44	37800	2575	QPSK	10MHz	1	24
	23.52	37800	2575	QPSK	10MHz	1	49
	22.38	37800	2575	QPSK	10MHz	25	0
	22.40	37800	2575	QPSK	10MHz	25	12
	22.39	37800	2575	QPSK	10MHz	25	25
	22.33	37800	2575	QPSK	10MHz	50	0
	23.54	38000	2595	QPSK	10MHz	1	0
	23.47	38000	2595	QPSK	10MHz	1	24
	23.53	38000	2595	QPSK	10MHz	1	49
	22.51	38000	2595	QPSK	10MHz	25	0
	22.51	38000	2595	QPSK	10MHz	25	12
	22.53	38000	2595	QPSK	10MHz	25	25
	22.48	38000	2595	QPSK	10MHz	50	0
	23.56	38200	2615	QPSK	10MHz	1	0
	23.49	38200	2615	QPSK	10MHz	1	24
	23.52	38200	2615	QPSK	10MHz	1	49
	22.57	38200	2615	QPSK	10MHz	25	0
	22.50	38200	2615	QPSK	10MHz	25	12
	22.52	38200	2615	QPSK	10MHz	25	25
	22.50	38200	2615	QPSK	10MHz	50	0
	22.36	37800	2575	16QAM	10MHz	1	0
	22.35	37800	2575	16QAM	10MHz	1	24
	22.42	37800	2575	16QAM	10MHz	1	49
	21.48	37800	2575	16QAM	10MHz	25	0
	21.48	37800	2575	16QAM	10MHz	25	12
	21.51	37800	2575	16QAM	10MHz	25	25
	21.39	37800	2575	16QAM	10MHz	50	0
	22.58	38000	2595	16QAM	10MHz	1	0
	22.50	38000	2595	16QAM	10MHz	1	24
	22.52	38000	2595	16QAM	10MHz	1	49
	21.60	38000	2595	16QAM	10MHz	25	0
	21.60	38000	2595	16QAM	10MHz	25	12
	21.62	38000	2595	16QAM	10MHz	25	25
	21.50	38000	2595	16QAM	10MHz	50	0
	22.71	38200	2615	16QAM	10MHz	1	0
	22.67	38200	2615	16QAM	10MHz	1	24
	22.69	38200	2615	16QAM	10MHz	1	49
	21.63	38200	2615	16QAM	10MHz	25	0
	21.62	38200	2615	16QAM	10MHz	25	12
21.63	38200	2615	16QAM	10MHz	25	25	
21.46	38200	2615	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	23.78	37825	2577.5	QPSK	15MHz	1	0
	23.80	37825	2577.5	QPSK	15MHz	1	37
	23.84	37825	2577.5	QPSK	15MHz	1	74
	22.74	37825	2577.5	QPSK	15MHz	36	0
	22.79	37825	2577.5	QPSK	15MHz	36	19
	22.78	37825	2577.5	QPSK	15MHz	36	39
	22.72	37825	2577.5	QPSK	15MHz	75	0
	23.75	38000	2595	QPSK	15MHz	1	0
	23.71	38000	2595	QPSK	15MHz	1	37
	23.74	38000	2595	QPSK	15MHz	1	74
	22.72	38000	2595	QPSK	15MHz	36	0
	22.71	38000	2595	QPSK	15MHz	36	19
	22.72	38000	2595	QPSK	15MHz	36	39
	22.70	38000	2595	QPSK	15MHz	75	0
	23.61	38175	2612.5	QPSK	15MHz	1	0
	23.59	38175	2612.5	QPSK	15MHz	1	37
	23.55	38175	2612.5	QPSK	15MHz	1	74
	22.59	38175	2612.5	QPSK	15MHz	36	0
	22.59	38175	2612.5	QPSK	15MHz	36	19
	22.59	38175	2612.5	QPSK	15MHz	36	39
	22.56	38175	2612.5	QPSK	15MHz	75	0
	22.63	37825	2577.5	16QAM	15MHz	1	0
	22.62	37825	2577.5	16QAM	15MHz	1	37
	22.69	37825	2577.5	16QAM	15MHz	1	74
	21.72	37825	2577.5	16QAM	15MHz	36	0
	21.71	37825	2577.5	16QAM	15MHz	36	19
	21.73	37825	2577.5	16QAM	15MHz	36	39
	21.69	37825	2577.5	16QAM	15MHz	75	0
	22.63	38000	2595	16QAM	15MHz	1	0
	22.58	38000	2595	16QAM	15MHz	1	37
	22.60	38000	2595	16QAM	15MHz	1	74
	21.67	38000	2595	16QAM	15MHz	36	0
	21.69	38000	2595	16QAM	15MHz	36	19
	21.69	38000	2595	16QAM	15MHz	36	39
	21.66	38000	2595	16QAM	15MHz	75	0
	22.48	38175	2612.5	16QAM	15MHz	1	0
	22.47	38175	2612.5	16QAM	15MHz	1	37
	22.46	38175	2612.5	16QAM	15MHz	1	74
	21.60	38175	2612.5	16QAM	15MHz	36	0
	21.61	38175	2612.5	16QAM	15MHz	36	19
21.60	38175	2612.5	16QAM	15MHz	36	39	
21.53	38175	2612.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	23.36	37850	2580	QPSK	20MHz	1	0
	23.34	37850	2580	QPSK	20MHz	1	49
	23.41	37850	2580	QPSK	20MHz	1	99
	22.26	37850	2580	QPSK	20MHz	50	0
	22.26	37850	2580	QPSK	20MHz	50	25
	22.29	37850	2580	QPSK	20MHz	50	50
	22.28	37850	2580	QPSK	20MHz	100	0
	23.39	38000	2595	QPSK	20MHz	1	0
	23.36	38000	2595	QPSK	20MHz	1	49
	23.44	38000	2595	QPSK	20MHz	1	99
	22.32	38000	2595	QPSK	20MHz	50	0
	22.32	38000	2595	QPSK	20MHz	50	25
	22.35	38000	2595	QPSK	20MHz	50	50
	22.34	38000	2595	QPSK	20MHz	100	0
	23.41	38150	2610	QPSK	20MHz	1	0
	23.35	38150	2610	QPSK	20MHz	1	49
	23.39	38150	2610	QPSK	20MHz	1	99
	22.33	38150	2610	QPSK	20MHz	50	0
	22.32	38150	2610	QPSK	20MHz	50	25
	22.32	38150	2610	QPSK	20MHz	50	50
	22.33	38150	2610	QPSK	20MHz	100	0
	22.16	37850	2580	16QAM	20MHz	1	0
	22.18	37850	2580	16QAM	20MHz	1	49
	22.29	37850	2580	16QAM	20MHz	1	99
	21.30	37850	2580	16QAM	20MHz	50	0
	21.31	37850	2580	16QAM	20MHz	50	25
	21.34	37850	2580	16QAM	20MHz	50	50
	21.32	37850	2580	16QAM	20MHz	100	0
	22.27	38000	2595	16QAM	20MHz	1	0
	22.25	38000	2595	16QAM	20MHz	1	49
	22.32	38000	2595	16QAM	20MHz	1	99
	21.38	38000	2595	16QAM	20MHz	50	0
	21.38	38000	2595	16QAM	20MHz	50	25
	21.40	38000	2595	16QAM	20MHz	50	50
21.41	38000	2595	16QAM	20MHz	100	0	
22.30	38150	2610	16QAM	20MHz	1	0	
22.25	38150	2610	16QAM	20MHz	1	49	
22.28	38150	2610	16QAM	20MHz	1	99	
21.39	38150	2610	16QAM	20MHz	50	0	
21.37	38150	2610	16QAM	20MHz	50	25	
21.38	38150	2610	16QAM	20MHz	50	50	
21.40	38150	2610	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	23.12	39715	2502.5	QPSK	5MHz	1	0
	23.05	39715	2502.5	QPSK	5MHz	1	12
	23.12	39715	2502.5	QPSK	5MHz	1	24
	22.24	39715	2502.5	QPSK	5MHz	12	0
	22.18	39715	2502.5	QPSK	5MHz	12	6
	22.23	39715	2502.5	QPSK	5MHz	12	13
	22.14	39715	2502.5	QPSK	5MHz	25	0
	23.10	39675	2498.5	QPSK	5MHz	1	0
	23.02	39675	2498.5	QPSK	5MHz	1	12
	23.09	39675	2498.5	QPSK	5MHz	1	24
	22.19	39675	2498.5	QPSK	5MHz	12	0
	22.19	39675	2498.5	QPSK	5MHz	12	6
	22.22	39675	2498.5	QPSK	5MHz	12	13
	22.11	39675	2498.5	QPSK	5MHz	25	0
	23.18	40148	2545.8	QPSK	5MHz	1	0
	23.14	40148	2545.8	QPSK	5MHz	1	12
	23.18	40148	2545.8	QPSK	5MHz	1	24
	22.32	40148	2545.8	QPSK	5MHz	12	0
	22.30	40148	2545.8	QPSK	5MHz	12	6
	22.32	40148	2545.8	QPSK	5MHz	12	13
	22.23	40148	2545.8	QPSK	5MHz	25	0
	23.18	40620	2593	QPSK	5MHz	1	0
	23.13	40620	2593	QPSK	5MHz	1	12
	23.17	40620	2593	QPSK	5MHz	1	24
	22.28	40620	2593	QPSK	5MHz	12	0
	22.28	40620	2593	QPSK	5MHz	12	6
	22.29	40620	2593	QPSK	5MHz	12	13
	22.21	40620	2593	QPSK	5MHz	25	0
	22.71	41093	2640.3	QPSK	5MHz	1	0
	22.68	41093	2640.3	QPSK	5MHz	1	12
	22.71	41093	2640.3	QPSK	5MHz	1	24
	21.32	41093	2640.3	QPSK	5MHz	12	0
	21.32	41093	2640.3	QPSK	5MHz	12	6
	21.34	41093	2640.3	QPSK	5MHz	12	13
	21.29	41093	2640.3	QPSK	5MHz	25	0
	23.14	41565	2687.5	QPSK	5MHz	1	0
	23.10	41565	2687.5	QPSK	5MHz	1	12
	23.18	41565	2687.5	QPSK	5MHz	1	24
	22.28	41565	2687.5	QPSK	5MHz	12	0
	22.27	41565	2687.5	QPSK	5MHz	12	6
22.27	41565	2687.5	QPSK	5MHz	12	13	
22.18	41565	2687.5	QPSK	5MHz	25	0	
22.67	39715	2502.5	16QAM	5MHz	1	0	
22.60	39715	2502.5	16QAM	5MHz	1	12	
22.65	39715	2502.5	16QAM	5MHz	1	24	
21.31	39715	2502.5	16QAM	5MHz	12	0	
21.25	39715	2502.5	16QAM	5MHz	12	6	
21.28	39715	2502.5	16QAM	5MHz	12	13	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	21.21	39715	2502.5	16QAM	5MHz	25	0
	22.57	39675	2498.5	16QAM	5MHz	1	0
	22.55	39675	2498.5	16QAM	5MHz	1	12
	22.61	39675	2498.5	16QAM	5MHz	1	24
	21.22	39675	2498.5	16QAM	5MHz	12	0
	21.23	39675	2498.5	16QAM	5MHz	12	6
	21.24	39675	2498.5	16QAM	5MHz	12	13
	21.18	39675	2498.5	16QAM	5MHz	25	0
	22.75	40148	2545.8	16QAM	5MHz	1	0
	22.68	40148	2545.8	16QAM	5MHz	1	12
	22.69	40148	2545.8	16QAM	5MHz	1	24
	21.32	40148	2545.8	16QAM	5MHz	12	0
	21.35	40148	2545.8	16QAM	5MHz	12	6
	21.37	40148	2545.8	16QAM	5MHz	12	11
	21.31	40148	2545.8	16QAM	5MHz	25	0
	22.71	40620	2593	16QAM	5MHz	1	0
	22.68	40620	2593	16QAM	5MHz	1	12
	22.71	40620	2593	16QAM	5MHz	1	24
	21.32	40620	2593	16QAM	5MHz	12	0
	21.32	40620	2593	16QAM	5MHz	12	6
	21.34	40620	2593	16QAM	5MHz	12	13
	21.29	40620	2593	16QAM	5MHz	25	0
	22.79	41093	2640.3	16QAM	5MHz	1	0
	22.74	41093	2640.3	16QAM	5MHz	1	12
	22.77	41093	2640.3	16QAM	5MHz	1	24
	21.43	41093	2640.3	16QAM	5MHz	12	0
	21.42	41093	2640.3	16QAM	5MHz	12	6
	21.42	41093	2640.3	16QAM	5MHz	12	11
	21.36	41093	2640.3	16QAM	5MHz	25	0
	22.65	41565	2687.5	16QAM	5MHz	1	0
22.60	41565	2687.5	16QAM	5MHz	1	12	
22.65	41565	2687.5	16QAM	5MHz	1	24	
21.29	41565	2687.5	16QAM	5MHz	12	0	
21.28	41565	2687.5	16QAM	5MHz	12	6	
21.28	41565	2687.5	16QAM	5MHz	12	11	
21.28	41565	2687.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	23.03	39740	2505	QPSK	10MHz	1	0
	22.98	39740	2505	QPSK	10MHz	1	24
	22.98	39740	2505	QPSK	10MHz	1	49
	22.06	39740	2505	QPSK	10MHz	25	0
	22.07	39740	2505	QPSK	10MHz	25	12
	22.10	39740	2505	QPSK	10MHz	25	25
	22.06	39740	2505	QPSK	10MHz	50	0
	23.01	39700	2501	QPSK	10MHz	1	0
	23.02	39700	2501	QPSK	10MHz	1	24
	23.05	39700	2501	QPSK	10MHz	1	49
	22.10	39700	2501	QPSK	10MHz	25	0
	22.11	39700	2501	QPSK	10MHz	25	12
	22.10	39700	2501	QPSK	10MHz	25	25
	22.12	39700	2501	QPSK	10MHz	50	0
	23.13	40160	2547	QPSK	10MHz	1	0
	23.09	40160	2547	QPSK	10MHz	1	24
	23.19	40160	2547	QPSK	10MHz	1	49
	22.19	40160	2547	QPSK	10MHz	25	0
	22.18	40160	2547	QPSK	10MHz	25	12
	22.26	40160	2547	QPSK	10MHz	25	25
	22.17	40160	2547	QPSK	10MHz	50	0
	23.11	40620	2593	QPSK	10MHz	1	0
	23.10	40620	2593	QPSK	10MHz	1	24
	23.15	40620	2593	QPSK	10MHz	1	49
	22.18	40620	2593	QPSK	10MHz	25	0
	22.18	40620	2593	QPSK	10MHz	25	12
	22.20	40620	2593	QPSK	10MHz	25	25
	22.16	40620	2593	QPSK	10MHz	50	0
	22.65	41080	2639	QPSK	10MHz	1	0
	22.63	41080	2639	QPSK	10MHz	1	24
	22.68	41080	2639	QPSK	10MHz	1	49
	21.30	41080	2639	QPSK	10MHz	25	0
	21.29	41080	2639	QPSK	10MHz	25	12
	21.31	41080	2639	QPSK	10MHz	25	25
	21.23	41080	2639	QPSK	10MHz	50	0
	23.15	41540	2685	QPSK	10MHz	1	0
	23.10	41540	2685	QPSK	10MHz	1	24
	23.17	41540	2685	QPSK	10MHz	1	49
	22.24	41540	2685	QPSK	10MHz	25	0
	22.21	41540	2685	QPSK	10MHz	25	12
22.21	41540	2685	QPSK	10MHz	25	25	
22.17	41540	2685	QPSK	10MHz	50	0	
22.54	39740	2505	16QAM	10MHz	1	0	
22.55	39740	2505	16QAM	10MHz	1	24	
22.58	39740	2505	16QAM	10MHz	1	49	
21.22	39740	2505	16QAM	10MHz	25	0	
21.23	39740	2505	16QAM	10MHz	25	12	
21.26	39740	2505	16QAM	10MHz	25	25	
21.18	39740	2505	16QAM	10MHz	50	0	
22.51	39700	2501	16QAM	10MHz	1	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	22.55	39700	2501	16QAM	10MHz	1	24
	22.59	39700	2501	16QAM	10MHz	1	49
	21.22	39700	2501	16QAM	10MHz	25	0
	21.23	39700	2501	16QAM	10MHz	25	12
	21.21	39700	2501	16QAM	10MHz	25	25
	21.20	39700	2501	16QAM	10MHz	50	0
	22.66	40160	2547	16QAM	10MHz	1	0
	22.64	40160	2547	16QAM	10MHz	1	24
	22.74	40160	2547	16QAM	10MHz	1	49
	21.31	40160	2547	16QAM	10MHz	25	0
	21.29	40160	2547	16QAM	10MHz	25	12
	21.35	40160	2547	16QAM	10MHz	25	25
	21.25	40160	2547	16QAM	10MHz	50	0
	22.65	40620	2593	16QAM	10MHz	1	0
	22.63	40620	2593	16QAM	10MHz	1	24
	22.68	40620	2593	16QAM	10MHz	1	49
	21.30	40620	2593	16QAM	10MHz	25	0
	21.29	40620	2593	16QAM	10MHz	25	12
	21.31	40620	2593	16QAM	10MHz	25	25
	21.23	40620	2593	16QAM	10MHz	50	0
	22.76	41080	2639	16QAM	10MHz	1	0
	22.78	41080	2639	16QAM	10MHz	1	24
	22.82	41080	2639	16QAM	10MHz	1	49
	21.45	41080	2639	16QAM	10MHz	25	0
	21.43	41080	2639	16QAM	10MHz	25	12
	21.43	41080	2639	16QAM	10MHz	25	25
	21.39	41080	2639	16QAM	10MHz	50	0
	22.67	41540	2685	16QAM	10MHz	1	0
	22.61	41540	2685	16QAM	10MHz	1	24
	22.68	41540	2685	16QAM	10MHz	1	49
21.37	41540	2685	16QAM	10MHz	25	0	
21.35	41540	2685	16QAM	10MHz	25	12	
21.35	41540	2685	16QAM	10MHz	25	25	
21.24	41540	2685	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	23.09	39765	2507.5	QPSK	15MHz	1	0
	23.05	39765	2507.5	QPSK	15MHz	1	37
	23.00	39765	2507.5	QPSK	15MHz	1	74
	22.09	39765	2507.5	QPSK	15MHz	36	0
	22.13	39765	2507.5	QPSK	15MHz	36	19
	22.09	39765	2507.5	QPSK	15MHz	36	39
	22.10	39765	2507.5	QPSK	15MHz	75	0
	22.98	39725	2503.5	QPSK	15MHz	1	0
	23.00	39725	2503.5	QPSK	15MHz	1	37
	23.02	39725	2503.5	QPSK	15MHz	1	74
	22.11	39725	2503.5	QPSK	15MHz	36	0
	22.10	39725	2503.5	QPSK	15MHz	36	19
	22.12	39725	2503.5	QPSK	15MHz	36	39
	22.08	39725	2503.5	QPSK	15MHz	75	0
	23.15	40173	2548.3	QPSK	15MHz	1	0
	23.13	40173	2548.3	QPSK	15MHz	1	37
	23.23	40173	2548.3	QPSK	15MHz	1	74
	22.15	40173	2548.3	QPSK	15MHz	36	0
	22.15	40173	2548.3	QPSK	15MHz	36	19
	22.22	40173	2548.3	QPSK	15MHz	36	39
	22.11	40173	2548.3	QPSK	15MHz	75	0
	23.17	40620	2593	QPSK	15MHz	1	0
	23.18	40620	2593	QPSK	15MHz	1	37
	23.20	40620	2593	QPSK	15MHz	1	74
	22.20	40620	2593	QPSK	15MHz	36	0
	22.22	40620	2593	QPSK	15MHz	36	19
	22.22	40620	2593	QPSK	15MHz	36	39
	22.23	40620	2593	QPSK	15MHz	75	0
	22.67	41068	2637.8	QPSK	15MHz	1	0
	22.67	41068	2637.8	QPSK	15MHz	1	37
	22.69	41068	2637.8	QPSK	15MHz	1	74
	21.24	41068	2637.8	QPSK	15MHz	36	0
	21.25	41068	2637.8	QPSK	15MHz	36	19
	21.26	41068	2637.8	QPSK	15MHz	36	39
	21.23	41068	2637.8	QPSK	15MHz	75	0
	23.18	41515	2682.5	QPSK	15MHz	1	0
	23.13	41515	2682.5	QPSK	15MHz	1	37
	23.11	41515	2682.5	QPSK	15MHz	1	74
	22.16	41515	2682.5	QPSK	15MHz	36	0
	22.16	41515	2682.5	QPSK	15MHz	36	19
22.14	41515	2682.5	QPSK	15MHz	36	39	
22.30	41515	2682.5	QPSK	15MHz	75	0	
22.57	39765	2507.5	16QAM	15MHz	1	0	
22.58	39765	2507.5	16QAM	15MHz	1	37	
22.51	39765	2507.5	16QAM	15MHz	1	74	
21.16	39765	2507.5	16QAM	15MHz	36	0	
21.19	39765	2507.5	16QAM	15MHz	36	19	
21.15	39765	2507.5	16QAM	15MHz	36	39	
21.17	39765	2507.5	16QAM	15MHz	75	0	
22.49	39725	2503.5	16QAM	15MHz	1	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	22.52	39725	2503.5	16QAM	15MHz	1	37
	22.54	39725	2503.5	16QAM	15MHz	1	74
	21.16	39725	2503.5	16QAM	15MHz	36	0
	21.13	39725	2503.5	16QAM	15MHz	36	19
	21.17	39725	2503.5	16QAM	15MHz	36	39
	21.14	39725	2503.5	16QAM	15MHz	75	0
	22.70	40173	2548.3	16QAM	15MHz	1	0
	22.69	40173	2548.3	16QAM	15MHz	1	37
	22.76	40173	2548.3	16QAM	15MHz	1	74
	21.28	40173	2548.3	16QAM	15MHz	36	0
	21.28	40173	2548.3	16QAM	15MHz	36	19
	21.34	40173	2548.3	16QAM	15MHz	36	39
	21.22	40173	2548.3	16QAM	15MHz	75	0
	22.67	40620	2593	16QAM	15MHz	1	0
	22.67	40620	2593	16QAM	15MHz	1	37
	22.69	40620	2593	16QAM	15MHz	1	74
	21.24	40620	2593	16QAM	15MHz	36	0
	21.25	40620	2593	16QAM	15MHz	36	19
	21.26	40620	2593	16QAM	15MHz	36	39
	21.23	40620	2593	16QAM	15MHz	75	0
	22.76	41068	2637.8	16QAM	15MHz	1	0
	22.79	41068	2637.8	16QAM	15MHz	1	37
	22.78	41068	2637.8	16QAM	15MHz	1	74
	21.34	41068	2637.8	16QAM	15MHz	36	0
	21.40	41068	2637.8	16QAM	15MHz	36	19
	21.39	41068	2637.8	16QAM	15MHz	36	39
	21.34	41068	2637.8	16QAM	15MHz	75	0
	22.63	41515	2682.5	16QAM	15MHz	1	0
	22.59	41515	2682.5	16QAM	15MHz	1	37
	22.60	41515	2682.5	16QAM	15MHz	1	74
	21.20	41515	2682.5	16QAM	15MHz	36	0
	21.22	41515	2682.5	16QAM	15MHz	36	19
	21.23	41515	2682.5	16QAM	15MHz	36	39
21.29	41515	2682.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	23.12	39790	2510	QPSK	20MHz	1	0
	23.01	39790	2510	QPSK	20MHz	1	49
	23.03	39790	2510	QPSK	20MHz	1	99
	22.13	39790	2510	QPSK	20MHz	50	0
	22.10	39790	2510	QPSK	20MHz	50	25
	22.07	39790	2510	QPSK	20MHz	50	50
	22.16	39790	2510	QPSK	20MHz	100	0
	23.07	39750	2506	QPSK	20MHz	1	0
	23.04	39750	2506	QPSK	20MHz	1	49
	23.03	39750	2506	QPSK	20MHz	1	99
	22.17	39750	2506	QPSK	20MHz	50	0
	22.13	39750	2506	QPSK	20MHz	50	25
	22.12	39750	2506	QPSK	20MHz	50	50
	22.21	39750	2506	QPSK	20MHz	100	0
	23.18	40185	2549.5	QPSK	20MHz	1	0
	23.18	40185	2549.5	QPSK	20MHz	1	49
	23.19	40185	2549.5	QPSK	20MHz	1	99
	22.20	40185	2549.5	QPSK	20MHz	50	0
	22.26	40185	2549.5	QPSK	20MHz	50	25
	22.28	40185	2549.5	QPSK	20MHz	50	50
	22.29	40185	2549.5	QPSK	20MHz	100	0
	23.13	40620	2593	QPSK	20MHz	1	0
	23.11	40620	2593	QPSK	20MHz	1	49
	23.18	40620	2593	QPSK	20MHz	1	99
	22.14	40620	2593	QPSK	20MHz	50	0
	22.15	40620	2593	QPSK	20MHz	50	25
	22.17	40620	2593	QPSK	20MHz	50	50
	22.18	40620	2593	QPSK	20MHz	100	0
	22.66	41055	2636.5	QPSK	20MHz	1	0
	22.65	41055	2636.5	QPSK	20MHz	1	49
	22.72	41055	2636.5	QPSK	20MHz	1	99
	21.23	41055	2636.5	QPSK	20MHz	50	0
	21.23	41055	2636.5	QPSK	20MHz	50	25
	21.26	41055	2636.5	QPSK	20MHz	50	50
	21.30	41055	2636.5	QPSK	20MHz	100	0
	23.16	41490	2680	QPSK	20MHz	1	0
	23.09	41490	2680	QPSK	20MHz	1	49
	23.12	41490	2680	QPSK	20MHz	1	99
	22.18	41490	2680	QPSK	20MHz	50	0
	22.16	41490	2680	QPSK	20MHz	50	25
	22.15	41490	2680	QPSK	20MHz	50	50
22.21	41490	2680	QPSK	20MHz	100	0	
22.61	39790	2510	16QAM	20MHz	1	0	
22.55	39790	2510	16QAM	20MHz	1	49	
22.58	39790	2510	16QAM	20MHz	1	99	
21.23	39790	2510	16QAM	20MHz	50	0	
21.18	39790	2510	16QAM	20MHz	50	25	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	21.15	39790	2510	16QAM	20MHz	50	50
	21.24	39790	2510	16QAM	20MHz	100	0
	22.56	39750	2506	16QAM	20MHz	1	0
	22.56	39750	2506	16QAM	20MHz	1	49
	22.55	39750	2506	16QAM	20MHz	1	99
	21.25	39750	2506	16QAM	20MHz	50	0
	21.20	39750	2506	16QAM	20MHz	50	25
	21.19	39750	2506	16QAM	20MHz	50	50
	21.29	39750	2506	16QAM	20MHz	100	0
	22.72	40185	2549.5	16QAM	20MHz	1	0
	22.72	40185	2549.5	16QAM	20MHz	1	49
	22.74	40185	2549.5	16QAM	20MHz	1	99
	21.29	40185	2549.5	16QAM	20MHz	50	0
	21.32	40185	2549.5	16QAM	20MHz	50	25
	21.34	40185	2549.5	16QAM	20MHz	50	50
	21.34	40185	2549.5	16QAM	20MHz	100	0
	22.66	40620	2593	16QAM	20MHz	1	0
	22.65	40620	2593	16QAM	20MHz	1	49
	22.72	40620	2593	16QAM	20MHz	1	99
	21.23	40620	2593	16QAM	20MHz	50	0
	21.23	40620	2593	16QAM	20MHz	50	25
	21.26	40620	2593	16QAM	20MHz	50	50
	21.30	40620	2593	16QAM	20MHz	100	0
	22.78	41055	2636.5	16QAM	20MHz	1	0
	22.77	41055	2636.5	16QAM	20MHz	1	49
	22.82	41055	2636.5	16QAM	20MHz	1	99
	21.36	41055	2636.5	16QAM	20MHz	50	0
	21.37	41055	2636.5	16QAM	20MHz	50	25
	21.38	41055	2636.5	16QAM	20MHz	50	50
	21.38	41055	2636.5	16QAM	20MHz	100	0
	22.70	41490	2680	16QAM	20MHz	1	0
	22.61	41490	2680	16QAM	20MHz	1	49
22.58	41490	2680	16QAM	20MHz	1	99	
21.22	41490	2680	16QAM	20MHz	50	0	
21.24	41490	2680	16QAM	20MHz	50	25	
21.24	41490	2680	16QAM	20MHz	50	50	
21.44	41490	2680	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.43	131979	1710.7	QPSK	1.4MHz	1	0
	23.30	131979	1710.7	QPSK	1.4MHz	1	2
	23.34	131979	1710.7	QPSK	1.4MHz	1	5
	23.22	131979	1710.7	QPSK	1.4MHz	3	0
	23.24	131979	1710.7	QPSK	1.4MHz	3	1
	23.23	131979	1710.7	QPSK	1.4MHz	3	3
	22.15	131979	1710.7	QPSK	1.4MHz	6	0
	23.33	132322	1745	QPSK	1.4MHz	1	0
	23.24	132322	1745	QPSK	1.4MHz	1	2
	23.26	132322	1745	QPSK	1.4MHz	1	5
	23.15	132322	1745	QPSK	1.4MHz	3	0
	23.18	132322	1745	QPSK	1.4MHz	3	1
	23.14	132322	1745	QPSK	1.4MHz	3	3
	22.13	132322	1745	QPSK	1.4MHz	6	0
	23.30	132665	1779.3	QPSK	1.4MHz	1	0
	23.28	132665	1779.3	QPSK	1.4MHz	1	2
	23.34	132665	1779.3	QPSK	1.4MHz	1	5
	23.13	132665	1779.3	QPSK	1.4MHz	3	0
	23.13	132665	1779.3	QPSK	1.4MHz	3	1
	23.18	132665	1779.3	QPSK	1.4MHz	3	3
	22.19	132665	1779.3	QPSK	1.4MHz	6	0
	22.77	131979	1710.7	16QAM	1.4MHz	1	0
	22.75	131979	1710.7	16QAM	1.4MHz	1	2
	22.62	131979	1710.7	16QAM	1.4MHz	1	5
	22.20	131979	1710.7	16QAM	1.4MHz	3	0
	22.24	131979	1710.7	16QAM	1.4MHz	3	1
	22.19	131979	1710.7	16QAM	1.4MHz	3	3
	21.19	131979	1710.7	16QAM	1.4MHz	6	0
	22.68	132322	1745	16QAM	1.4MHz	1	0
	22.51	132322	1745	16QAM	1.4MHz	1	2
	22.69	132322	1745	16QAM	1.4MHz	1	5
	22.20	132322	1745	16QAM	1.4MHz	3	0
	22.21	132322	1745	16QAM	1.4MHz	3	1
	22.16	132322	1745	16QAM	1.4MHz	3	3
	21.11	132322	1745	16QAM	1.4MHz	6	0
	22.61	132665	1779.3	16QAM	1.4MHz	1	0
	22.55	132665	1779.3	16QAM	1.4MHz	1	2
	22.65	132665	1779.3	16QAM	1.4MHz	1	5
	22.22	132665	1779.3	16QAM	1.4MHz	3	0
	22.21	132665	1779.3	16QAM	1.4MHz	3	1
22.21	132665	1779.3	16QAM	1.4MHz	3	3	
21.19	132665	1779.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.35	131987	1711.5	QPSK	3MHz	1	0
	23.44	131987	1711.5	QPSK	3MHz	1	7
	23.42	131987	1711.5	QPSK	3MHz	1	14
	22.19	131987	1711.5	QPSK	3MHz	8	0
	22.19	131987	1711.5	QPSK	3MHz	8	3
	22.30	131987	1711.5	QPSK	3MHz	8	7
	22.25	131987	1711.5	QPSK	3MHz	15	0
	23.26	132322	1745	QPSK	3MHz	1	0
	23.29	132322	1745	QPSK	3MHz	1	7
	23.23	132322	1745	QPSK	3MHz	1	14
	22.14	132322	1745	QPSK	3MHz	8	0
	22.12	132322	1745	QPSK	3MHz	8	3
	22.16	132322	1745	QPSK	3MHz	8	7
	22.20	132322	1745	QPSK	3MHz	15	0
	23.12	132657	1778.5	QPSK	3MHz	1	0
	23.26	132657	1778.5	QPSK	3MHz	1	7
	23.23	132657	1778.5	QPSK	3MHz	1	14
	22.03	132657	1778.5	QPSK	3MHz	8	0
	22.11	132657	1778.5	QPSK	3MHz	8	3
	22.17	132657	1778.5	QPSK	3MHz	8	7
	22.14	132657	1778.5	QPSK	3MHz	15	0
	22.68	131987	1711.5	16QAM	3MHz	1	0
	22.74	131987	1711.5	16QAM	3MHz	1	7
	22.68	131987	1711.5	16QAM	3MHz	1	14
	21.16	131987	1711.5	16QAM	3MHz	8	0
	21.15	131987	1711.5	16QAM	3MHz	8	3
	21.23	131987	1711.5	16QAM	3MHz	8	7
	21.14	131987	1711.5	16QAM	3MHz	15	0
	22.52	132322	1745	16QAM	3MHz	1	0
	22.50	132322	1745	16QAM	3MHz	1	7
	22.48	132322	1745	16QAM	3MHz	1	14
	21.07	132322	1745	16QAM	3MHz	8	0
	21.04	132322	1745	16QAM	3MHz	8	3
	21.07	132322	1745	16QAM	3MHz	8	7
	21.08	132322	1745	16QAM	3MHz	15	0
	22.40	132657	1778.5	16QAM	3MHz	1	0
	22.56	132657	1778.5	16QAM	3MHz	1	7
	22.61	132657	1778.5	16QAM	3MHz	1	14
	21.06	132657	1778.5	16QAM	3MHz	8	0
	21.02	132657	1778.5	16QAM	3MHz	8	3
21.06	132657	1778.5	16QAM	3MHz	8	7	
21.05	132657	1778.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.38	131997	1712.5	QPSK	5MHz	1	0
	23.38	131997	1712.5	QPSK	5MHz	1	12
	23.50	131997	1712.5	QPSK	5MHz	1	24
	22.13	131997	1712.5	QPSK	5MHz	12	0
	22.21	131997	1712.5	QPSK	5MHz	12	6
	22.24	131997	1712.5	QPSK	5MHz	12	13
	22.39	131997	1712.5	QPSK	5MHz	25	0
	23.30	132322	1745	QPSK	5MHz	1	0
	23.29	132322	1745	QPSK	5MHz	1	12
	23.29	132322	1745	QPSK	5MHz	1	24
	22.12	132322	1745	QPSK	5MHz	12	0
	22.12	132322	1745	QPSK	5MHz	12	6
	22.11	132322	1745	QPSK	5MHz	12	13
	22.23	132322	1745	QPSK	5MHz	25	0
	23.08	132647	1777.5	QPSK	5MHz	1	0
	23.14	132647	1777.5	QPSK	5MHz	1	12
	23.32	132647	1777.5	QPSK	5MHz	1	24
	21.94	132647	1777.5	QPSK	5MHz	12	0
	21.98	132647	1777.5	QPSK	5MHz	12	6
	22.11	132647	1777.5	QPSK	5MHz	12	13
	22.12	132647	1777.5	QPSK	5MHz	25	0
	22.56	131997	1712.5	16QAM	5MHz	1	0
	22.59	131997	1712.5	16QAM	5MHz	1	12
	22.70	131997	1712.5	16QAM	5MHz	1	24
	21.03	131997	1712.5	16QAM	5MHz	12	0
	21.12	131997	1712.5	16QAM	5MHz	12	6
	21.15	131997	1712.5	16QAM	5MHz	12	13
	21.23	131997	1712.5	16QAM	5MHz	25	0
	22.62	132322	1745	16QAM	5MHz	1	0
	22.60	132322	1745	16QAM	5MHz	1	12
	22.68	132322	1745	16QAM	5MHz	1	24
	21.07	132322	1745	16QAM	5MHz	12	0
	21.05	132322	1745	16QAM	5MHz	12	6
	21.09	132322	1745	16QAM	5MHz	12	13
	21.17	132322	1745	16QAM	5MHz	25	0
	22.37	132647	1777.5	16QAM	5MHz	1	0
	22.42	132647	1777.5	16QAM	5MHz	1	12
	22.63	132647	1777.5	16QAM	5MHz	1	24
	21.08	132647	1777.5	16QAM	5MHz	12	0
	21.11	132647	1777.5	16QAM	5MHz	12	6
21.06	132647	1777.5	16QAM	5MHz	12	11	
21.03	132647	1777.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.37	132022	1715	QPSK	10MHz	1	0
	23.49	132022	1715	QPSK	10MHz	1	24
	23.65	132022	1715	QPSK	10MHz	1	49
	22.40	132022	1715	QPSK	10MHz	25	0
	22.44	132022	1715	QPSK	10MHz	25	12
	22.53	132022	1715	QPSK	10MHz	25	25
	22.52	132022	1715	QPSK	10MHz	50	0
	23.33	132322	1745	QPSK	10MHz	1	0
	23.34	132322	1745	QPSK	10MHz	1	24
	23.51	132322	1745	QPSK	10MHz	1	49
	22.28	132322	1745	QPSK	10MHz	25	0
	22.28	132322	1745	QPSK	10MHz	25	12
	22.33	132322	1745	QPSK	10MHz	25	25
	22.36	132322	1745	QPSK	10MHz	50	0
	23.11	132622	1775	QPSK	10MHz	1	0
	23.17	132622	1775	QPSK	10MHz	1	24
	23.35	132622	1775	QPSK	10MHz	1	49
	22.05	132622	1775	QPSK	10MHz	25	0
	22.12	132622	1775	QPSK	10MHz	25	12
	22.28	132622	1775	QPSK	10MHz	25	25
	22.30	132622	1775	QPSK	10MHz	50	0
	22.64	132022	1715	16QAM	10MHz	1	0
	22.76	132022	1715	16QAM	10MHz	1	24
	22.95	132022	1715	16QAM	10MHz	1	49
	21.32	132022	1715	16QAM	10MHz	25	0
	21.37	132022	1715	16QAM	10MHz	25	12
	21.45	132022	1715	16QAM	10MHz	25	25
	21.49	132022	1715	16QAM	10MHz	50	0
	22.67	132322	1745	16QAM	10MHz	1	0
	22.59	132322	1745	16QAM	10MHz	1	24
	22.86	132322	1745	16QAM	10MHz	1	49
	21.18	132322	1745	16QAM	10MHz	25	0
	21.18	132322	1745	16QAM	10MHz	25	12
	21.23	132322	1745	16QAM	10MHz	25	25
	21.31	132322	1745	16QAM	10MHz	50	0
	22.41	132622	1775	16QAM	10MHz	1	0
	22.42	132622	1775	16QAM	10MHz	1	24
	22.62	132622	1775	16QAM	10MHz	1	49
	21.06	132622	1775	16QAM	10MHz	25	0
	21.05	132622	1775	16QAM	10MHz	25	12
21.21	132622	1775	16QAM	10MHz	25	25	
21.21	132622	1775	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.34	132047	1717.5	QPSK	15MHz	1	0
	23.56	132047	1717.5	QPSK	15MHz	1	37
	23.45	132047	1717.5	QPSK	15MHz	1	74
	22.50	132047	1717.5	QPSK	15MHz	36	0
	22.62	132047	1717.5	QPSK	15MHz	36	19
	22.63	132047	1717.5	QPSK	15MHz	36	39
	22.66	132047	1717.5	QPSK	15MHz	75	0
	23.36	132322	1745	QPSK	15MHz	1	0
	23.32	132322	1745	QPSK	15MHz	1	37
	23.49	132322	1745	QPSK	15MHz	1	74
	22.30	132322	1745	QPSK	15MHz	36	0
	22.36	132322	1745	QPSK	15MHz	36	19
	22.48	132322	1745	QPSK	15MHz	36	39
	22.46	132322	1745	QPSK	15MHz	75	0
	23.32	132597	1772.5	QPSK	15MHz	1	0
	23.10	132597	1772.5	QPSK	15MHz	1	37
	23.26	132597	1772.5	QPSK	15MHz	1	74
	22.17	132597	1772.5	QPSK	15MHz	36	0
	22.10	132597	1772.5	QPSK	15MHz	36	19
	22.17	132597	1772.5	QPSK	15MHz	36	39
	22.28	132597	1772.5	QPSK	15MHz	75	0
	22.64	132047	1717.5	16QAM	15MHz	1	0
	22.84	132047	1717.5	16QAM	15MHz	1	37
	22.79	132047	1717.5	16QAM	15MHz	1	74
	21.42	132047	1717.5	16QAM	15MHz	36	0
	21.52	132047	1717.5	16QAM	15MHz	36	19
	21.52	132047	1717.5	16QAM	15MHz	36	39
	21.66	132047	1717.5	16QAM	15MHz	75	0
	22.68	132322	1745	16QAM	15MHz	1	0
	22.62	132322	1745	16QAM	15MHz	1	37
	22.86	132322	1745	16QAM	15MHz	1	74
	21.20	132322	1745	16QAM	15MHz	36	0
	21.25	132322	1745	16QAM	15MHz	36	19
	21.38	132322	1745	16QAM	15MHz	36	39
	21.38	132322	1745	16QAM	15MHz	75	0
	22.67	132597	1772.5	16QAM	15MHz	1	0
	22.39	132597	1772.5	16QAM	15MHz	1	37
	22.61	132597	1772.5	16QAM	15MHz	1	74
	21.01	132597	1772.5	16QAM	15MHz	36	0
	21.08	132597	1772.5	16QAM	15MHz	36	19
21.10	132597	1772.5	16QAM	15MHz	36	39	
21.23	132597	1772.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	23.44	132072	1720	QPSK	20MHz	1	0
	23.68	132072	1720	QPSK	20MHz	1	49
	23.48	132072	1720	QPSK	20MHz	1	99
	22.63	132072	1720	QPSK	20MHz	50	0
	22.61	132072	1720	QPSK	20MHz	50	25
	22.53	132072	1720	QPSK	20MHz	50	50
	22.78	132072	1720	QPSK	20MHz	100	0
	23.51	132322	1745	QPSK	20MHz	1	0
	23.34	132322	1745	QPSK	20MHz	1	49
	23.64	132322	1745	QPSK	20MHz	1	99
	22.40	132322	1745	QPSK	20MHz	50	0
	22.37	132322	1745	QPSK	20MHz	50	25
	22.56	132322	1745	QPSK	20MHz	50	50
	22.61	132322	1745	QPSK	20MHz	100	0
	23.47	132572	1770	QPSK	20MHz	1	0
	23.19	132572	1770	QPSK	20MHz	1	49
	23.35	132572	1770	QPSK	20MHz	1	99
	22.37	132572	1770	QPSK	20MHz	50	0
	22.26	132572	1770	QPSK	20MHz	50	25
	22.21	132572	1770	QPSK	20MHz	50	50
	22.45	132572	1770	QPSK	20MHz	100	0
	22.70	132072	1720	16QAM	20MHz	1	0
	22.92	132072	1720	16QAM	20MHz	1	49
	22.79	132072	1720	16QAM	20MHz	1	99
	21.53	132072	1720	16QAM	20MHz	50	0
	21.53	132072	1720	16QAM	20MHz	50	25
	21.45	132072	1720	16QAM	20MHz	50	50
	21.71	132072	1720	16QAM	20MHz	100	0
	22.83	132322	1745	16QAM	20MHz	1	0
	22.64	132322	1745	16QAM	20MHz	1	49
	22.99	132322	1745	16QAM	20MHz	1	99
	21.25	132322	1745	16QAM	20MHz	50	0
	21.26	132322	1745	16QAM	20MHz	50	25
	21.46	132322	1745	16QAM	20MHz	50	50
21.56	132322	1745	16QAM	20MHz	100	0	
22.76	132572	1770	16QAM	20MHz	1	0	
22.46	132572	1770	16QAM	20MHz	1	49	
22.62	132572	1770	16QAM	20MHz	1	99	
21.24	132572	1770	16QAM	20MHz	50	0	
21.09	132572	1770	16QAM	20MHz	50	25	
21.13	132572	1770	16QAM	20MHz	50	50	
21.42	132572	1770	16QAM	20MHz	100	0	



7.8 Power Reduction

Band	Modulation	Date Rate or Sub-test	CH	Frequency	Avg Conducted power (dBm)	Tune up (dBm)	
WCDMA II	RMC12.2K	---	Lowest	9262	1852.4	16.80	18.00
			Middle	9400	1880.0	17.02	18.00
			Highest	9538	1907.6	16.86	18.00
HSDPA II	QPSK	1	Lowest	9262	1852.4	16.69	18.00
			Middle	9400	1880.0	16.87	18.00
			Highest	9538	1907.6	16.73	18.00
		2	Lowest	9262	1852.4	16.62	18.00
			Middle	9400	1880.0	16.92	18.00
			Highest	9538	1907.6	16.76	18.00
		3	Lowest	9262	1852.4	16.18	17.50
			Middle	9400	1880.0	16.38	17.50
			Highest	9538	1907.6	16.18	17.50
		4	Lowest	9262	1852.4	16.11	17.50
			Middle	9400	1880.0	16.33	17.50
			Highest	9538	1907.6	16.24	17.50
HSUPA II	QPSK	1	Lowest	9262	1852.4	16.70	18.00
			Middle	9400	1880.0	16.86	18.00
			Highest	9538	1907.6	16.76	18.00
		2	Lowest	9262	1852.4	14.67	16.00
			Middle	9400	1880.0	14.86	16.00
			Highest	9538	1907.6	14.68	16.00
		3	Lowest	9262	1852.4	15.64	17.00
			Middle	9400	1880.0	15.88	17.00
			Highest	9538	1907.6	15.70	17.00
		4	Lowest	9262	1852.4	14.64	16.00
			Middle	9400	1880.0	14.89	16.00
			Highest	9538	1907.6	14.73	16.00
		5	Lowest	9262	1852.4	16.63	18.00
			Middle	9400	1880.0	16.84	18.00
			Highest	9538	1907.6	16.72	18.00



Band	Modulation	Date Rate or Sub-test	CH		Frequency (MHz)	Avg Conducted power (dBm)	Tune up (dBm)
WCDMA IV	RMC12.2K	---	Lowest	1312	1712.4	19.63	21.00
			Middle	1413	1732.6	19.88	21.00
			Highest	1513	1752.6	19.81	21.00
HSDPA IV	QPSK	1	Lowest	1312	1712.4	19.46	21.00
			Middle	1413	1732.6	19.70	21.00
			Highest	1513	1752.6	19.63	21.00
		2	Lowest	1312	1712.4	19.48	21.00
			Middle	1413	1732.6	19.78	21.00
			Highest	1513	1752.6	19.61	21.00
		3	Lowest	1312	1712.4	19.00	20.50
			Middle	1413	1732.6	19.24	20.50
			Highest	1513	1752.6	19.14	20.50
		4	Lowest	1312	1712.4	19.03	20.50
			Middle	1413	1732.6	19.23	20.50
			Highest	1513	1752.6	19.16	20.50
HSUPA IV	QPSK	1	Lowest	1312	1712.4	19.44	21.00
			Middle	1413	1732.6	19.76	21.00
			Highest	1513	1752.6	19.66	21.00
		2	Lowest	1312	1712.4	17.49	19.00
			Middle	1413	1732.6	17.69	19.00
			Highest	1513	1752.6	17.63	19.00
		3	Lowest	1312	1712.4	18.46	20.00
			Middle	1413	1732.6	18.75	20.00
			Highest	1513	1752.6	18.65	20.00
		4	Lowest	1312	1712.4	17.50	19.00
			Middle	1413	1732.6	17.75	19.00
			Highest	1513	1752.6	17.68	19.00
		5	Lowest	1312	1712.4	19.46	21.00
			Middle	1413	1732.6	19.74	21.00
			Highest	1513	1752.6	19.71	21.00



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.36	18607	1850.7	QPSK	1.4MHz	1	0
	17.31	18607	1850.7	QPSK	1.4MHz	1	2
	17.28	18607	1850.7	QPSK	1.4MHz	1	5
	17.31	18607	1850.7	QPSK	1.4MHz	3	0
	17.29	18607	1850.7	QPSK	1.4MHz	3	1
	17.38	18607	1850.7	QPSK	1.4MHz	3	3
	16.37	18607	1850.7	QPSK	1.4MHz	6	0
	17.53	18900	1880	QPSK	1.4MHz	1	0
	17.56	18900	1880	QPSK	1.4MHz	1	2
	17.51	18900	1880	QPSK	1.4MHz	1	5
	17.60	18900	1880	QPSK	1.4MHz	3	0
	17.55	18900	1880	QPSK	1.4MHz	3	1
	17.46	18900	1880	QPSK	1.4MHz	3	3
	16.44	18900	1880	QPSK	1.4MHz	6	0
	17.42	19193	1909.3	QPSK	1.4MHz	1	0
	17.38	19193	1909.3	QPSK	1.4MHz	1	2
	17.30	19193	1909.3	QPSK	1.4MHz	1	5
	17.35	19193	1909.3	QPSK	1.4MHz	3	0
	17.27	19193	1909.3	QPSK	1.4MHz	3	1
	17.30	19193	1909.3	QPSK	1.4MHz	3	3
	16.31	19193	1909.3	QPSK	1.4MHz	6	0
	16.85	18607	1850.7	16QAM	1.4MHz	1	0
	16.59	18607	1850.7	16QAM	1.4MHz	1	2
	16.38	18607	1850.7	16QAM	1.4MHz	1	5
	16.59	18607	1850.7	16QAM	1.4MHz	3	0
	16.53	18607	1850.7	16QAM	1.4MHz	3	1
	16.22	18607	1850.7	16QAM	1.4MHz	3	3
	15.44	18607	1850.7	16QAM	1.4MHz	6	0
	15.95	18900	1880	16QAM	1.4MHz	1	0
	16.53	18900	1880	16QAM	1.4MHz	1	2
	16.53	18900	1880	16QAM	1.4MHz	1	5
	16.41	18900	1880	16QAM	1.4MHz	3	0
	16.60	18900	1880	16QAM	1.4MHz	3	1
	16.42	18900	1880	16QAM	1.4MHz	3	3
15.61	18900	1880	16QAM	1.4MHz	6	0	
16.90	19193	1909.3	16QAM	1.4MHz	1	0	
16.43	19193	1909.3	16QAM	1.4MHz	1	2	
16.63	19193	1909.3	16QAM	1.4MHz	1	5	
16.56	19193	1909.3	16QAM	1.4MHz	3	0	
16.54	19193	1909.3	16QAM	1.4MHz	3	1	
16.42	19193	1909.3	16QAM	1.4MHz	3	3	
15.27	19193	1909.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.22	18615	1851.5	QPSK	3MHz	1	0
	17.19	18615	1851.5	QPSK	3MHz	1	7
	17.16	18615	1851.5	QPSK	3MHz	1	14
	16.23	18615	1851.5	QPSK	3MHz	8	0
	16.25	18615	1851.5	QPSK	3MHz	8	3
	16.24	18615	1851.5	QPSK	3MHz	8	7
	16.25	18615	1851.5	QPSK	3MHz	15	0
	17.48	18900	1880	QPSK	3MHz	1	0
	17.43	18900	1880	QPSK	3MHz	1	7
	17.40	18900	1880	QPSK	3MHz	1	14
	16.49	18900	1880	QPSK	3MHz	8	0
	16.51	18900	1880	QPSK	3MHz	8	3
	16.47	18900	1880	QPSK	3MHz	8	7
	16.47	18900	1880	QPSK	3MHz	15	0
	17.19	19185	1908.5	QPSK	3MHz	1	0
	17.26	19185	1908.5	QPSK	3MHz	1	7
	17.21	19185	1908.5	QPSK	3MHz	1	14
	16.31	19185	1908.5	QPSK	3MHz	8	0
	16.30	19185	1908.5	QPSK	3MHz	8	3
	16.32	19185	1908.5	QPSK	3MHz	8	7
	16.34	19185	1908.5	QPSK	3MHz	15	0
	16.58	18615	1851.5	16QAM	3MHz	1	0
	16.49	18615	1851.5	16QAM	3MHz	1	7
	16.62	18615	1851.5	16QAM	3MHz	1	14
	15.20	18615	1851.5	16QAM	3MHz	8	0
	15.32	18615	1851.5	16QAM	3MHz	8	3
	15.29	18615	1851.5	16QAM	3MHz	8	7
	15.27	18615	1851.5	16QAM	3MHz	15	0
	16.44	18900	1880	16QAM	3MHz	1	0
	16.26	18900	1880	16QAM	3MHz	1	7
	16.89	18900	1880	16QAM	3MHz	1	14
	15.70	18900	1880	16QAM	3MHz	8	0
	15.45	18900	1880	16QAM	3MHz	8	3
	15.66	18900	1880	16QAM	3MHz	8	7
	15.54	18900	1880	16QAM	3MHz	15	0
	16.49	19185	1908.5	16QAM	3MHz	1	0
	16.74	19185	1908.5	16QAM	3MHz	1	7
	16.70	19185	1908.5	16QAM	3MHz	1	14
	15.28	19185	1908.5	16QAM	3MHz	8	0
	15.40	19185	1908.5	16QAM	3MHz	8	3
15.31	19185	1908.5	16QAM	3MHz	8	7	
15.25	19185	1908.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.15	18625	1852.5	QPSK	5MHz	1	0
	17.14	18625	1852.5	QPSK	5MHz	1	12
	17.07	18625	1852.5	QPSK	5MHz	1	24
	16.16	18625	1852.5	QPSK	5MHz	12	0
	16.18	18625	1852.5	QPSK	5MHz	12	6
	16.04	18625	1852.5	QPSK	5MHz	12	13
	16.20	18625	1852.5	QPSK	5MHz	25	0
	17.45	18900	1880	QPSK	5MHz	1	0
	17.39	18900	1880	QPSK	5MHz	1	12
	17.37	18900	1880	QPSK	5MHz	1	24
	16.46	18900	1880	QPSK	5MHz	12	0
	16.45	18900	1880	QPSK	5MHz	12	6
	16.38	18900	1880	QPSK	5MHz	12	13
	16.43	18900	1880	QPSK	5MHz	25	0
	17.24	19175	1907.5	QPSK	5MHz	1	0
	17.14	19175	1907.5	QPSK	5MHz	1	12
	17.23	19175	1907.5	QPSK	5MHz	1	24
	16.22	19175	1907.5	QPSK	5MHz	12	0
	16.23	19175	1907.5	QPSK	5MHz	12	6
	16.27	19175	1907.5	QPSK	5MHz	12	13
	16.27	19175	1907.5	QPSK	5MHz	25	0
	16.22	18625	1852.5	16QAM	5MHz	1	0
	16.82	18625	1852.5	16QAM	5MHz	1	12
	16.37	18625	1852.5	16QAM	5MHz	1	24
	15.14	18625	1852.5	16QAM	5MHz	12	0
	15.22	18625	1852.5	16QAM	5MHz	12	6
	15.05	18625	1852.5	16QAM	5MHz	12	13
	15.27	18625	1852.5	16QAM	5MHz	25	0
	16.80	18900	1880	16QAM	5MHz	1	0
	16.40	18900	1880	16QAM	5MHz	1	12
	16.66	18900	1880	16QAM	5MHz	1	24
	15.47	18900	1880	16QAM	5MHz	12	0
	15.53	18900	1880	16QAM	5MHz	12	6
	15.56	18900	1880	16QAM	5MHz	12	13
	15.42	18900	1880	16QAM	5MHz	25	0
	16.48	19175	1907.5	16QAM	5MHz	1	0
	16.30	19175	1907.5	16QAM	5MHz	1	12
	16.18	19175	1907.5	16QAM	5MHz	1	24
	15.33	19175	1907.5	16QAM	5MHz	12	0
	15.22	19175	1907.5	16QAM	5MHz	12	6
15.29	19175	1907.5	16QAM	5MHz	12	11	
15.24	19175	1907.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.08	18650	1855	QPSK	10MHz	1	0
	17.04	18650	1855	QPSK	10MHz	1	24
	17.04	18650	1855	QPSK	10MHz	1	49
	16.20	18650	1855	QPSK	10MHz	25	0
	16.10	18650	1855	QPSK	10MHz	25	12
	16.08	18650	1855	QPSK	10MHz	25	25
	16.06	18650	1855	QPSK	10MHz	50	0
	17.46	18900	1880	QPSK	10MHz	1	0
	17.39	18900	1880	QPSK	10MHz	1	24
	17.44	18900	1880	QPSK	10MHz	1	49
	16.55	18900	1880	QPSK	10MHz	25	0
	16.59	18900	1880	QPSK	10MHz	25	12
	16.48	18900	1880	QPSK	10MHz	25	25
	16.48	18900	1880	QPSK	10MHz	50	0
	17.21	19150	1905	QPSK	10MHz	1	0
	17.38	19150	1905	QPSK	10MHz	1	24
	17.30	19150	1905	QPSK	10MHz	1	49
	16.34	19150	1905	QPSK	10MHz	25	0
	16.38	19150	1905	QPSK	10MHz	25	12
	16.32	19150	1905	QPSK	10MHz	25	25
	16.49	19150	1905	QPSK	10MHz	50	0
	16.42	18650	1855	16QAM	10MHz	1	0
	16.15	18650	1855	16QAM	10MHz	1	24
	16.23	18650	1855	16QAM	10MHz	1	49
	15.29	18650	1855	16QAM	10MHz	25	0
	15.19	18650	1855	16QAM	10MHz	25	12
	15.20	18650	1855	16QAM	10MHz	25	25
	15.18	18650	1855	16QAM	10MHz	50	0
	16.82	18900	1880	16QAM	10MHz	1	0
	16.70	18900	1880	16QAM	10MHz	1	24
	16.63	18900	1880	16QAM	10MHz	1	49
	15.62	18900	1880	16QAM	10MHz	25	0
	15.67	18900	1880	16QAM	10MHz	25	12
	15.55	18900	1880	16QAM	10MHz	25	25
	15.57	18900	1880	16QAM	10MHz	50	0
	16.70	19150	1905	16QAM	10MHz	1	0
	16.75	19150	1905	16QAM	10MHz	1	24
	16.42	19150	1905	16QAM	10MHz	1	49
	15.38	19150	1905	16QAM	10MHz	25	0
	15.53	19150	1905	16QAM	10MHz	25	12
15.50	19150	1905	16QAM	10MHz	25	25	
15.43	19150	1905	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.17	18675	1857.5	QPSK	15MHz	1	0
	16.95	18675	1857.5	QPSK	15MHz	1	37
	17.16	18675	1857.5	QPSK	15MHz	1	74
	16.13	18675	1857.5	QPSK	15MHz	36	0
	16.10	18675	1857.5	QPSK	15MHz	36	19
	16.17	18675	1857.5	QPSK	15MHz	36	39
	16.12	18675	1857.5	QPSK	15MHz	75	0
	17.29	18900	1880	QPSK	15MHz	1	0
	17.32	18900	1880	QPSK	15MHz	1	37
	17.35	18900	1880	QPSK	15MHz	1	74
	16.47	18900	1880	QPSK	15MHz	36	0
	16.55	18900	1880	QPSK	15MHz	36	19
	16.45	18900	1880	QPSK	15MHz	36	39
	16.47	18900	1880	QPSK	15MHz	75	0
	17.07	19125	1902.5	QPSK	15MHz	1	0
	17.18	19125	1902.5	QPSK	15MHz	1	37
	17.24	19125	1902.5	QPSK	15MHz	1	74
	16.18	19125	1902.5	QPSK	15MHz	36	0
	16.39	19125	1902.5	QPSK	15MHz	36	19
	16.39	19125	1902.5	QPSK	15MHz	36	39
	16.48	19125	1902.5	QPSK	15MHz	75	0
	16.56	18675	1857.5	16QAM	15MHz	1	0
	16.11	18675	1857.5	16QAM	15MHz	1	37
	16.03	18675	1857.5	16QAM	15MHz	1	74
	15.25	18675	1857.5	16QAM	15MHz	36	0
	15.17	18675	1857.5	16QAM	15MHz	36	19
	15.13	18675	1857.5	16QAM	15MHz	36	39
	15.22	18675	1857.5	16QAM	15MHz	75	0
	16.38	18900	1880	16QAM	15MHz	1	0
	16.57	18900	1880	16QAM	15MHz	1	37
	16.44	18900	1880	16QAM	15MHz	1	74
	15.56	18900	1880	16QAM	15MHz	36	0
	15.54	18900	1880	16QAM	15MHz	36	19
	15.48	18900	1880	16QAM	15MHz	36	39
	15.51	18900	1880	16QAM	15MHz	75	0
	16.36	19125	1902.5	16QAM	15MHz	1	0
16.57	19125	1902.5	16QAM	15MHz	1	37	
16.42	19125	1902.5	16QAM	15MHz	1	74	
15.21	19125	1902.5	16QAM	15MHz	36	0	
15.55	19125	1902.5	16QAM	15MHz	36	19	
15.49	19125	1902.5	16QAM	15MHz	36	39	
15.52	19125	1902.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 2	17.40	18700	1860	QPSK	20MHz	1	0
	16.96	18700	1860	QPSK	20MHz	1	49
	17.13	18700	1860	QPSK	20MHz	1	99
	16.10	18700	1860	QPSK	20MHz	50	0
	16.02	18700	1860	QPSK	20MHz	50	25
	16.07	18700	1860	QPSK	20MHz	50	50
	16.28	18700	1860	QPSK	20MHz	100	0
	17.28	18900	1880	QPSK	20MHz	1	0
	17.38	18900	1880	QPSK	20MHz	1	49
	17.26	18900	1880	QPSK	20MHz	1	99
	16.40	18900	1880	QPSK	20MHz	50	0
	16.40	18900	1880	QPSK	20MHz	50	25
	16.42	18900	1880	QPSK	20MHz	50	50
	16.52	18900	1880	QPSK	20MHz	100	0
	17.31	19100	1900	QPSK	20MHz	1	0
	17.07	19100	1900	QPSK	20MHz	1	49
	17.22	19100	1900	QPSK	20MHz	1	99
	16.17	19100	1900	QPSK	20MHz	50	0
	16.18	19100	1900	QPSK	20MHz	50	25
	16.40	19100	1900	QPSK	20MHz	50	50
	16.47	19100	1900	QPSK	20MHz	100	0
	16.55	18700	1860	16QAM	20MHz	1	0
	15.89	18700	1860	16QAM	20MHz	1	49
	16.49	18700	1860	16QAM	20MHz	1	99
	15.23	18700	1860	16QAM	20MHz	50	0
	15.12	18700	1860	16QAM	20MHz	50	25
	15.16	18700	1860	16QAM	20MHz	50	50
	15.28	18700	1860	16QAM	20MHz	100	0
	16.17	18900	1880	16QAM	20MHz	1	0
	16.43	18900	1880	16QAM	20MHz	1	49
	16.38	18900	1880	16QAM	20MHz	1	99
	15.46	18900	1880	16QAM	20MHz	50	0
	15.47	18900	1880	16QAM	20MHz	50	25
	15.47	18900	1880	16QAM	20MHz	50	50
15.55	18900	1880	16QAM	20MHz	100	0	
16.24	19100	1900	16QAM	20MHz	1	0	
15.93	19100	1900	16QAM	20MHz	1	49	
16.44	19100	1900	16QAM	20MHz	1	99	
15.17	19100	1900	16QAM	20MHz	50	0	
15.25	19100	1900	16QAM	20MHz	50	25	
15.35	19100	1900	16QAM	20MHz	50	50	
15.58	19100	1900	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.52	19957	1710.7	QPSK	1.4MHz	1	0
	20.45	19957	1710.7	QPSK	1.4MHz	1	2
	20.60	19957	1710.7	QPSK	1.4MHz	1	5
	20.58	19957	1710.7	QPSK	1.4MHz	3	0
	20.59	19957	1710.7	QPSK	1.4MHz	3	1
	20.56	19957	1710.7	QPSK	1.4MHz	3	3
	19.61	19957	1710.7	QPSK	1.4MHz	6	0
	20.54	20175	1732.5	QPSK	1.4MHz	1	0
	20.63	20175	1732.5	QPSK	1.4MHz	1	2
	20.60	20175	1732.5	QPSK	1.4MHz	1	5
	20.62	20175	1732.5	QPSK	1.4MHz	3	0
	20.56	20175	1732.5	QPSK	1.4MHz	3	1
	20.53	20175	1732.5	QPSK	1.4MHz	3	3
	19.57	20175	1732.5	QPSK	1.4MHz	6	0
	20.74	20393	1754.3	QPSK	1.4MHz	1	0
	20.72	20393	1754.3	QPSK	1.4MHz	1	2
	20.87	20393	1754.3	QPSK	1.4MHz	1	5
	20.71	20393	1754.3	QPSK	1.4MHz	3	0
	20.73	20393	1754.3	QPSK	1.4MHz	3	1
	20.77	20393	1754.3	QPSK	1.4MHz	3	3
	19.77	20393	1754.3	QPSK	1.4MHz	6	0
	19.96	19957	1710.7	16QAM	1.4MHz	1	0
	19.72	19957	1710.7	16QAM	1.4MHz	1	2
	19.89	19957	1710.7	16QAM	1.4MHz	1	5
	19.52	19957	1710.7	16QAM	1.4MHz	3	0
	19.31	19957	1710.7	16QAM	1.4MHz	3	1
	19.68	19957	1710.7	16QAM	1.4MHz	3	3
	18.54	19957	1710.7	16QAM	1.4MHz	6	0
	18.94	20175	1732.5	16QAM	1.4MHz	1	0
	19.73	20175	1732.5	16QAM	1.4MHz	1	2
	19.93	20175	1732.5	16QAM	1.4MHz	1	5
	19.69	20175	1732.5	16QAM	1.4MHz	3	0
	19.53	20175	1732.5	16QAM	1.4MHz	3	1
	19.91	20175	1732.5	16QAM	1.4MHz	3	3
	18.51	20175	1732.5	16QAM	1.4MHz	6	0
	19.74	20393	1754.3	16QAM	1.4MHz	1	0
	19.58	20393	1754.3	16QAM	1.4MHz	1	2
	19.97	20393	1754.3	16QAM	1.4MHz	1	5
	19.86	20393	1754.3	16QAM	1.4MHz	3	0
	19.91	20393	1754.3	16QAM	1.4MHz	3	1
19.77	20393	1754.3	16QAM	1.4MHz	3	3	
18.74	20393	1754.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.51	19965	1711.5	QPSK	3MHz	1	0
	20.58	19965	1711.5	QPSK	3MHz	1	7
	20.65	19965	1711.5	QPSK	3MHz	1	14
	19.57	19965	1711.5	QPSK	3MHz	8	0
	19.55	19965	1711.5	QPSK	3MHz	8	3
	19.69	19965	1711.5	QPSK	3MHz	8	7
	19.58	19965	1711.5	QPSK	3MHz	15	0
	20.54	20175	1732.5	QPSK	3MHz	1	0
	20.55	20175	1732.5	QPSK	3MHz	1	7
	20.52	20175	1732.5	QPSK	3MHz	1	14
	19.62	20175	1732.5	QPSK	3MHz	8	0
	19.58	20175	1732.5	QPSK	3MHz	8	3
	19.57	20175	1732.5	QPSK	3MHz	8	7
	19.57	20175	1732.5	QPSK	3MHz	15	0
	20.66	20385	1753.5	QPSK	3MHz	1	0
	20.75	20385	1753.5	QPSK	3MHz	1	7
	20.85	20385	1753.5	QPSK	3MHz	1	14
	19.73	20385	1753.5	QPSK	3MHz	8	0
	19.71	20385	1753.5	QPSK	3MHz	8	3
	19.77	20385	1753.5	QPSK	3MHz	8	7
	19.76	20385	1753.5	QPSK	3MHz	15	0
	19.82	19965	1711.5	16QAM	3MHz	1	0
	19.89	19965	1711.5	16QAM	3MHz	1	7
	19.79	19965	1711.5	16QAM	3MHz	1	14
	18.56	19965	1711.5	16QAM	3MHz	8	0
	18.59	19965	1711.5	16QAM	3MHz	8	3
	18.66	19965	1711.5	16QAM	3MHz	8	7
	18.56	19965	1711.5	16QAM	3MHz	15	0
	19.29	20175	1732.5	16QAM	3MHz	1	0
	19.92	20175	1732.5	16QAM	3MHz	1	7
	19.79	20175	1732.5	16QAM	3MHz	1	14
	18.54	20175	1732.5	16QAM	3MHz	8	0
	18.60	20175	1732.5	16QAM	3MHz	8	3
	18.58	20175	1732.5	16QAM	3MHz	8	7
	18.51	20175	1732.5	16QAM	3MHz	15	0
	19.88	20385	1753.5	16QAM	3MHz	1	0
	19.94	20385	1753.5	16QAM	3MHz	1	7
	19.86	20385	1753.5	16QAM	3MHz	1	14
	18.90	20385	1753.5	16QAM	3MHz	8	0
	18.78	20385	1753.5	16QAM	3MHz	8	3
18.77	20385	1753.5	16QAM	3MHz	8	7	
18.81	20385	1753.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.52	19975	1712.5	QPSK	5MHz	1	0
	20.60	19975	1712.5	QPSK	5MHz	1	12
	20.73	19975	1712.5	QPSK	5MHz	1	24
	19.59	19975	1712.5	QPSK	5MHz	12	0
	19.72	19975	1712.5	QPSK	5MHz	12	6
	19.75	19975	1712.5	QPSK	5MHz	12	13
	19.72	19975	1712.5	QPSK	5MHz	25	0
	20.76	20175	1732.5	QPSK	5MHz	1	0
	20.58	20175	1732.5	QPSK	5MHz	1	12
	20.50	20175	1732.5	QPSK	5MHz	1	24
	19.65	20175	1732.5	QPSK	5MHz	12	0
	19.60	20175	1732.5	QPSK	5MHz	12	6
	19.55	20175	1732.5	QPSK	5MHz	12	13
	19.57	20175	1732.5	QPSK	5MHz	25	0
	20.72	20375	1752.5	QPSK	5MHz	1	0
	20.58	20375	1752.5	QPSK	5MHz	1	12
	20.77	20375	1752.5	QPSK	5MHz	1	24
	19.72	20375	1752.5	QPSK	5MHz	12	0
	19.67	20375	1752.5	QPSK	5MHz	12	6
	19.89	20375	1752.5	QPSK	5MHz	12	13
	19.71	20375	1752.5	QPSK	5MHz	25	0
	19.88	19975	1712.5	16QAM	5MHz	1	0
	19.36	19975	1712.5	16QAM	5MHz	1	12
	19.60	19975	1712.5	16QAM	5MHz	1	24
	18.52	19975	1712.5	16QAM	5MHz	12	0
	18.70	19975	1712.5	16QAM	5MHz	12	6
	18.81	19975	1712.5	16QAM	5MHz	12	13
	18.82	19975	1712.5	16QAM	5MHz	25	0
	19.91	20175	1732.5	16QAM	5MHz	1	0
	19.72	20175	1732.5	16QAM	5MHz	1	12
	19.69	20175	1732.5	16QAM	5MHz	1	24
	18.73	20175	1732.5	16QAM	5MHz	12	0
	18.58	20175	1732.5	16QAM	5MHz	12	6
	18.52	20175	1732.5	16QAM	5MHz	12	13
	18.61	20175	1732.5	16QAM	5MHz	25	0
	19.98	20375	1752.5	16QAM	5MHz	1	0
	19.62	20375	1752.5	16QAM	5MHz	1	12
	19.66	20375	1752.5	16QAM	5MHz	1	24
	18.83	20375	1752.5	16QAM	5MHz	12	0
	18.78	20375	1752.5	16QAM	5MHz	12	6
18.92	20375	1752.5	16QAM	5MHz	12	11	
18.76	20375	1752.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.67	20000	1715	QPSK	10MHz	1	0
	20.75	20000	1715	QPSK	10MHz	1	24
	20.72	20000	1715	QPSK	10MHz	1	49
	19.70	20000	1715	QPSK	10MHz	25	0
	19.76	20000	1715	QPSK	10MHz	25	12
	19.86	20000	1715	QPSK	10MHz	25	25
	19.74	20000	1715	QPSK	10MHz	50	0
	20.46	20175	1732.5	QPSK	10MHz	1	0
	20.56	20175	1732.5	QPSK	10MHz	1	24
	20.57	20175	1732.5	QPSK	10MHz	1	49
	19.71	20175	1732.5	QPSK	10MHz	25	0
	19.57	20175	1732.5	QPSK	10MHz	25	12
	19.51	20175	1732.5	QPSK	10MHz	25	25
	19.62	20175	1732.5	QPSK	10MHz	50	0
	20.45	20350	1750	QPSK	10MHz	1	0
	20.77	20350	1750	QPSK	10MHz	1	24
	20.78	20350	1750	QPSK	10MHz	1	49
	19.69	20350	1750	QPSK	10MHz	25	0
	19.70	20350	1750	QPSK	10MHz	25	12
	19.75	20350	1750	QPSK	10MHz	25	25
	19.68	20350	1750	QPSK	10MHz	50	0
	19.60	20000	1715	16QAM	10MHz	1	0
	19.99	20000	1715	16QAM	10MHz	1	24
	19.96	20000	1715	16QAM	10MHz	1	49
	18.80	20000	1715	16QAM	10MHz	25	0
	18.83	20000	1715	16QAM	10MHz	25	12
	18.87	20000	1715	16QAM	10MHz	25	25
	18.85	20000	1715	16QAM	10MHz	50	0
	19.89	20175	1732.5	16QAM	10MHz	1	0
	19.65	20175	1732.5	16QAM	10MHz	1	24
	19.56	20175	1732.5	16QAM	10MHz	1	49
	18.86	20175	1732.5	16QAM	10MHz	25	0
	18.70	20175	1732.5	16QAM	10MHz	25	12
	18.63	20175	1732.5	16QAM	10MHz	25	25
	18.57	20175	1732.5	16QAM	10MHz	50	0
	19.74	20350	1750	16QAM	10MHz	1	0
	19.87	20350	1750	16QAM	10MHz	1	24
	19.80	20350	1750	16QAM	10MHz	1	49
	18.71	20350	1750	16QAM	10MHz	25	0
	18.78	20350	1750	16QAM	10MHz	25	12
18.79	20350	1750	16QAM	10MHz	25	25	
18.73	20350	1750	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.59	20025	1717.5	QPSK	15MHz	1	0
	20.85	20025	1717.5	QPSK	15MHz	1	37
	20.76	20025	1717.5	QPSK	15MHz	1	74
	19.75	20025	1717.5	QPSK	15MHz	36	0
	19.84	20025	1717.5	QPSK	15MHz	36	19
	19.79	20025	1717.5	QPSK	15MHz	36	39
	19.88	20025	1717.5	QPSK	15MHz	75	0
	20.63	20175	1732.5	QPSK	15MHz	1	0
	20.55	20175	1732.5	QPSK	15MHz	1	37
	20.47	20175	1732.5	QPSK	15MHz	1	74
	19.66	20175	1732.5	QPSK	15MHz	36	0
	19.64	20175	1732.5	QPSK	15MHz	36	19
	19.55	20175	1732.5	QPSK	15MHz	36	39
	19.60	20175	1732.5	QPSK	15MHz	75	0
	20.51	20325	1747.5	QPSK	15MHz	1	0
	20.65	20325	1747.5	QPSK	15MHz	1	37
	20.73	20325	1747.5	QPSK	15MHz	1	74
	19.58	20325	1747.5	QPSK	15MHz	36	0
	19.68	20325	1747.5	QPSK	15MHz	36	19
	19.69	20325	1747.5	QPSK	15MHz	36	39
	19.75	20325	1747.5	QPSK	15MHz	75	0
	19.91	20025	1717.5	16QAM	15MHz	1	0
	19.82	20025	1717.5	16QAM	15MHz	1	37
	19.97	20025	1717.5	16QAM	15MHz	1	74
	18.76	20025	1717.5	16QAM	15MHz	36	0
	18.86	20025	1717.5	16QAM	15MHz	36	19
	18.81	20025	1717.5	16QAM	15MHz	36	39
	18.92	20025	1717.5	16QAM	15MHz	75	0
	19.76	20175	1732.5	16QAM	15MHz	1	0
	19.53	20175	1732.5	16QAM	15MHz	1	37
	19.42	20175	1732.5	16QAM	15MHz	1	74
	18.70	20175	1732.5	16QAM	15MHz	36	0
	18.74	20175	1732.5	16QAM	15MHz	36	19
	18.59	20175	1732.5	16QAM	15MHz	36	39
	18.58	20175	1732.5	16QAM	15MHz	75	0
	19.67	20325	1747.5	16QAM	15MHz	1	0
	19.96	20325	1747.5	16QAM	15MHz	1	37
	19.62	20325	1747.5	16QAM	15MHz	1	74
	18.68	20325	1747.5	16QAM	15MHz	36	0
	18.79	20325	1747.5	16QAM	15MHz	36	19
18.58	20325	1747.5	16QAM	15MHz	36	39	
18.67	20325	1747.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 4	20.60	20050	1720	QPSK	20MHz	1	0
	20.64	20050	1720	QPSK	20MHz	1	49
	20.65	20050	1720	QPSK	20MHz	1	99
	19.75	20050	1720	QPSK	20MHz	50	0
	19.70	20050	1720	QPSK	20MHz	50	25
	19.67	20050	1720	QPSK	20MHz	50	50
	19.88	20050	1720	QPSK	20MHz	100	0
	20.68	20175	1732.5	QPSK	20MHz	1	0
	20.42	20175	1732.5	QPSK	20MHz	1	49
	20.47	20175	1732.5	QPSK	20MHz	1	99
	19.65	20175	1732.5	QPSK	20MHz	50	0
	19.55	20175	1732.5	QPSK	20MHz	50	25
	19.51	20175	1732.5	QPSK	20MHz	50	50
	19.66	20175	1732.5	QPSK	20MHz	100	0
	20.61	20300	1745	QPSK	20MHz	1	0
	20.43	20300	1745	QPSK	20MHz	1	49
	20.67	20300	1745	QPSK	20MHz	1	99
	19.51	20300	1745	QPSK	20MHz	50	0
	19.52	20300	1745	QPSK	20MHz	50	25
	19.69	20300	1745	QPSK	20MHz	50	50
	19.76	20300	1745	QPSK	20MHz	100	0
	19.66	20050	1720	16QAM	20MHz	1	0
	19.76	20050	1720	16QAM	20MHz	1	49
	19.93	20050	1720	16QAM	20MHz	1	99
	18.76	20050	1720	16QAM	20MHz	50	0
	18.68	20050	1720	16QAM	20MHz	50	25
	18.74	20050	1720	16QAM	20MHz	50	50
	18.79	20050	1720	16QAM	20MHz	100	0
	19.60	20175	1732.5	16QAM	20MHz	1	0
	19.79	20175	1732.5	16QAM	20MHz	1	49
	19.72	20175	1732.5	16QAM	20MHz	1	99
	18.60	20175	1732.5	16QAM	20MHz	50	0
	18.56	20175	1732.5	16QAM	20MHz	50	25
	18.53	20175	1732.5	16QAM	20MHz	50	50
	18.67	20175	1732.5	16QAM	20MHz	100	0
	19.98	20300	1745	16QAM	20MHz	1	0
	19.55	20300	1745	16QAM	20MHz	1	49
	19.67	20300	1745	16QAM	20MHz	1	99
	18.51	20300	1745	16QAM	20MHz	50	0
	18.52	20300	1745	16QAM	20MHz	50	25
18.64	20300	1745	16QAM	20MHz	50	50	
18.76	20300	1745	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	15.74	20775	2502.5	QPSK	5MHz	1	0
	15.77	20775	2502.5	QPSK	5MHz	1	12
	15.73	20775	2502.5	QPSK	5MHz	1	24
	14.78	20775	2502.5	QPSK	5MHz	12	0
	14.71	20775	2502.5	QPSK	5MHz	12	6
	14.73	20775	2502.5	QPSK	5MHz	12	13
	14.75	20775	2502.5	QPSK	5MHz	25	0
	16.02	21100	2535	QPSK	5MHz	1	0
	16.08	21100	2535	QPSK	5MHz	1	12
	16.01	21100	2535	QPSK	5MHz	1	24
	15.14	21100	2535	QPSK	5MHz	12	0
	15.13	21100	2535	QPSK	5MHz	12	6
	15.09	21100	2535	QPSK	5MHz	12	13
	15.17	21100	2535	QPSK	5MHz	25	0
	16.13	21425	2567.5	QPSK	5MHz	1	0
	16.05	21425	2567.5	QPSK	5MHz	1	12
	15.88	21425	2567.5	QPSK	5MHz	1	24
	15.04	21425	2567.5	QPSK	5MHz	12	0
	15.04	21425	2567.5	QPSK	5MHz	12	6
	15.03	21425	2567.5	QPSK	5MHz	12	13
	15.04	21425	2567.5	QPSK	5MHz	25	0
	15.03	20775	2502.5	16QAM	5MHz	1	0
	14.79	20775	2502.5	16QAM	5MHz	1	12
	14.77	20775	2502.5	16QAM	5MHz	1	24
	13.74	20775	2502.5	16QAM	5MHz	12	0
	13.73	20775	2502.5	16QAM	5MHz	12	6
	13.71	20775	2502.5	16QAM	5MHz	12	13
	13.78	20775	2502.5	16QAM	5MHz	25	0
	15.45	21100	2535	16QAM	5MHz	1	0
	14.85	21100	2535	16QAM	5MHz	1	12
	15.03	21100	2535	16QAM	5MHz	1	24
	14.18	21100	2535	16QAM	5MHz	12	0
	14.06	21100	2535	16QAM	5MHz	12	6
	14.06	21100	2535	16QAM	5MHz	12	13
	14.20	21100	2535	16QAM	5MHz	25	0
	15.33	21425	2567.5	16QAM	5MHz	1	0
	15.07	21425	2567.5	16QAM	5MHz	1	12
	14.75	21425	2567.5	16QAM	5MHz	1	24
	13.93	21425	2567.5	16QAM	5MHz	12	0
	14.00	21425	2567.5	16QAM	5MHz	12	6
14.03	21425	2567.5	16QAM	5MHz	12	11	
14.04	21425	2567.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	15.82	20800	2505	QPSK	10MHz	1	0
	15.74	20800	2505	QPSK	10MHz	1	24
	15.92	20800	2505	QPSK	10MHz	1	49
	14.84	20800	2505	QPSK	10MHz	25	0
	14.90	20800	2505	QPSK	10MHz	25	12
	14.98	20800	2505	QPSK	10MHz	25	25
	14.91	20800	2505	QPSK	10MHz	50	0
	16.11	21100	2535	QPSK	10MHz	1	0
	16.05	21100	2535	QPSK	10MHz	1	24
	15.97	21100	2535	QPSK	10MHz	1	49
	15.22	21100	2535	QPSK	10MHz	25	0
	15.24	21100	2535	QPSK	10MHz	25	12
	15.23	21100	2535	QPSK	10MHz	25	25
	15.24	21100	2535	QPSK	10MHz	50	0
	16.16	21400	2565	QPSK	10MHz	1	0
	16.11	21400	2565	QPSK	10MHz	1	24
	15.98	21400	2565	QPSK	10MHz	1	49
	15.19	21400	2565	QPSK	10MHz	25	0
	15.19	21400	2565	QPSK	10MHz	25	12
	15.15	21400	2565	QPSK	10MHz	25	25
	15.19	21400	2565	QPSK	10MHz	50	0
	15.12	20800	2505	16QAM	10MHz	1	0
	15.03	20800	2505	16QAM	10MHz	1	24
	15.18	20800	2505	16QAM	10MHz	1	49
	13.86	20800	2505	16QAM	10MHz	25	0
	13.86	20800	2505	16QAM	10MHz	25	12
	13.97	20800	2505	16QAM	10MHz	25	25
	13.87	20800	2505	16QAM	10MHz	50	0
	15.25	21100	2535	16QAM	10MHz	1	0
	14.90	21100	2535	16QAM	10MHz	1	24
	15.45	21100	2535	16QAM	10MHz	1	49
	14.25	21100	2535	16QAM	10MHz	25	0
	14.29	21100	2535	16QAM	10MHz	25	12
	14.19	21100	2535	16QAM	10MHz	25	25
	14.24	21100	2535	16QAM	10MHz	50	0
	15.39	21400	2565	16QAM	10MHz	1	0
	15.32	21400	2565	16QAM	10MHz	1	24
	15.42	21400	2565	16QAM	10MHz	1	49
	14.27	21400	2565	16QAM	10MHz	25	0
	14.23	21400	2565	16QAM	10MHz	25	12
14.13	21400	2565	16QAM	10MHz	25	25	
14.14	21400	2565	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	15.83	20825	2507.5	QPSK	15MHz	1	0
	15.86	20825	2507.5	QPSK	15MHz	1	37
	15.87	20825	2507.5	QPSK	15MHz	1	74
	14.80	20825	2507.5	QPSK	15MHz	36	0
	14.93	20825	2507.5	QPSK	15MHz	36	19
	14.97	20825	2507.5	QPSK	15MHz	36	39
	14.97	20825	2507.5	QPSK	15MHz	75	0
	16.01	21100	2535	QPSK	15MHz	1	0
	16.04	21100	2535	QPSK	15MHz	1	37
	15.91	21100	2535	QPSK	15MHz	1	74
	15.25	21100	2535	QPSK	15MHz	36	0
	15.27	21100	2535	QPSK	15MHz	36	19
	15.10	21100	2535	QPSK	15MHz	36	39
	15.29	21100	2535	QPSK	15MHz	75	0
	16.22	21375	2562.5	QPSK	15MHz	1	0
	16.11	21375	2562.5	QPSK	15MHz	1	37
	16.03	21375	2562.5	QPSK	15MHz	1	74
	15.17	21375	2562.5	QPSK	15MHz	36	0
	15.18	21375	2562.5	QPSK	15MHz	36	19
	15.12	21375	2562.5	QPSK	15MHz	36	39
	15.20	21375	2562.5	QPSK	15MHz	75	0
	14.24	20825	2507.5	16QAM	15MHz	1	0
	14.34	20825	2507.5	16QAM	15MHz	1	37
	15.00	20825	2507.5	16QAM	15MHz	1	74
	13.87	20825	2507.5	16QAM	15MHz	36	0
	14.02	20825	2507.5	16QAM	15MHz	36	19
	13.93	20825	2507.5	16QAM	15MHz	36	39
	14.04	20825	2507.5	16QAM	15MHz	75	0
	14.60	21100	2535	16QAM	15MHz	1	0
	15.33	21100	2535	16QAM	15MHz	1	37
	15.28	21100	2535	16QAM	15MHz	1	74
	14.30	21100	2535	16QAM	15MHz	36	0
	14.29	21100	2535	16QAM	15MHz	36	19
	14.16	21100	2535	16QAM	15MHz	36	39
	14.28	21100	2535	16QAM	15MHz	75	0
	15.42	21375	2562.5	16QAM	15MHz	1	0
	15.30	21375	2562.5	16QAM	15MHz	1	37
	15.47	21375	2562.5	16QAM	15MHz	1	74
	14.28	21375	2562.5	16QAM	15MHz	36	0
	14.18	21375	2562.5	16QAM	15MHz	36	19
14.17	21375	2562.5	16QAM	15MHz	36	39	
14.22	21375	2562.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 7	15.72	20850	2510	QPSK	20MHz	1	0
	15.87	20850	2510	QPSK	20MHz	1	49
	15.94	20850	2510	QPSK	20MHz	1	99
	14.85	20850	2510	QPSK	20MHz	50	0
	14.93	20850	2510	QPSK	20MHz	50	25
	15.01	20850	2510	QPSK	20MHz	50	50
	15.05	20850	2510	QPSK	20MHz	100	0
	16.20	21100	2535	QPSK	20MHz	1	0
	16.12	21100	2535	QPSK	20MHz	1	49
	16.06	21100	2535	QPSK	20MHz	1	99
	15.21	21100	2535	QPSK	20MHz	50	0
	15.15	21100	2535	QPSK	20MHz	50	25
	15.01	21100	2535	QPSK	20MHz	50	50
	15.26	21100	2535	QPSK	20MHz	100	0
	16.36	21350	2560	QPSK	20MHz	1	0
	16.18	21350	2560	QPSK	20MHz	1	49
	16.13	21350	2560	QPSK	20MHz	1	99
	15.20	21350	2560	QPSK	20MHz	50	0
	15.11	21350	2560	QPSK	20MHz	50	25
	15.12	21350	2560	QPSK	20MHz	50	50
	15.24	21350	2560	QPSK	20MHz	100	0
	14.85	20850	2510	16QAM	20MHz	1	0
	14.82	20850	2510	16QAM	20MHz	1	49
	15.41	20850	2510	16QAM	20MHz	1	99
	13.84	20850	2510	16QAM	20MHz	50	0
	13.89	20850	2510	16QAM	20MHz	50	25
	14.04	20850	2510	16QAM	20MHz	50	50
	14.01	20850	2510	16QAM	20MHz	100	0
	15.22	21100	2535	16QAM	20MHz	1	0
	14.98	21100	2535	16QAM	20MHz	1	49
	14.99	21100	2535	16QAM	20MHz	1	99
	14.19	21100	2535	16QAM	20MHz	50	0
	14.16	21100	2535	16QAM	20MHz	50	25
	14.10	21100	2535	16QAM	20MHz	50	50
	14.25	21100	2535	16QAM	20MHz	100	0
	14.77	21350	2560	16QAM	20MHz	1	0
	15.23	21350	2560	16QAM	20MHz	1	49
	15.41	21350	2560	16QAM	20MHz	1	99
	14.26	21350	2560	16QAM	20MHz	50	0
	14.10	21350	2560	16QAM	20MHz	50	25
14.16	21350	2560	16QAM	20MHz	50	50	
14.19	21350	2560	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 30	19.20	27685	2307.5	QPSK	5MHz	1	0
	19.11	27685	2307.5	QPSK	5MHz	1	12
	19.13	27685	2307.5	QPSK	5MHz	1	24
	18.07	27685	2307.5	QPSK	5MHz	12	0
	17.97	27685	2307.5	QPSK	5MHz	12	6
	17.94	27685	2307.5	QPSK	5MHz	12	13
	17.97	27685	2307.5	QPSK	5MHz	25	0
	18.96	27710	2310	QPSK	5MHz	1	0
	19.10	27710	2310	QPSK	5MHz	1	12
	19.04	27710	2310	QPSK	5MHz	1	24
	18.01	27710	2310	QPSK	5MHz	12	0
	18.05	27710	2310	QPSK	5MHz	12	6
	17.99	27710	2310	QPSK	5MHz	12	13
	18.08	27710	2310	QPSK	5MHz	25	0
	19.11	27735	2312.5	QPSK	5MHz	1	0
	19.04	27735	2312.5	QPSK	5MHz	1	12
	19.18	27735	2312.5	QPSK	5MHz	1	24
	18.04	27735	2312.5	QPSK	5MHz	12	0
	17.97	27735	2312.5	QPSK	5MHz	12	6
	18.06	27735	2312.5	QPSK	5MHz	12	13
	18.06	27735	2312.5	QPSK	5MHz	25	0
	18.29	27685	2307.5	16QAM	5MHz	1	0
	17.92	27685	2307.5	16QAM	5MHz	1	12
	18.40	27685	2307.5	16QAM	5MHz	1	24
	17.07	27685	2307.5	16QAM	5MHz	12	0
	16.95	27685	2307.5	16QAM	5MHz	12	6
	17.10	27685	2307.5	16QAM	5MHz	12	13
	16.98	27685	2307.5	16QAM	5MHz	25	0
	17.67	27710	2310	16QAM	5MHz	1	0
	18.26	27710	2310	16QAM	5MHz	1	12
	18.12	27710	2310	16QAM	5MHz	1	24
	17.04	27710	2310	16QAM	5MHz	12	0
	17.03	27710	2310	16QAM	5MHz	12	6
	16.96	27710	2310	16QAM	5MHz	12	13
	17.10	27710	2310	16QAM	5MHz	25	0
	17.77	27735	2312.5	16QAM	5MHz	1	0
	18.26	27735	2312.5	16QAM	5MHz	1	12
	17.71	27735	2312.5	16QAM	5MHz	1	24
	17.05	27735	2312.5	16QAM	5MHz	12	0
	17.03	27735	2312.5	16QAM	5MHz	12	6
17.16	27735	2312.5	16QAM	5MHz	12	11	
16.96	27735	2312.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 30	19.26	27710	2310	QPSK	10MHz	1	0
	18.99	27710	2310	QPSK	10MHz	1	24
	19.04	27710	2310	QPSK	10MHz	1	49
	18.04	27710	2310	QPSK	10MHz	25	0
	18.01	27710	2310	QPSK	10MHz	25	12
	18.04	27710	2310	QPSK	10MHz	25	25
	18.11	27710	2310	QPSK	10MHz	50	0
	18.28	27710	2310	16QAM	10MHz	1	0
	18.07	27710	2310	16QAM	10MHz	1	24
	18.41	27710	2310	16QAM	10MHz	1	49
	17.04	27710	2310	16QAM	10MHz	25	0
	17.04	27710	2310	16QAM	10MHz	25	12
	16.99	27710	2310	16QAM	10MHz	25	25
	17.17	27710	2310	16QAM	10MHz	50	0



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	17.26	37775	2572.5	QPSK	5MHz	1	0
	17.29	37775	2572.5	QPSK	5MHz	1	12
	17.25	37775	2572.5	QPSK	5MHz	1	24
	16.20	37775	2572.5	QPSK	5MHz	12	0
	16.28	37775	2572.5	QPSK	5MHz	12	6
	16.29	37775	2572.5	QPSK	5MHz	12	13
	16.25	37775	2572.5	QPSK	5MHz	25	0
	17.51	38000	2595	QPSK	5MHz	1	0
	17.47	38000	2595	QPSK	5MHz	1	12
	17.32	38000	2595	QPSK	5MHz	1	24
	16.52	38000	2595	QPSK	5MHz	12	0
	16.43	38000	2595	QPSK	5MHz	12	6
	16.58	38000	2595	QPSK	5MHz	12	13
	16.48	38000	2595	QPSK	5MHz	25	0
	17.30	38225	2617.5	QPSK	5MHz	1	0
	17.30	38225	2617.5	QPSK	5MHz	1	12
	17.27	38225	2617.5	QPSK	5MHz	1	24
	16.31	38225	2617.5	QPSK	5MHz	12	0
	16.35	38225	2617.5	QPSK	5MHz	12	6
	16.40	38225	2617.5	QPSK	5MHz	12	13
	16.27	38225	2617.5	QPSK	5MHz	25	0
	16.33	37775	2572.5	16QAM	5MHz	1	0
	16.19	37775	2572.5	16QAM	5MHz	1	12
	16.31	37775	2572.5	16QAM	5MHz	1	24
	15.39	37775	2572.5	16QAM	5MHz	12	0
	15.23	37775	2572.5	16QAM	5MHz	12	6
	15.29	37775	2572.5	16QAM	5MHz	12	13
	15.25	37775	2572.5	16QAM	5MHz	25	0
	16.50	38000	2595	16QAM	5MHz	1	0
	16.37	38000	2595	16QAM	5MHz	1	12
	16.54	38000	2595	16QAM	5MHz	1	24
	15.54	38000	2595	16QAM	5MHz	12	0
	15.56	38000	2595	16QAM	5MHz	12	6
	15.40	38000	2595	16QAM	5MHz	12	13
	15.53	38000	2595	16QAM	5MHz	25	0
	16.26	38225	2617.5	16QAM	5MHz	1	0
	16.23	38225	2617.5	16QAM	5MHz	1	12
	16.35	38225	2617.5	16QAM	5MHz	1	24
	15.54	38225	2617.5	16QAM	5MHz	12	0
	15.40	38225	2617.5	16QAM	5MHz	12	6
15.40	38225	2617.5	16QAM	5MHz	12	11	
15.35	38225	2617.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	17.33	37800	2575	QPSK	10MHz	1	0
	17.38	37800	2575	QPSK	10MHz	1	24
	17.44	37800	2575	QPSK	10MHz	1	49
	16.44	37800	2575	QPSK	10MHz	25	0
	16.37	37800	2575	QPSK	10MHz	25	12
	16.30	37800	2575	QPSK	10MHz	25	25
	16.40	37800	2575	QPSK	10MHz	50	0
	17.64	38000	2595	QPSK	10MHz	1	0
	17.52	38000	2595	QPSK	10MHz	1	24
	17.54	38000	2595	QPSK	10MHz	1	49
	16.56	38000	2595	QPSK	10MHz	25	0
	16.54	38000	2595	QPSK	10MHz	25	12
	16.54	38000	2595	QPSK	10MHz	25	25
	16.50	38000	2595	QPSK	10MHz	50	0
	17.58	38200	2615	QPSK	10MHz	1	0
	17.59	38200	2615	QPSK	10MHz	1	24
	17.44	38200	2615	QPSK	10MHz	1	49
	16.63	38200	2615	QPSK	10MHz	25	0
	16.41	38200	2615	QPSK	10MHz	25	12
	16.49	38200	2615	QPSK	10MHz	25	25
	16.53	38200	2615	QPSK	10MHz	50	0
	16.35	37800	2575	16QAM	10MHz	1	0
	16.37	37800	2575	16QAM	10MHz	1	24
	16.42	37800	2575	16QAM	10MHz	1	49
	15.56	37800	2575	16QAM	10MHz	25	0
	15.52	37800	2575	16QAM	10MHz	25	12
	15.59	37800	2575	16QAM	10MHz	25	25
	15.30	37800	2575	16QAM	10MHz	50	0
	16.48	38000	2595	16QAM	10MHz	1	0
	16.49	38000	2595	16QAM	10MHz	1	24
	16.46	38000	2595	16QAM	10MHz	1	49
	15.61	38000	2595	16QAM	10MHz	25	0
	15.52	38000	2595	16QAM	10MHz	25	12
	15.64	38000	2595	16QAM	10MHz	25	25
	15.42	38000	2595	16QAM	10MHz	50	0
	16.76	38200	2615	16QAM	10MHz	1	0
	16.68	38200	2615	16QAM	10MHz	1	24
	16.72	38200	2615	16QAM	10MHz	1	49
	15.62	38200	2615	16QAM	10MHz	25	0
	15.61	38200	2615	16QAM	10MHz	25	12
15.61	38200	2615	16QAM	10MHz	25	25	
15.42	38200	2615	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	17.82	37825	2577.5	QPSK	15MHz	1	0
	17.71	37825	2577.5	QPSK	15MHz	1	37
	17.79	37825	2577.5	QPSK	15MHz	1	74
	16.84	37825	2577.5	QPSK	15MHz	36	0
	16.88	37825	2577.5	QPSK	15MHz	36	19
	16.81	37825	2577.5	QPSK	15MHz	36	39
	16.72	37825	2577.5	QPSK	15MHz	75	0
	17.74	38000	2595	QPSK	15MHz	1	0
	17.70	38000	2595	QPSK	15MHz	1	37
	17.65	38000	2595	QPSK	15MHz	1	74
	16.72	38000	2595	QPSK	15MHz	36	0
	16.80	38000	2595	QPSK	15MHz	36	19
	16.80	38000	2595	QPSK	15MHz	36	39
	16.64	38000	2595	QPSK	15MHz	75	0
	17.57	38175	2612.5	QPSK	15MHz	1	0
	17.59	38175	2612.5	QPSK	15MHz	1	37
	17.50	38175	2612.5	QPSK	15MHz	1	74
	16.59	38175	2612.5	QPSK	15MHz	36	0
	16.65	38175	2612.5	QPSK	15MHz	36	19
	16.50	38175	2612.5	QPSK	15MHz	36	39
	16.64	38175	2612.5	QPSK	15MHz	75	0
	16.60	37825	2577.5	16QAM	15MHz	1	0
	16.62	37825	2577.5	16QAM	15MHz	1	37
	16.71	37825	2577.5	16QAM	15MHz	1	74
	15.67	37825	2577.5	16QAM	15MHz	36	0
	15.72	37825	2577.5	16QAM	15MHz	36	19
	15.75	37825	2577.5	16QAM	15MHz	36	39
	15.69	37825	2577.5	16QAM	15MHz	75	0
	16.59	38000	2595	16QAM	15MHz	1	0
	16.59	38000	2595	16QAM	15MHz	1	37
	16.57	38000	2595	16QAM	15MHz	1	74
	15.67	38000	2595	16QAM	15MHz	36	0
	15.68	38000	2595	16QAM	15MHz	36	19
	15.59	38000	2595	16QAM	15MHz	36	39
15.70	38000	2595	16QAM	15MHz	75	0	
16.54	38175	2612.5	16QAM	15MHz	1	0	
16.45	38175	2612.5	16QAM	15MHz	1	37	
16.41	38175	2612.5	16QAM	15MHz	1	74	
15.68	38175	2612.5	16QAM	15MHz	36	0	
15.63	38175	2612.5	16QAM	15MHz	36	19	
15.62	38175	2612.5	16QAM	15MHz	36	39	
15.51	38175	2612.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 38	17.31	37850	2580	QPSK	20MHz	1	0
	17.38	37850	2580	QPSK	20MHz	1	49
	17.39	37850	2580	QPSK	20MHz	1	99
	16.27	37850	2580	QPSK	20MHz	50	0
	16.19	37850	2580	QPSK	20MHz	50	25
	16.37	37850	2580	QPSK	20MHz	50	50
	16.31	37850	2580	QPSK	20MHz	100	0
	17.36	38000	2595	QPSK	20MHz	1	0
	17.35	38000	2595	QPSK	20MHz	1	49
	17.46	38000	2595	QPSK	20MHz	1	99
	16.35	38000	2595	QPSK	20MHz	50	0
	16.38	38000	2595	QPSK	20MHz	50	25
	16.35	38000	2595	QPSK	20MHz	50	50
	16.24	38000	2595	QPSK	20MHz	100	0
	17.34	38150	2610	QPSK	20MHz	1	0
	17.41	38150	2610	QPSK	20MHz	1	49
	17.32	38150	2610	QPSK	20MHz	1	99
	16.41	38150	2610	QPSK	20MHz	50	0
	16.38	38150	2610	QPSK	20MHz	50	25
	16.22	38150	2610	QPSK	20MHz	50	50
	16.32	38150	2610	QPSK	20MHz	100	0
	16.24	37850	2580	16QAM	20MHz	1	0
	16.25	37850	2580	16QAM	20MHz	1	49
	16.31	37850	2580	16QAM	20MHz	1	99
	15.26	37850	2580	16QAM	20MHz	50	0
	15.25	37850	2580	16QAM	20MHz	50	25
	15.40	37850	2580	16QAM	20MHz	50	50
	15.38	37850	2580	16QAM	20MHz	100	0
	16.18	38000	2595	16QAM	20MHz	1	0
	16.30	38000	2595	16QAM	20MHz	1	49
	16.25	38000	2595	16QAM	20MHz	1	99
	15.39	38000	2595	16QAM	20MHz	50	0
	15.42	38000	2595	16QAM	20MHz	50	25
	15.30	38000	2595	16QAM	20MHz	50	50
	15.41	38000	2595	16QAM	20MHz	100	0
	16.35	38150	2610	16QAM	20MHz	1	0
	16.25	38150	2610	16QAM	20MHz	1	49
	16.32	38150	2610	16QAM	20MHz	1	99
	15.49	38150	2610	16QAM	20MHz	50	0
	15.40	38150	2610	16QAM	20MHz	50	25
15.37	38150	2610	16QAM	20MHz	50	50	
15.32	38150	2610	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	17.41	39715	2502.5	QPSK	5MHz	1	0
	17.36	39715	2502.5	QPSK	5MHz	1	12
	17.43	39715	2502.5	QPSK	5MHz	1	24
	16.39	39715	2502.5	QPSK	5MHz	12	0
	16.35	39715	2502.5	QPSK	5MHz	12	6
	16.39	39715	2502.5	QPSK	5MHz	12	13
	16.35	39715	2502.5	QPSK	5MHz	25	0
	17.36	39675	2498.5	QPSK	5MHz	1	0
	17.37	39675	2498.5	QPSK	5MHz	1	12
	17.43	39675	2498.5	QPSK	5MHz	1	24
	16.30	39675	2498.5	QPSK	5MHz	12	0
	16.29	39675	2498.5	QPSK	5MHz	12	6
	16.34	39675	2498.5	QPSK	5MHz	12	13
	16.33	39675	2498.5	QPSK	5MHz	25	0
	17.78	40148	2545.8	QPSK	5MHz	1	0
	17.70	40148	2545.8	QPSK	5MHz	1	12
	17.71	40148	2545.8	QPSK	5MHz	1	24
	16.72	40148	2545.8	QPSK	5MHz	12	0
	16.69	40148	2545.8	QPSK	5MHz	12	6
	16.69	40148	2545.8	QPSK	5MHz	12	13
	16.69	40148	2545.8	QPSK	5MHz	25	0
	17.69	40620	2593	QPSK	5MHz	1	0
	17.64	40620	2593	QPSK	5MHz	1	12
	17.66	40620	2593	QPSK	5MHz	1	24
	16.63	40620	2593	QPSK	5MHz	12	0
	16.56	40620	2593	QPSK	5MHz	12	6
	16.62	40620	2593	QPSK	5MHz	12	13
	16.59	40620	2593	QPSK	5MHz	25	0
	17.91	41093	2640.3	QPSK	5MHz	1	0
	17.88	41093	2640.3	QPSK	5MHz	1	12
	17.89	41093	2640.3	QPSK	5MHz	1	24
	16.82	41093	2640.3	QPSK	5MHz	12	0
	16.79	41093	2640.3	QPSK	5MHz	12	6
	16.80	41093	2640.3	QPSK	5MHz	12	13
	16.83	41093	2640.3	QPSK	5MHz	25	0
	17.80	41565	2687.5	QPSK	5MHz	1	0
	17.75	41565	2687.5	QPSK	5MHz	1	12
	17.79	41565	2687.5	QPSK	5MHz	1	24
	16.70	41565	2687.5	QPSK	5MHz	12	0
	16.71	41565	2687.5	QPSK	5MHz	12	6
16.69	41565	2687.5	QPSK	5MHz	12	13	
16.72	41565	2687.5	QPSK	5MHz	25	0	
16.57	39715	2502.5	16QAM	5MHz	1	0	
16.55	39715	2502.5	16QAM	5MHz	1	12	
16.63	39715	2502.5	16QAM	5MHz	1	24	
15.37	39715	2502.5	16QAM	5MHz	12	0	
15.33	39715	2502.5	16QAM	5MHz	12	6	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	15.37	39715	2502.5	16QAM	5MHz	12	13
	15.36	39715	2502.5	16QAM	5MHz	25	0
	16.52	39675	2498.5	16QAM	5MHz	1	0
	16.50	39675	2498.5	16QAM	5MHz	1	12
	16.57	39675	2498.5	16QAM	5MHz	1	24
	15.30	39675	2498.5	16QAM	5MHz	12	0
	15.30	39675	2498.5	16QAM	5MHz	12	6
	15.39	39675	2498.5	16QAM	5MHz	12	13
	15.39	39675	2498.5	16QAM	5MHz	25	0
	16.95	40148	2545.8	16QAM	5MHz	1	0
	16.88	40148	2545.8	16QAM	5MHz	1	12
	16.90	40148	2545.8	16QAM	5MHz	1	24
	15.69	40148	2545.8	16QAM	5MHz	12	0
	15.68	40148	2545.8	16QAM	5MHz	12	6
	15.68	40148	2545.8	16QAM	5MHz	12	11
	15.69	40148	2545.8	16QAM	5MHz	25	0
	16.82	40620	2593	16QAM	5MHz	1	0
	16.76	40620	2593	16QAM	5MHz	1	12
	16.82	40620	2593	16QAM	5MHz	1	24
	15.57	40620	2593	16QAM	5MHz	12	0
	15.54	40620	2593	16QAM	5MHz	12	6
	15.55	40620	2593	16QAM	5MHz	12	13
	15.61	40620	2593	16QAM	5MHz	25	0
	16.91	41093	2640.3	16QAM	5MHz	1	0
	16.89	41093	2640.3	16QAM	5MHz	1	12
	16.88	41093	2640.3	16QAM	5MHz	1	24
	15.85	41093	2640.3	16QAM	5MHz	12	0
	15.85	41093	2640.3	16QAM	5MHz	12	6
	15.82	41093	2640.3	16QAM	5MHz	12	11
	15.85	41093	2640.3	16QAM	5MHz	25	0
	16.93	41565	2687.5	16QAM	5MHz	1	0
	16.91	41565	2687.5	16QAM	5MHz	1	12
16.95	41565	2687.5	16QAM	5MHz	1	24	
15.64	41565	2687.5	16QAM	5MHz	12	0	
15.65	41565	2687.5	16QAM	5MHz	12	6	
15.65	41565	2687.5	16QAM	5MHz	12	11	
15.70	41565	2687.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	17.78	39740	2505	QPSK	10MHz	1	0
	17.76	39740	2505	QPSK	10MHz	1	24
	17.83	39740	2505	QPSK	10MHz	1	49
	16.67	39740	2505	QPSK	10MHz	25	0
	16.68	39740	2505	QPSK	10MHz	25	12
	16.78	39740	2505	QPSK	10MHz	25	25
	16.64	39740	2505	QPSK	10MHz	50	0
	17.65	39700	2501	QPSK	10MHz	1	0
	17.70	39700	2501	QPSK	10MHz	1	24
	17.77	39700	2501	QPSK	10MHz	1	49
	16.60	39700	2501	QPSK	10MHz	25	0
	16.61	39700	2501	QPSK	10MHz	25	12
	16.60	39700	2501	QPSK	10MHz	25	25
	16.60	39700	2501	QPSK	10MHz	50	0
	17.95	40160	2547	QPSK	10MHz	1	0
	17.91	40160	2547	QPSK	10MHz	1	24
	17.99	40160	2547	QPSK	10MHz	1	49
	16.85	40160	2547	QPSK	10MHz	25	0
	16.83	40160	2547	QPSK	10MHz	25	12
	16.88	40160	2547	QPSK	10MHz	25	25
	16.77	40160	2547	QPSK	10MHz	50	0
	17.87	40620	2593	QPSK	10MHz	1	0
	17.83	40620	2593	QPSK	10MHz	1	24
	17.87	40620	2593	QPSK	10MHz	1	49
	16.77	40620	2593	QPSK	10MHz	25	0
	16.77	40620	2593	QPSK	10MHz	25	12
	16.77	40620	2593	QPSK	10MHz	25	25
	16.70	40620	2593	QPSK	10MHz	50	0
	17.90	41080	2639	QPSK	10MHz	1	0
	17.83	41080	2639	QPSK	10MHz	1	24
	17.96	41080	2639	QPSK	10MHz	1	49
	16.97	41080	2639	QPSK	10MHz	25	0
	16.94	41080	2639	QPSK	10MHz	25	12
	16.96	41080	2639	QPSK	10MHz	25	25
	16.90	41080	2639	QPSK	10MHz	50	0
	17.97	41540	2685	QPSK	10MHz	1	0
	17.94	41540	2685	QPSK	10MHz	1	24
	17.91	41540	2685	QPSK	10MHz	1	49
	16.87	41540	2685	QPSK	10MHz	25	0
	16.84	41540	2685	QPSK	10MHz	25	12
	16.85	41540	2685	QPSK	10MHz	25	25
16.77	41540	2685	QPSK	10MHz	50	0	
16.39	39740	2505	16QAM	10MHz	1	0	
16.40	39740	2505	16QAM	10MHz	1	24	
16.46	39740	2505	16QAM	10MHz	1	49	
15.59	39740	2505	16QAM	10MHz	25	0	
15.68	39740	2505	16QAM	10MHz	25	12	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	15.74	39740	2505	16QAM	10MHz	25	25
	15.68	39740	2505	16QAM	10MHz	50	0
	16.34	39700	2501	16QAM	10MHz	1	0
	16.38	39700	2501	16QAM	10MHz	1	24
	16.43	39700	2501	16QAM	10MHz	1	49
	15.62	39700	2501	16QAM	10MHz	25	0
	15.64	39700	2501	16QAM	10MHz	25	12
	15.63	39700	2501	16QAM	10MHz	25	25
	15.69	39700	2501	16QAM	10MHz	50	0
	16.64	40160	2547	16QAM	10MHz	1	0
	16.56	40160	2547	16QAM	10MHz	1	24
	16.61	40160	2547	16QAM	10MHz	1	49
	15.88	40160	2547	16QAM	10MHz	25	0
	15.88	40160	2547	16QAM	10MHz	25	12
	15.93	40160	2547	16QAM	10MHz	25	25
	15.87	40160	2547	16QAM	10MHz	50	0
	16.51	40620	2593	16QAM	10MHz	1	0
	16.47	40620	2593	16QAM	10MHz	1	24
	16.51	40620	2593	16QAM	10MHz	1	49
	15.80	40620	2593	16QAM	10MHz	25	0
	15.79	40620	2593	16QAM	10MHz	25	12
	15.76	40620	2593	16QAM	10MHz	25	25
	15.76	40620	2593	16QAM	10MHz	50	0
	16.68	41080	2639	16QAM	10MHz	1	0
	16.69	41080	2639	16QAM	10MHz	1	24
	16.68	41080	2639	16QAM	10MHz	1	49
	16.02	41080	2639	16QAM	10MHz	25	0
	15.99	41080	2639	16QAM	10MHz	25	12
	15.99	41080	2639	16QAM	10MHz	25	25
	16.01	41080	2639	16QAM	10MHz	50	0
	16.58	41540	2685	16QAM	10MHz	1	0
	16.54	41540	2685	16QAM	10MHz	1	24
16.60	41540	2685	16QAM	10MHz	1	49	
15.86	41540	2685	16QAM	10MHz	25	0	
15.82	41540	2685	16QAM	10MHz	25	12	
15.79	41540	2685	16QAM	10MHz	25	25	
15.81	41540	2685	16QAM	10MHz	50	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	17.55	39765	2507.5	QPSK	15MHz	1	0
	17.63	39765	2507.5	QPSK	15MHz	1	37
	17.64	39765	2507.5	QPSK	15MHz	1	74
	16.53	39765	2507.5	QPSK	15MHz	36	0
	16.60	39765	2507.5	QPSK	15MHz	36	19
	16.61	39765	2507.5	QPSK	15MHz	36	39
	16.57	39765	2507.5	QPSK	15MHz	75	0
	17.46	39725	2503.5	QPSK	15MHz	1	0
	17.53	39725	2503.5	QPSK	15MHz	1	37
	17.63	39725	2503.5	QPSK	15MHz	1	74
	16.49	39725	2503.5	QPSK	15MHz	36	0
	16.50	39725	2503.5	QPSK	15MHz	36	19
	16.58	39725	2503.5	QPSK	15MHz	36	39
	16.53	39725	2503.5	QPSK	15MHz	75	0
	17.89	40173	2548.3	QPSK	15MHz	1	0
	17.82	40173	2548.3	QPSK	15MHz	1	37
	17.83	40173	2548.3	QPSK	15MHz	1	74
	16.81	40173	2548.3	QPSK	15MHz	36	0
	16.78	40173	2548.3	QPSK	15MHz	36	19
	16.80	40173	2548.3	QPSK	15MHz	36	39
	16.75	40173	2548.3	QPSK	15MHz	75	0
	17.68	40620	2593	QPSK	15MHz	1	0
	17.69	40620	2593	QPSK	15MHz	1	37
	17.72	40620	2593	QPSK	15MHz	1	74
	16.65	40620	2593	QPSK	15MHz	36	0
	16.65	40620	2593	QPSK	15MHz	36	19
	16.63	40620	2593	QPSK	15MHz	36	39
	16.59	40620	2593	QPSK	15MHz	75	0
	17.96	41068	2637.8	QPSK	15MHz	1	0
	17.95	41068	2637.8	QPSK	15MHz	1	37
	17.96	41068	2637.8	QPSK	15MHz	1	74
	16.84	41068	2637.8	QPSK	15MHz	36	0
	16.94	41068	2637.8	QPSK	15MHz	36	19
	16.91	41068	2637.8	QPSK	15MHz	36	39
	16.93	41068	2637.8	QPSK	15MHz	75	0
	17.76	41515	2682.5	QPSK	15MHz	1	0
	17.74	41515	2682.5	QPSK	15MHz	1	37
	17.76	41515	2682.5	QPSK	15MHz	1	74
	16.78	41515	2682.5	QPSK	15MHz	36	0
	16.81	41515	2682.5	QPSK	15MHz	36	19
	16.77	41515	2682.5	QPSK	15MHz	36	39
16.73	41515	2682.5	QPSK	15MHz	75	0	
16.27	39765	2507.5	16QAM	15MHz	1	0	
16.36	39765	2507.5	16QAM	15MHz	1	37	
16.35	39765	2507.5	16QAM	15MHz	1	74	
15.62	39765	2507.5	16QAM	15MHz	36	0	
15.71	39765	2507.5	16QAM	15MHz	36	19	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	15.70	39765	2507.5	16QAM	15MHz	36	39
	15.64	39765	2507.5	16QAM	15MHz	75	0
	16.21	39725	2503.5	16QAM	15MHz	1	0
	16.27	39725	2503.5	16QAM	15MHz	1	37
	16.36	39725	2503.5	16QAM	15MHz	1	74
	15.60	39725	2503.5	16QAM	15MHz	36	0
	15.60	39725	2503.5	16QAM	15MHz	36	19
	15.67	39725	2503.5	16QAM	15MHz	36	39
	15.58	39725	2503.5	16QAM	15MHz	75	0
	16.59	40173	2548.3	16QAM	15MHz	1	0
	16.51	40173	2548.3	16QAM	15MHz	1	37
	16.54	40173	2548.3	16QAM	15MHz	1	74
	15.91	40173	2548.3	16QAM	15MHz	36	0
	15.90	40173	2548.3	16QAM	15MHz	36	19
	15.91	40173	2548.3	16QAM	15MHz	36	39
	15.78	40173	2548.3	16QAM	15MHz	75	0
	16.40	40620	2593	16QAM	15MHz	1	0
	16.40	40620	2593	16QAM	15MHz	1	37
	16.41	40620	2593	16QAM	15MHz	1	74
	15.76	40620	2593	16QAM	15MHz	36	0
	15.71	40620	2593	16QAM	15MHz	36	19
	15.74	40620	2593	16QAM	15MHz	36	39
	15.66	40620	2593	16QAM	15MHz	75	0
	16.65	41068	2637.8	16QAM	15MHz	1	0
	16.67	41068	2637.8	16QAM	15MHz	1	37
	16.63	41068	2637.8	16QAM	15MHz	1	74
	15.98	41068	2637.8	16QAM	15MHz	36	0
	16.04	41068	2637.8	16QAM	15MHz	36	19
	16.05	41068	2637.8	16QAM	15MHz	36	39
	15.89	41068	2637.8	16QAM	15MHz	75	0
	16.97	41515	2682.5	16QAM	15MHz	1	0
	16.98	41515	2682.5	16QAM	15MHz	1	37
16.94	41515	2682.5	16QAM	15MHz	1	74	
15.81	41515	2682.5	16QAM	15MHz	36	0	
15.83	41515	2682.5	16QAM	15MHz	36	19	
15.78	41515	2682.5	16QAM	15MHz	36	39	
15.82	41515	2682.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 41	17.58	39790	2510	QPSK	20MHz	1	0
	17.63	39790	2510	QPSK	20MHz	1	49
	17.71	39790	2510	QPSK	20MHz	1	99
	16.55	39790	2510	QPSK	20MHz	50	0
	16.52	39790	2510	QPSK	20MHz	50	25
	16.54	39790	2510	QPSK	20MHz	50	50
	16.55	39790	2510	QPSK	20MHz	100	0
	17.55	39750	2506	QPSK	20MHz	1	0
	17.60	39750	2506	QPSK	20MHz	1	49
	17.67	39750	2506	QPSK	20MHz	1	99
	16.48	39750	2506	QPSK	20MHz	50	0
	16.52	39750	2506	QPSK	20MHz	50	25
	16.56	39750	2506	QPSK	20MHz	50	50
	16.61	39750	2506	QPSK	20MHz	100	0
	17.94	40185	2549.5	QPSK	20MHz	1	0
	17.87	40185	2549.5	QPSK	20MHz	1	49
	17.77	40185	2549.5	QPSK	20MHz	1	99
	16.74	40185	2549.5	QPSK	20MHz	50	0
	16.73	40185	2549.5	QPSK	20MHz	50	25
	16.70	40185	2549.5	QPSK	20MHz	50	50
	16.77	40185	2549.5	QPSK	20MHz	100	0
	17.73	40620	2593	QPSK	20MHz	1	0
	17.67	40620	2593	QPSK	20MHz	1	49
	17.75	40620	2593	QPSK	20MHz	1	99
	16.60	40620	2593	QPSK	20MHz	50	0
	16.56	40620	2593	QPSK	20MHz	50	25
	16.57	40620	2593	QPSK	20MHz	50	50
	16.61	40620	2593	QPSK	20MHz	100	0
	17.73	41055	2636.5	QPSK	20MHz	1	0
	17.68	41055	2636.5	QPSK	20MHz	1	49
	17.69	41055	2636.5	QPSK	20MHz	1	99
	16.82	41055	2636.5	QPSK	20MHz	50	0
	16.85	41055	2636.5	QPSK	20MHz	50	25
	16.83	41055	2636.5	QPSK	20MHz	50	50
	16.86	41055	2636.5	QPSK	20MHz	100	0
	17.84	41490	2680	QPSK	20MHz	1	0
	17.78	41490	2680	QPSK	20MHz	1	49
	17.85	41490	2680	QPSK	20MHz	1	99
	16.72	41490	2680	QPSK	20MHz	50	0
	16.69	41490	2680	QPSK	20MHz	50	25
	16.68	41490	2680	QPSK	20MHz	50	50
16.74	41490	2680	QPSK	20MHz	100	0	
16.75	39790	2510	16QAM	20MHz	1	0	
16.76	39790	2510	16QAM	20MHz	1	49	
16.84	39790	2510	16QAM	20MHz	1	99	
15.54	39790	2510	16QAM	20MHz	50	0	
15.55	39790	2510	16QAM	20MHz	50	25	



LTE Band 41	15.60	39790	2510	16QAM	20MHz	50	50
	15.63	39790	2510	16QAM	20MHz	100	0
	16.68	39750	2506	16QAM	20MHz	1	0
	16.78	39750	2506	16QAM	20MHz	1	49
	16.86	39750	2506	16QAM	20MHz	1	99
	15.51	39750	2506	16QAM	20MHz	50	0
	15.54	39750	2506	16QAM	20MHz	50	25
	15.58	39750	2506	16QAM	20MHz	50	50
	15.63	39750	2506	16QAM	20MHz	100	0
	16.99	40185	2549.5	16QAM	20MHz	1	0
	16.89	40185	2549.5	16QAM	20MHz	1	49
	16.91	40185	2549.5	16QAM	20MHz	1	99
	15.74	40185	2549.5	16QAM	20MHz	50	0
	15.78	40185	2549.5	16QAM	20MHz	50	25
	15.76	40185	2549.5	16QAM	20MHz	50	50
	15.84	40185	2549.5	16QAM	20MHz	100	0
	16.87	40620	2593	16QAM	20MHz	1	0
	16.84	40620	2593	16QAM	20MHz	1	49
	16.87	40620	2593	16QAM	20MHz	1	99
	15.63	40620	2593	16QAM	20MHz	50	0
	15.68	40620	2593	16QAM	20MHz	50	25
	15.66	40620	2593	16QAM	20MHz	50	50
	15.68	40620	2593	16QAM	20MHz	100	0
	16.98	41055	2636.5	16QAM	20MHz	1	0
	16.95	41055	2636.5	16QAM	20MHz	1	49
	16.96	41055	2636.5	16QAM	20MHz	1	99
	15.86	41055	2636.5	16QAM	20MHz	50	0
	15.89	41055	2636.5	16QAM	20MHz	50	25
	15.90	41055	2636.5	16QAM	20MHz	50	50
	15.92	41055	2636.5	16QAM	20MHz	100	0
	16.96	41490	2680	16QAM	20MHz	1	0
	16.89	41490	2680	16QAM	20MHz	1	49
	16.97	41490	2680	16QAM	20MHz	1	99
	15.74	41490	2680	16QAM	20MHz	50	0
15.73	41490	2680	16QAM	20MHz	50	25	
15.74	41490	2680	16QAM	20MHz	50	50	
15.79	41490	2680	16QAM	20MHz	100	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.11	131979	1710.7	QPSK	1.4MHz	1	0
	20.17	131979	1710.7	QPSK	1.4MHz	1	2
	20.47	131979	1710.7	QPSK	1.4MHz	1	5
	20.24	131979	1710.7	QPSK	1.4MHz	3	0
	20.35	131979	1710.7	QPSK	1.4MHz	3	1
	20.28	131979	1710.7	QPSK	1.4MHz	3	3
	19.27	131979	1710.7	QPSK	1.4MHz	6	0
	20.14	132322	1745	QPSK	1.4MHz	1	0
	19.84	132322	1745	QPSK	1.4MHz	1	2
	20.36	132322	1745	QPSK	1.4MHz	1	5
	20.17	132322	1745	QPSK	1.4MHz	3	0
	20.03	132322	1745	QPSK	1.4MHz	3	1
	20.19	132322	1745	QPSK	1.4MHz	3	3
	19.18	132322	1745	QPSK	1.4MHz	6	0
	20.43	132665	1779.3	QPSK	1.4MHz	1	0
	19.94	132665	1779.3	QPSK	1.4MHz	1	2
	20.44	132665	1779.3	QPSK	1.4MHz	1	5
	19.80	132665	1779.3	QPSK	1.4MHz	3	0
	20.23	132665	1779.3	QPSK	1.4MHz	3	1
	20.07	132665	1779.3	QPSK	1.4MHz	3	3
	19.14	132665	1779.3	QPSK	1.4MHz	6	0
	19.85	131979	1710.7	16QAM	1.4MHz	1	0
	19.54	131979	1710.7	16QAM	1.4MHz	1	2
	19.62	131979	1710.7	16QAM	1.4MHz	1	5
	19.16	131979	1710.7	16QAM	1.4MHz	3	0
	19.12	131979	1710.7	16QAM	1.4MHz	3	1
	19.09	131979	1710.7	16QAM	1.4MHz	3	3
	18.33	131979	1710.7	16QAM	1.4MHz	6	0
	19.48	132322	1745	16QAM	1.4MHz	1	0
	19.70	132322	1745	16QAM	1.4MHz	1	2
	19.59	132322	1745	16QAM	1.4MHz	1	5
	18.93	132322	1745	16QAM	1.4MHz	3	0
	19.12	132322	1745	16QAM	1.4MHz	3	1
	18.94	132322	1745	16QAM	1.4MHz	3	3
	18.16	132322	1745	16QAM	1.4MHz	6	0
	19.91	132665	1779.3	16QAM	1.4MHz	1	0
	19.76	132665	1779.3	16QAM	1.4MHz	1	2
	19.77	132665	1779.3	16QAM	1.4MHz	1	5
	19.35	132665	1779.3	16QAM	1.4MHz	3	0
	19.27	132665	1779.3	16QAM	1.4MHz	3	1
19.27	132665	1779.3	16QAM	1.4MHz	3	3	
18.17	132665	1779.3	16QAM	1.4MHz	6	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.39	131987	1711.5	QPSK	3MHz	1	0
	20.43	131987	1711.5	QPSK	3MHz	1	7
	20.45	131987	1711.5	QPSK	3MHz	1	14
	19.14	131987	1711.5	QPSK	3MHz	8	0
	19.24	131987	1711.5	QPSK	3MHz	8	3
	19.33	131987	1711.5	QPSK	3MHz	8	7
	19.35	131987	1711.5	QPSK	3MHz	15	0
	20.13	132322	1745	QPSK	3MHz	1	0
	20.25	132322	1745	QPSK	3MHz	1	7
	20.43	132322	1745	QPSK	3MHz	1	14
	19.05	132322	1745	QPSK	3MHz	8	0
	19.11	132322	1745	QPSK	3MHz	8	3
	19.08	132322	1745	QPSK	3MHz	8	7
	19.22	132322	1745	QPSK	3MHz	15	0
	20.02	132657	1778.5	QPSK	3MHz	1	0
	20.38	132657	1778.5	QPSK	3MHz	1	7
	20.38	132657	1778.5	QPSK	3MHz	1	14
	19.03	132657	1778.5	QPSK	3MHz	8	0
	19.15	132657	1778.5	QPSK	3MHz	8	3
	19.33	132657	1778.5	QPSK	3MHz	8	7
	19.12	132657	1778.5	QPSK	3MHz	15	0
	19.09	131987	1711.5	16QAM	3MHz	1	0
	19.64	131987	1711.5	16QAM	3MHz	1	7
	19.26	131987	1711.5	16QAM	3MHz	1	14
	18.05	131987	1711.5	16QAM	3MHz	8	0
	18.04	131987	1711.5	16QAM	3MHz	8	3
	18.22	131987	1711.5	16QAM	3MHz	8	7
	18.07	131987	1711.5	16QAM	3MHz	15	0
	19.20	132322	1745	16QAM	3MHz	1	0
	19.80	132322	1745	16QAM	3MHz	1	7
	19.54	132322	1745	16QAM	3MHz	1	14
	18.13	132322	1745	16QAM	3MHz	8	0
	18.01	132322	1745	16QAM	3MHz	8	3
	18.13	132322	1745	16QAM	3MHz	8	7
	18.08	132322	1745	16QAM	3MHz	15	0
	19.46	132657	1778.5	16QAM	3MHz	1	0
	19.59	132657	1778.5	16QAM	3MHz	1	7
	19.68	132657	1778.5	16QAM	3MHz	1	14
	18.05	132657	1778.5	16QAM	3MHz	8	0
	18.15	132657	1778.5	16QAM	3MHz	8	3
18.23	132657	1778.5	16QAM	3MHz	8	7	
18.01	132657	1778.5	16QAM	3MHz	15	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.44	131997	1712.5	QPSK	5MHz	1	0
	20.43	131997	1712.5	QPSK	5MHz	1	12
	20.54	131997	1712.5	QPSK	5MHz	1	24
	19.19	131997	1712.5	QPSK	5MHz	12	0
	19.29	131997	1712.5	QPSK	5MHz	12	6
	19.26	131997	1712.5	QPSK	5MHz	12	13
	19.41	131997	1712.5	QPSK	5MHz	25	0
	20.34	132322	1745	QPSK	5MHz	1	0
	20.40	132322	1745	QPSK	5MHz	1	12
	20.30	132322	1745	QPSK	5MHz	1	24
	19.17	132322	1745	QPSK	5MHz	12	0
	19.18	132322	1745	QPSK	5MHz	12	6
	19.18	132322	1745	QPSK	5MHz	12	13
	19.29	132322	1745	QPSK	5MHz	25	0
	20.04	132647	1777.5	QPSK	5MHz	1	0
	19.62	132647	1777.5	QPSK	5MHz	1	12
	20.36	132647	1777.5	QPSK	5MHz	1	24
	19.01	132647	1777.5	QPSK	5MHz	12	0
	19.11	132647	1777.5	QPSK	5MHz	12	6
	19.16	132647	1777.5	QPSK	5MHz	12	13
	19.22	132647	1777.5	QPSK	5MHz	25	0
	19.72	131997	1712.5	16QAM	5MHz	1	0
	19.29	131997	1712.5	16QAM	5MHz	1	12
	19.56	131997	1712.5	16QAM	5MHz	1	24
	18.07	131997	1712.5	16QAM	5MHz	12	0
	18.28	131997	1712.5	16QAM	5MHz	12	6
	18.32	131997	1712.5	16QAM	5MHz	12	13
	18.29	131997	1712.5	16QAM	5MHz	25	0
	19.72	132322	1745	16QAM	5MHz	1	0
	19.52	132322	1745	16QAM	5MHz	1	12
	19.41	132322	1745	16QAM	5MHz	1	24
	18.04	132322	1745	16QAM	5MHz	12	0
	18.18	132322	1745	16QAM	5MHz	12	6
	18.07	132322	1745	16QAM	5MHz	12	13
	18.14	132322	1745	16QAM	5MHz	25	0
	19.42	132647	1777.5	16QAM	5MHz	1	0
	19.02	132647	1777.5	16QAM	5MHz	1	12
	19.24	132647	1777.5	16QAM	5MHz	1	24
	18.06	132647	1777.5	16QAM	5MHz	12	0
	18.11	132647	1777.5	16QAM	5MHz	12	6
18.02	132647	1777.5	16QAM	5MHz	12	11	
18.07	132647	1777.5	16QAM	5MHz	25	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.40	132022	1715	QPSK	10MHz	1	0
	20.54	132022	1715	QPSK	10MHz	1	24
	20.76	132022	1715	QPSK	10MHz	1	49
	19.42	132022	1715	QPSK	10MHz	25	0
	19.42	132022	1715	QPSK	10MHz	25	12
	19.56	132022	1715	QPSK	10MHz	25	25
	19.56	132022	1715	QPSK	10MHz	50	0
	20.23	132322	1745	QPSK	10MHz	1	0
	20.38	132322	1745	QPSK	10MHz	1	24
	20.64	132322	1745	QPSK	10MHz	1	49
	19.23	132322	1745	QPSK	10MHz	25	0
	19.26	132322	1745	QPSK	10MHz	25	12
	19.28	132322	1745	QPSK	10MHz	25	25
	19.37	132322	1745	QPSK	10MHz	50	0
	20.05	132622	1775	QPSK	10MHz	1	0
	20.27	132622	1775	QPSK	10MHz	1	24
	20.37	132622	1775	QPSK	10MHz	1	49
	19.03	132622	1775	QPSK	10MHz	25	0
	19.09	132622	1775	QPSK	10MHz	25	12
	19.32	132622	1775	QPSK	10MHz	25	25
	19.23	132622	1775	QPSK	10MHz	50	0
	19.87	132022	1715	16QAM	10MHz	1	0
	19.59	132022	1715	16QAM	10MHz	1	24
	19.85	132022	1715	16QAM	10MHz	1	49
	18.34	132022	1715	16QAM	10MHz	25	0
	18.41	132022	1715	16QAM	10MHz	25	12
	18.41	132022	1715	16QAM	10MHz	25	25
	18.48	132022	1715	16QAM	10MHz	50	0
	19.43	132322	1745	16QAM	10MHz	1	0
	19.31	132322	1745	16QAM	10MHz	1	24
	19.96	132322	1745	16QAM	10MHz	1	49
	18.22	132322	1745	16QAM	10MHz	25	0
	18.10	132322	1745	16QAM	10MHz	25	12
	18.27	132322	1745	16QAM	10MHz	25	25
	18.29	132322	1745	16QAM	10MHz	50	0
	19.29	132622	1775	16QAM	10MHz	1	0
	19.37	132622	1775	16QAM	10MHz	1	24
	19.37	132622	1775	16QAM	10MHz	1	49
	18.01	132622	1775	16QAM	10MHz	25	0
	18.20	132622	1775	16QAM	10MHz	25	12
18.44	132622	1775	16QAM	10MHz	25	25	
18.11	132622	1775	16QAM	10MHz	50	0	



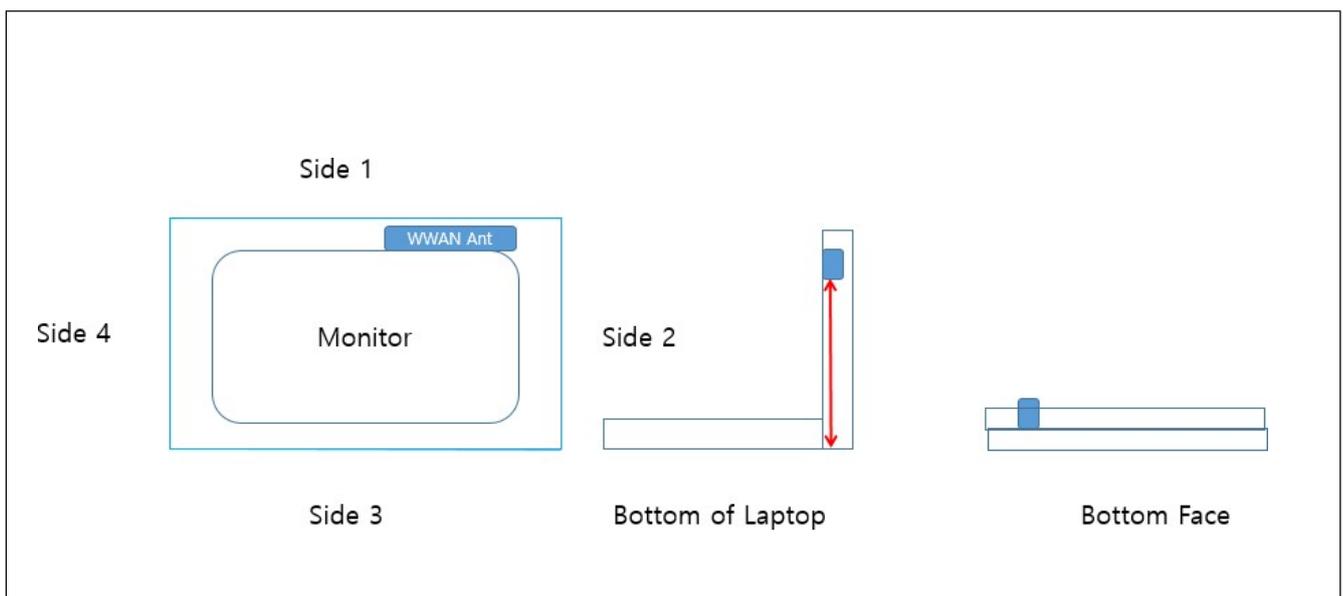
	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.47	132047	1717.5	QPSK	15MHz	1	0
	20.53	132047	1717.5	QPSK	15MHz	1	37
	20.35	132047	1717.5	QPSK	15MHz	1	74
	19.52	132047	1717.5	QPSK	15MHz	36	0
	19.62	132047	1717.5	QPSK	15MHz	36	19
	19.60	132047	1717.5	QPSK	15MHz	36	39
	19.73	132047	1717.5	QPSK	15MHz	75	0
	20.42	132322	1745	QPSK	15MHz	1	0
	20.35	132322	1745	QPSK	15MHz	1	37
	20.65	132322	1745	QPSK	15MHz	1	74
	19.22	132322	1745	QPSK	15MHz	36	0
	19.30	132322	1745	QPSK	15MHz	36	19
	19.42	132322	1745	QPSK	15MHz	36	39
	19.46	132322	1745	QPSK	15MHz	75	0
	20.32	132597	1772.5	QPSK	15MHz	1	0
	20.08	132597	1772.5	QPSK	15MHz	1	37
	20.52	132597	1772.5	QPSK	15MHz	1	74
	19.18	132597	1772.5	QPSK	15MHz	36	0
	19.05	132597	1772.5	QPSK	15MHz	36	19
	19.15	132597	1772.5	QPSK	15MHz	36	39
	19.28	132597	1772.5	QPSK	15MHz	75	0
	19.18	132047	1717.5	16QAM	15MHz	1	0
	19.97	132047	1717.5	16QAM	15MHz	1	37
	19.88	132047	1717.5	16QAM	15MHz	1	74
	18.40	132047	1717.5	16QAM	15MHz	36	0
	18.58	132047	1717.5	16QAM	15MHz	36	19
	18.44	132047	1717.5	16QAM	15MHz	36	39
	18.71	132047	1717.5	16QAM	15MHz	75	0
	19.64	132322	1745	16QAM	15MHz	1	0
	19.33	132322	1745	16QAM	15MHz	1	37
	19.46	132322	1745	16QAM	15MHz	1	74
	18.14	132322	1745	16QAM	15MHz	36	0
	18.15	132322	1745	16QAM	15MHz	36	19
	18.30	132322	1745	16QAM	15MHz	36	39
	18.36	132322	1745	16QAM	15MHz	75	0
	19.53	132597	1772.5	16QAM	15MHz	1	0
	19.03	132597	1772.5	16QAM	15MHz	1	37
	19.58	132597	1772.5	16QAM	15MHz	1	74
	18.02	132597	1772.5	16QAM	15MHz	36	0
	18.03	132597	1772.5	16QAM	15MHz	36	19
18.06	132597	1772.5	16QAM	15MHz	36	39	
18.21	132597	1772.5	16QAM	15MHz	75	0	



	Maximum Average Power (dBm)	EARFCN	Freq. (MHz)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
LTE Band 66	20.48	132072	1720	QPSK	20MHz	1	0
	20.53	132072	1720	QPSK	20MHz	1	49
	20.30	132072	1720	QPSK	20MHz	1	99
	19.60	132072	1720	QPSK	20MHz	50	0
	19.60	132072	1720	QPSK	20MHz	50	25
	19.54	132072	1720	QPSK	20MHz	50	50
	19.79	132072	1720	QPSK	20MHz	100	0
	20.43	132322	1745	QPSK	20MHz	1	0
	20.29	132322	1745	QPSK	20MHz	1	49
	20.64	132322	1745	QPSK	20MHz	1	99
	19.30	132322	1745	QPSK	20MHz	50	0
	19.39	132322	1745	QPSK	20MHz	50	25
	19.52	132322	1745	QPSK	20MHz	50	50
	19.60	132322	1745	QPSK	20MHz	100	0
	20.40	132572	1770	QPSK	20MHz	1	0
	20.26	132572	1770	QPSK	20MHz	1	49
	20.56	132572	1770	QPSK	20MHz	1	99
	19.33	132572	1770	QPSK	20MHz	50	0
	19.19	132572	1770	QPSK	20MHz	50	25
	19.24	132572	1770	QPSK	20MHz	50	50
	19.38	132572	1770	QPSK	20MHz	100	0
	19.10	132072	1720	16QAM	20MHz	1	0
	19.54	132072	1720	16QAM	20MHz	1	49
	19.82	132072	1720	16QAM	20MHz	1	99
	18.52	132072	1720	16QAM	20MHz	50	0
	18.57	132072	1720	16QAM	20MHz	50	25
	18.45	132072	1720	16QAM	20MHz	50	50
	18.74	132072	1720	16QAM	20MHz	100	0
	19.83	132322	1745	16QAM	20MHz	1	0
	19.76	132322	1745	16QAM	20MHz	1	49
	19.83	132322	1745	16QAM	20MHz	1	99
	18.27	132322	1745	16QAM	20MHz	50	0
	18.31	132322	1745	16QAM	20MHz	50	25
	18.57	132322	1745	16QAM	20MHz	50	50
	18.61	132322	1745	16QAM	20MHz	100	0
	19.45	132572	1770	16QAM	20MHz	1	0
	19.32	132572	1770	16QAM	20MHz	1	49
	19.36	132572	1770	16QAM	20MHz	1	99
	18.23	132572	1770	16QAM	20MHz	50	0
	18.22	132572	1770	16QAM	20MHz	50	25
18.13	132572	1770	16QAM	20MHz	50	50	
18.44	132572	1770	16QAM	20MHz	100	0	

7.9 Antenna location

Band	Test Position Configurations					
	Bottom Laptop (mm)	Side 1 (mm)	Side 2 (mm)	Side 3 (mm)	Side 4 (mm)	Bottom Face (mm)
WWAN	188.7mm	<5mm	28.57mm	188.97mm	181.59mm	<5mm





7.10 Standalone SAR Test Exclusion Calculation

Body SAR test reduction															
Ant. Used	Band	Frequency	Tune-Power		Distance of Ant. To User (mm)					Calculated value and evaluated result					exclusion threshold
		(GHz)	(dBm)	(mW)	Bottom Face	Side1	Side2	Side3	Side4	Bottom Face	Side1	Side2	Side3	Side4	
WWAN Antenna	WCDMA II	1.907	24.5	282	5.00	4.67	28.57	188.97	181.59	77.9	77.9	13.6	1498.0	1425.0	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	WCDMA IV	1.750	24.5	282	5.00	4.67	28.57	188.97	181.59	74.6	74.6	13.1	1503.0	1429.0	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	WCDMA V	0.846	24.5	282	5.00	4.67	28.57	188.97	181.59	51.9	51.9	9.1	946.9mW	905.2mW	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 2	1.909	24	251	5.00	4.67	28.57	188.97	181.59	69.4	69.4	12.1	1498.0	1424.0	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 4	1.754	24	251	5.00	4.67	28.57	188.97	181.59	66.5	66.5	11.6	1503.0	1429.0	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 5	0.848	24	251	5.00	4.67	28.57	188.97	181.59	46.2	46.2	8.1	948.5mW	906.8mW	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 7	2.567	24	251	5.00	4.67	28.57	188.97	181.59	80.4	80.4	14.1	1483.0	1410.0	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 12	0.715	24	251	5.00	4.67	28.57	188.97	181.59	42.5	42.5	7.4	839.8mW	804.6mW	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE 13	0.783	24	251	5.00	4.67	28.57	188.97	181.59	44.4	44.4	7.8	894.9mW	856.4mW	3
										MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
LTE 17	0.713	24	251	5.00	4.67	28.57	188.97	181.59	42.4	42.4	7.4	838.2mW	803.1mW	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 25	1.914	24	251	5.00	4.67	28.57	188.97	181.59	69.5	69.5	12.2	1498.0	1424.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 26	0.848	24	251	5.00	4.67	28.57	188.97	181.59	46.2	46.2	8.1	948.5mW	906.8mW	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 30	2.313	24	251	5.00	4.67	28.57	188.97	181.59	76.4	76.4	13.4	1488.0	1415.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 38	2.618	24	251	5.00	4.67	28.57	188.97	181.59	81.2	81.2	14.2	1482.0	1409.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 40	2.358	24	251	5.00	4.67	28.57	188.97	181.59	77.1	77.1	13.5	1487.0	1414.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 41	2.687	24	251	5.00	4.67	28.57	188.97	181.59	82.3	82.3	14.4	1481.0	1407.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		
LTE 66	1.773	24	251	5.00	4.67	28.57	188.97	181.59	66.8	66.8	11.7	1502.0	1429.0	3	
									MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT		



Note:

1. The test reduction for distance less than 50mm and more than 50mm. Use the max power to make sure minimum distance by evaluated for SAR testing.
2. For 100 MHz to 6 GHz and test separation distances > 50 mm, According to KDB 447498, if the calculated Power threshold is less than the output power then SAR testing is required.
3. For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following: According to KDB 447498, if the calculated threshold value are >3 then Body SAR and >7.5 then Limbs SAR testing are required. Calculated Value only include number format, that is mean through compare output power with threshold, if the Calculated value more than 3, the SAR test should be perform. Otherwise, the SAR test could be exempt. (<50mm)
4. When an antenna qualifies for the standalone SAR test exclusion of KDB 447498 section 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value must be estimated according to KDB 447498 section "4.3.2. Simultaneous transmission SAR test exclusion considerations b)"
5. We used the highest frequency and power, and evaluated the results in the worst case.
6. Power and distance are rounded to the nearest mW and mm before calculation.
7. The result is rounded to one decimal place for comparison.
8. The Devices has actually tested the exemption from SAR.



7.11 Simultaneous Transmitting Evaluate

Simultaneous transmission configurations as below:

Condition(s)	Band					
	WWAN	WLAN 2.4GHz Main	WLAN 2.4GHz Aux	WLAN 5GHz Main	WLAN 5GHz Aux	Bluetooth
1	V	V				V
2	V	V	V			
3	V			V		V
4	V			V	V	
5	V			V	V	V

7.11.1 Sum of 1-g SAR of all simultaneously transmitting

When the sum of 1-g SAR of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.

Sum of 1-g SAR of summary as below:

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2+6 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant Main	WLAN2.4GHz Ant Aux	WLAN5GHz Ant Main	WLAN5GHz Ant Aux	Bluetooth Ant Aux					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)					
WCDMA Band II	Bottom Face at 0mm -	0.789	0.126	0.147	0.615	0.076	0.058	0.97	1.06	1.46	1.48	1.54
	side 1 at 0mm -	0.977	0.010	0.001	0.088	0.020	0.002	0.99	0.99	1.07	1.09	1.09
	side 2 at 0mm -	0.121	0.052	0.001	0.798	0.001	0.002	0.18	0.17	0.92	0.92	0.92
	side 3 at 0mm -	0.079	0.002	0.001	0.001	0.001	0.002	0.08	0.08	0.08	0.08	0.08
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
WCDMA Band IV	Bottom Face at 0mm -	0.798	0.126	0.147	0.615	0.076	0.058	0.98	1.07	1.47	1.49	1.55
	side 1 at 0mm -	1.036	0.010	0.001	0.088	0.020	0.002	1.05	1.05	1.13	1.14	1.15
	side 2 at 0mm -	0.198	0.052	0.001	0.798	0.001	0.002	0.25	0.25	1.00	1.00	1.00
	side 3 at 0mm -	0.024	0.002	0.001	0.001	0.001	0.002	0.03	0.03	0.03	0.03	0.03
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
WCDMA Band V	Bottom Face at 0mm -	0.312	0.126	0.147	0.615	0.076	0.058	0.50	0.59	0.99	1.00	1.06
	side 1 at 0mm -	1.047	0.010	0.001	0.088	0.020	0.002	1.06	1.06	1.14	1.16	1.16
	side 2 at 0mm -	0.240	0.052	0.001	0.798	0.001	0.002	0.29	0.29	1.04	1.04	1.04
	side 3 at 0mm -	0.039	0.002	0.001	0.001	0.001	0.002	0.04	0.04	0.04	0.04	0.04
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04



WWAN Band	Exposure Position	1	2	3	4	5	6	1+2+6 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant Main	WLAN2.4GHz Ant Aux	WLAN5GHz Ant Main	WLAN5GHz Ant Aux	Bluetooth Ant Aux					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)					
LTE Band 2	Bottom Face at 0mm -	0.744	0.126	0.147	0.615	0.076	0.058	0.93	1.02	1.42	1.44	1.49
	side 1 at 0mm -	0.934	0.010	0.001	0.088	0.020	0.002	0.95	0.95	1.02	1.04	1.04
	side 2 at 0mm -	0.124	0.052	0.001	0.798	0.001	0.002	0.18	0.18	0.92	0.92	0.93
	side 3 at 0mm -	0.085	0.002	0.001	0.001	0.001	0.002	0.09	0.09	0.09	0.09	0.09
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 5	Bottom Face at 0mm -	0.418	0.126	0.147	0.615	0.076	0.058	0.60	0.69	1.09	1.11	1.17
	side 1 at 0mm -	1.057	0.010	0.001	0.088	0.020	0.002	1.07	1.07	1.15	1.17	1.17
	side 2 at 0mm -	0.302	0.052	0.001	0.798	0.001	0.002	0.36	0.36	1.10	1.10	1.10
	side 3 at 0mm -	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.00	0.00	0.00	0.01
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 7	Bottom Face at 0mm -	0.826	0.126	0.147	0.615	0.076	0.058	1.01	1.10	1.50	1.52	1.58
	side 1 at 0mm -	0.970	0.010	0.001	0.088	0.020	0.002	0.98	0.98	1.06	1.08	1.08
	side 2 at 0mm -	0.443	0.052	0.001	0.798	0.001	0.002	0.50	0.50	1.24	1.24	1.24
	side 3 at 0mm -	0.075	0.002	0.001	0.001	0.001	0.002	0.08	0.08	0.08	0.08	0.08
	side 4 at 0mm -	0.048	0.001	0.048	0.001	0.029	0.009	0.06	0.10	0.06	0.08	0.09
LTE Band 12/17	Bottom Face at 0mm -	0.226	0.126	0.147	0.615	0.076	0.058	0.41	0.50	0.90	0.92	0.98
	side 1 at 0mm -	0.607	0.010	0.001	0.088	0.020	0.002	0.62	0.62	0.70	0.72	0.72
	side 2 at 0mm -	0.602	0.052	0.001	0.798	0.001	0.002	0.66	0.66	1.40	1.40	1.40
	side 3 at 0mm -	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.00	0.00	0.00	0.01
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 13	Bottom Face at 0mm -	0.373	0.126	0.147	0.615	0.076	0.058	0.56	0.65	1.05	1.06	1.12
	side 1 at 0mm -	1.078	0.010	0.001	0.088	0.020	0.002	1.09	1.09	1.17	1.19	1.19
	side 2 at 0mm -	0.084	0.052	0.001	0.798	0.001	0.002	0.14	0.14	0.88	0.88	0.89
	side 3 at 0mm -	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.00	0.00	0.00	0.01
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 26	Bottom Face at 0mm -	0.301	0.126	0.147	0.615	0.076	0.058	0.49	0.57	0.97	0.99	1.05
	side 1 at 0mm -	0.877	0.010	0.001	0.088	0.020	0.002	0.89	0.89	0.97	0.99	0.99
	side 2 at 0mm -	0.211	0.052	0.001	0.798	0.001	0.002	0.27	0.26	1.01	1.01	1.01
	side 3 at 0mm -	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.00	0.00	0.00	0.01
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04



WWAN Band	Exposure Position	1	2	3	4	5	6	1+2+6 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant Main	WLAN2.4GHz Ant Aux	WLAN5GHz Ant Main	WLAN5GHz Ant Aux	Bluetooth Ant Aux					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)					
LTE Band 4/66	Bottom Face at 0mm -	0.717	0.126	0.147	0.615	0.076	0.058	0.90	0.99	1.39	1.41	1.47
	side 1 at 0mm -	0.997	0.010	0.001	0.088	0.020	0.002	1.01	1.01	1.09	1.11	1.11
	side 2 at 0mm -	0.146	0.052	0.001	0.798	0.001	0.002	0.20	0.20	0.95	0.95	0.95
	side 3 at 0mm -	0.105	0.002	0.001	0.001	0.001	0.002	0.11	0.11	0.11	0.11	0.11
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 30	Bottom Face at 0mm -	0.829	0.126	0.147	0.615	0.076	0.058	1.01	1.10	1.50	1.52	1.58
	side 1 at 0mm -	1.067	0.010	0.001	0.088	0.020	0.002	1.08	1.08	1.16	1.18	1.18
	side 2 at 0mm -	0.789	0.052	0.001	0.798	0.001	0.002	0.84	0.84	1.59	1.59	1.59
	side 3 at 0mm -	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.00	0.00	0.00	0.01
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04
LTE Band 38/41	Bottom Face at 0mm -	0.449	0.126	0.147	0.615	0.076	0.058	0.63	0.72	1.12	1.14	1.20
	side 1 at 0mm -	0.914	0.010	0.001	0.088	0.020	0.002	0.93	0.93	1.00	1.02	1.02
	side 2 at 0mm -	0.377	0.052	0.001	0.798	0.001	0.002	0.43	0.43	1.18	1.18	1.18
	side 3 at 0mm -	0.102	0.002	0.001	0.001	0.001	0.002	0.11	0.11	0.11	0.10	0.11
	side 4 at 0mm -	0.001	0.001	0.048	0.001	0.029	0.009	0.01	0.05	0.01	0.03	0.04



WWAN Band	Exposure Position	1	2	3	4	5	6	1+2+6 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant Main	WLAN2.4GHz Ant Aux	WLAN5GHz Ant Main	WLAN5GHz Ant Aux	Bluetooth Ant Aux					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)					
WCDMA Band II	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.819	0.001	0.001	0.002	0.001	0.002	0.82	0.82	0.82	0.82	0.82
WCDMA Band IV	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.725	0.001	0.001	0.002	0.001	0.002	0.73	0.73	0.73	0.73	0.73
WCDMA Band V	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.173	0.001	0.001	0.002	0.001	0.002	0.18	0.18	0.18	0.18	0.18
LTE Band 2	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.670	0.001	0.001	0.002	0.001	0.002	0.67	0.67	0.67	0.67	0.68
LTE Band 5	Bottom of laptop at 0mm	0.071	0.625	0.396	0.937	0.171	0.321	1.02	1.09	1.33	1.18	1.50
	Back of display screen at 25mm	0.308	0.001	0.001	0.002	0.001	0.002	0.31	0.31	0.31	0.31	0.31
LTE Band 7	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.396	0.001	0.001	0.002	0.001	0.002	0.40	0.40	0.40	0.40	0.40
LTE Band 12/17	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.147	0.001	0.001	0.002	0.001	0.002	0.15	0.15	0.15	0.15	0.15
LTE Band 13	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.206	0.001	0.001	0.002	0.001	0.002	0.21	0.21	0.21	0.21	0.21
LTE Band 26	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.220	0.001	0.001	0.002	0.001	0.002	0.22	0.22	0.22	0.22	0.23
LTE Band 4/66	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.511	0.001	0.001	0.002	0.001	0.002	0.51	0.51	0.52	0.51	0.52
LTE Band 30	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.202	0.001	0.001	0.002	0.001	0.002	0.21	0.20	0.21	0.21	0.21
LTE Band 38/41	Bottom of laptop at 0mm	0.001	0.625	0.396	0.937	0.171	0.321	0.95	1.02	1.26	1.11	1.43
	Back of display screen at 25mm	0.293	0.001	0.001	0.002	0.001	0.002	0.30	0.30	0.30	0.30	0.30

8. System Verification and Validation

8.1 Symmetric Dipoles for System Verification

Construction Symmetrical dipole with 1/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.

Return Loss > 20 dB at specified verification position

Options Dipoles for other frequencies or solutions and other calibration conditions are available upon request

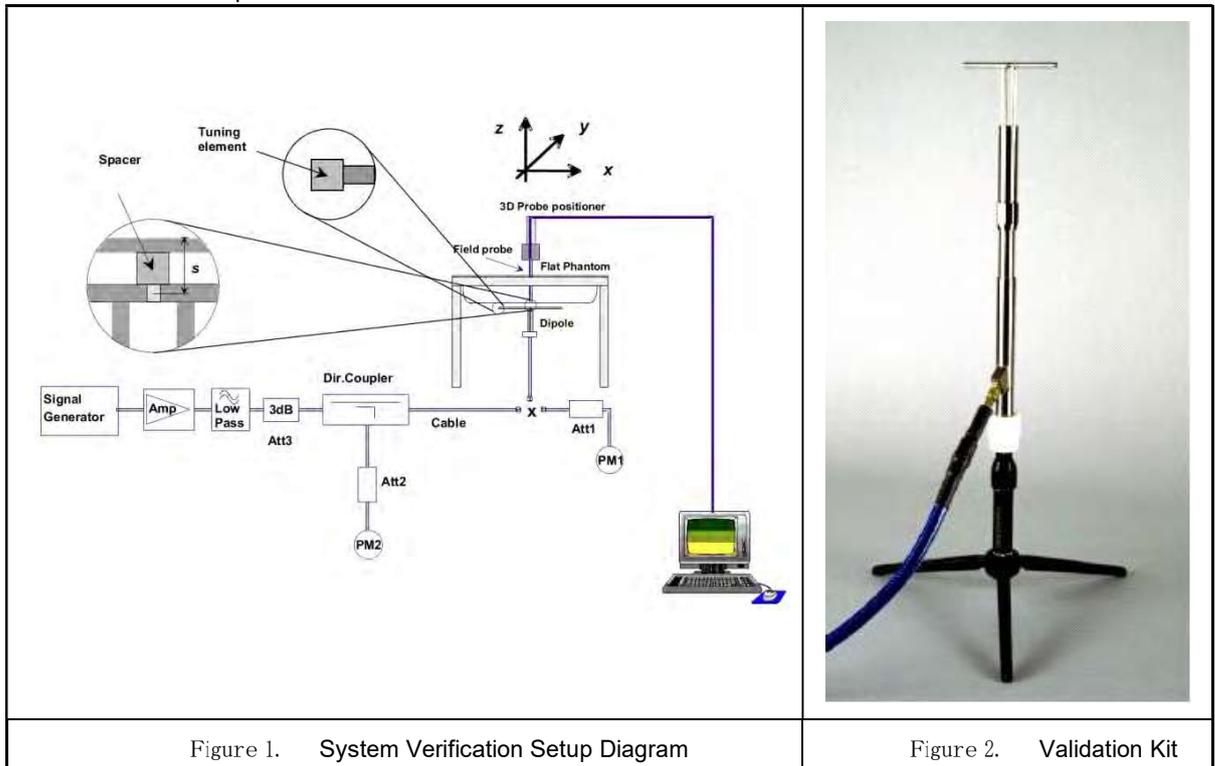


Figure 1. System Verification Setup Diagram

Figure 2. Validation Kit

8.2 Verification Summary

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 10\%$. The measured SAR will be normalized to 1 W input power. The verification was performed at 2450, 5250, 5600 and 5750 MHz.

Mixture Type	Frequency (MHz)	Power	Probe	Dipole	SAR _{1g} (W/Kg)	Normalize to 1 Watt 1 g (W/Kg)	1 W Target SAR _{1g} (W/Kg)	SAR _{10g} (W/Kg)	Normalize to 1 Watt 10 g (W/Kg)	1 W Target SAR _{10g} (W/Kg)	Difference percentage 1 g	Difference percentage 10 g	Date
			Model / Serial No.	Model / Serial No.									
Head	750	250 mW	EX3DV4-S N3847	D750V3 – SN1004	2.15	8.6	8.37	1.44	5.76	5.48	2.7%	5.1%	Dec. 11, 2020
Head	750	250 mW	EX3DV4-S N3847	D750V3 – SN1004	2.12	8.48	8.37	1.39	5.56	5.48	1.3%	1.5%	Dec. 12, 2020
Head	835	250 mW	EX3DV4-S N3847	D835V2 – SN4d082	2.57	10.28	9.49	1.65	6.6	6.17	8.3%	7.0%	Dec. 09, 2020
Head	835	250 mW	EX3DV4-S N3847	D835V2 – SN4d082	2.45	9.8	9.49	1.55	6.2	6.17	3.3%	0.5%	Dec. 10, 2020
Head	1750	250 mW	EX3DV4-S N3847	D1750V2 – SN1023	9.63	38.52	35.70	4.99	19.96	18.70	7.9%	6.7%	Dec. 07, 2020
Head	1750	250 mW	EX3DV4-S N3847	D1750V2 – SN1023	9.3	37.2	35.70	4.9	19.6	18.70	4.2%	4.8%	Dec. 08, 2020
Head	1900	250 mW	EX3DV4-S N3847	D1900V2 – SN5d111	10.4	41.6	40.10	5.38	21.52	20.70	3.7%	4.0%	Dec. 05, 2020
Head	1900	250 mW	EX3DV4-S N3847	D1900V2 – SN5d111	10.3	41.2	40.10	5.24	20.96	20.70	2.7%	1.3%	Dec. 06, 2020
Head	2300	250 mW	EX3DV4-S N3847	D2300V2 – SN1005	11.2	44.8	48.20	5.23	20.92	22.90	-7.1%	-8.6%	Dec. 03, 2020
Head	2300	250 mW	EX3DV4-S N3847	D2300V2 – SN1005	12.6	50.4	48.20	5.89	23.56	22.90	4.6%	2.9%	Dec. 04, 2020
Head	2600	250 mW	EX3DV4-S N3847	D2600V2 – SN1007	14.7	58.8	57.30	6.97	27.88	25.90	2.6%	7.6%	Dec. 01, 2020
Head	2600	250 mW	EX3DV4-S N3847	D2600V2 – SN1007	13.9	55.6	57.30	6.49	25.96	25.90	-3.0%	0.2%	Dec. 02, 2020



9. Test Equipment List

Testing Engineer: Jason Tsao

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Cal. Date	Cal.Period
SPEAG	750MHz System Validation Kit	D750V3	1004	2020/09/17	1 year
SPEAG	835MHz System Validation Kit	D835V2	4d082	2020/09/17	1 year
SPEAG	900MHz System Validation Kit	D900V2	073	2020/05/08	1 year
SPEAG	1750MHz System Validation Kit	D1750V2	1023	2020/06/18	1 year
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	2020/09/18	1 year
SPEAG	1950MHz System Validation Kit	D1950V3	1117	2020/04/28	1 year
SPEAG	2300MHz System Validation Kit	D2300V2	1005	2020/04/26	1 year
SPEAG	2600MHz System Validation Kit	D2600V2	1007	2020/09/29	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	3847	2020/05/20	1 year
SPEAG	Data Acquisition Electronics	DAE4	541	2020/03/18	1 year
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Phantom	ELI V4.0	1036	NCR	
SPEAG	Robot	Staubli TX90XL	F16/54FTA1/A/01	NCR	
SPEAG	Software	DASY52 V52.10 (3)	N/A	NCR	
SPEAG	Software	SEMCAD X V14.6.10(7331)	N/A	NCR	
R&S	Wireless Communication Test Set	CMU200	112387	2020/05/15	1 year
Anritsu	Radio Communication Analyzer	MT8820C	6201342039	2020/12/03	1 year
R&S	Wideband Radio Communication Tester	CMW500	103168	2020/11/20	1 year
SPEAG	Network Analyzer	DAKS_VNA R140	0010318	2020/05/26	1 year
SPEAG	Dielectric Probe Kit	DAKS-3.5	1101	2020/05/26	1 year
HILA	Digital Thermometer	TM-906A	1500033	2020/10/28	1 year
Agilent	Power Sensor	8481H	3318A20779	2020/06/09	1 year
Agilent	Power Meter	EDM Series E4418B	GB40206143	2020/06/09	1 year
Agilent	Signal Generator	E8257D	MY44320425	2020/03/04	1 year
Agilent	Dual Directional Coupler	778D	50334	NCR	
Woken	Dual Directional Coupler	0100AZ20200801O	11012409517	NCR	
Mini-Circuits	Power Amplifier	EMC014225P	980292	NCR	
Mini-Circuits	Power Amplifier	EMC2830P	980293	NCR	
Aisi	Attenuator	IEAT 3dB	N/A	NCR	

Table 1. Test Equipment List



10. Measurement Uncertainty

Decision Rule

- Uncertainty is not included.
- Uncertainty is included.

IEC 62209-2 Measurement uncertainty evaluation template for handset SAR test (300 MHz~3 GHz)								
Uncertainty component	Tol.	Prob. Dist.	Div.	C _i - 1g	C _i - 10g	u _i - 1g (+ %)	u _i - 10g (+ %)	v _i
Measurement system								
Probe calibration	6.1	N	1	1	1	6.1	6.1	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.02	R	1.732	1	1	0.01	0.01	∞
Probe Positioning	0.4	R	1.732	1	1	0.2	0.2	∞
Max. SAR evaluation	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	7.2	R	1.732	1	1	4.2	4.2	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	11.4	11.4	693
Expanded uncertainty (95% confidence interval)								
-	-	k=2	-	-	-	22.9	22.7	-

Uncertainty Budget for frequency range 300 MHz to 3 GHz



IEC 62209-2 Measurement uncertainty evaluation template for handset SAR test (3 GHz~6 GHz)								
Uncertainty component	Tol.	Prob. Dist.	Div.	C _i - 1g	C _i - 10g	u _i - 1g (± %)	u _i - 10g (± %)	v _i
Measurement system								
Probe calibration	6.1	N	1	1	1	6.1	6.1	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.02	R	1.732	1	1	0.01	0.01	∞
Probe Positioning	0.4	R	1.732	1	1	0.2	0.2	∞
Max. SAR evaluation	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	7.6	R	1.732	1	1	4.4	4.4	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	12.1	12.0	859
Expanded uncertainty (95% confidence interval)								
-	-	k =2	-	-	-	24.1	24.0	-

Uncertainty Budget for frequency range 3 GHz to 6 GHz

11. Measurement Procedure

The measurement procedures are as follows:

1. For WLAN function, engineering testing software installed on DUTs can provide continuous transmitting signal.
2. Measure output power through RF cable and power meter
3. Set scan area, grid size and other setting on the DASY software
4. Find out the largest SAR result on these testing positions of each band
5. Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

1. Power reference measurement
2. Area scan
3. Zoom scan
4. Power drift measurement

11.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1 g and 10 g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1 g and 10 g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages

1. Extraction of the measured data (grid and values) from the Zoom Scan
2. Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. Generation of a high-resolution mesh within the measured volume
4. Interpolation of all measured values from the measurement grid to the high-resolution grid
5. Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. Calculation of the averaged SAR within masses of 1 g and 10 g

11.2 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

		≤ 3 GHz	> 3 GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 mm \pm 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2)$ mm \pm 0.5 mm	
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30° \pm 1°	20° \pm 1°	
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm	
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.		
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm	
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm	
<p>Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.</p> <p>* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p>				

(Our measure settings are refer KDB Publication 865664 D01v01r04)



11.3 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1 g aggregate SAR, the DUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

11.4 Power Drift Monitoring

All SAR testing is under the DUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of DUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5 %, the SAR will be retested.



11.5 Body SAR Measurement

Index.	Band	Frequency		Modulation or Sub-Test	Test Position	Spacing	SAR 1 g	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR 1 g	Note	Antenna
		Ch.	MHz			(mm)	(W/Kg)					
	WCDMA Band II	9400	1880	RMC12.2K	Bottom of laptop	0	0.001	23.28	24.5	0.00		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Back of display screen	25	0.599	23.28	24.5	0.79		South Star
#84	WCDMA Band II	9262	1852.4	RMC12.2K	Back of display screen	25	0.58	23	24.5	0.82		South Star
	WCDMA Band II	9538	1907.6	RMC12.2K	Back of display screen	25	0.465	23.16	24.5	0.63		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Bottom Face	0	0.596	23.28	24.5	0.79		South Star
#73	WCDMA Band II	9400	1880	RMC12.2K	Side 1	0	0.78	17.02	18	0.98	Power Reduction	South Star
	WCDMA Band II	9262	1852.4	RMC12.2K	Side 1	0	0.656	16.8	18	0.87	Power Reduction	South Star
	WCDMA Band II	9538	1907.6	RMC12.2K	Side 1	0	0.658	16.86	18	0.86	Power Reduction	South Star
	WCDMA Band II	9400	1880	RMC12.2K	Side 1	14	0.552	23.28	24.5	0.73		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Side 2	0	0.091	23.28	24.5	0.12		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Side 3	0	0.06	23.28	24.5	0.08		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Side 4	0	0.001	23.28	24.5	0.00		South Star
	WCDMA Band II	9400	1880	RMC12.2K	Bottom of laptop	0	0.001	23.28	24.5	0.00		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Back of display screen	25	0.226	23.28	24.5	0.30		AWAN
	WCDMA Band II	9262	1852.4	RMC12.2K	Back of display screen	25	0.219	23	24.5	0.31		AWAN
	WCDMA Band II	9538	1907.6	RMC12.2K	Back of display screen	25	0.176	23.16	24.5	0.24		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Bottom Face	0	0.225	23.28	24.5	0.30		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Side 1	0	0.295	17.02	18	0.37	Power Reduction	AWAN
	WCDMA Band II	9262	1852.4	RMC12.2K	Side 1	0	0.248	16.8	18	0.33	Power Reduction	AWAN
	WCDMA Band II	9538	1907.6	RMC12.2K	Side 1	0	0.249	16.86	18	0.32	Power Reduction	AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Side 1	14	0.208	23.28	24.5	0.28		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Side 2	0	0.034	23.28	24.5	0.05		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Side 3	0	0.022	23.28	24.5	0.03		AWAN
	WCDMA Band II	9400	1880	RMC12.2K	Side 4	0	0.001	23.28	24.5	0.00		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Bottom of laptop	0	0.001	23	24.5	0.00		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Back of display screen	25	0.473	23	24.5	0.67		South Star
#81	WCDMA Band IV	1312	1712.4	RMC12.2K	Back of display screen	25	0.486	22.76	24.5	0.73		South Star
	WCDMA Band IV	1413	1732.6	RMC12.2K	Back of display screen	25	0.499	22.88	24.5	0.73		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Bottom Face	0	0.565	23	24.5	0.80		South Star
	WCDMA Band IV	1413	1732.6	RMC12.2K	Side 1	0	0.735	19.88	21	0.95	Power Reduction	South Star



Index.	Band	Frequency		Modulation or Sub-Test	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz			(mm)	(W/Kg)					
	WCDMA Band IV	1312	1712.4	RMC12.2K	Side 1	0	0.696	19.63	21	0.95	Power Reduction	South Star
#76	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	0	0.788	19.81	21	1.04	Power Reduction	South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	14	0.296	23	24.5	0.42		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 2	0	0.14	23	24.5	0.20		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 3	0	0.017	23	24.5	0.02		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 4	0	0.001	23	24.5	0.00		South Star
	WCDMA Band IV	1513	1752.6	RMC12.2K	Bottom of laptop	0	0.001	23	24.5	0.00		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Back of display screen	25	0.448	23	24.5	0.63		AWAN
	WCDMA Band IV	1312	1712.4	RMC12.2K	Back of display screen	25	0.461	22.76	24.5	0.69		AWAN
	WCDMA Band IV	1413	1732.6	RMC12.2K	Back of display screen	25	0.474	22.88	24.5	0.69		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Bottom Face	0	0.535	23	24.5	0.76		AWAN
	WCDMA Band IV	1413	1732.6	RMC12.2K	Side 1	0	0.698	19.88	21	0.90	Power Reduction	AWAN
	WCDMA Band IV	1312	1712.4	RMC12.2K	Side 1	0	0.696	19.63	21	0.95	Power Reduction	AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	0	0.678	19.81	21	0.89	Power Reduction	AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	14	0.279	23	24.5	0.39		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 2	0	0.121	23	24.5	0.17		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 3	0	0.014	23	24.5	0.02		AWAN
	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 4	0	0.001	23	24.5	0.00		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Bottom of laptop	0	0.001	23.5	24.5	0.00		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Back of display screen	25	0.117	23.5	24.5	0.15		South Star
#105	WCDMA Band V	4132	826.4	RMC12.2K	Back of display screen	25	0.134	23.38	24.5	0.17		South Star
	WCDMA Band V	4233	846.6	RMC12.2K	Back of display screen	25	0.103	23.46	24.5	0.13		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Bottom Face	0	0.248	23.5	24.5	0.31		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Side 1	0	0.382	23.5	24.5	0.48		South Star
	WCDMA Band V	4132	826.4	RMC12.2K	Side 1	0	0.307	23.38	24.5	0.40		South Star
	WCDMA Band V	4233	846.6	RMC12.2K	Side 1	0	0.403	23.46	24.5	0.51		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Side 2	0	0.191	23.5	24.5	0.24		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Side 3	0	0.031	23.5	24.5	0.04		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Side 4	0	0.001	23.5	24.5	0.00		South Star
	WCDMA Band V	4182	836.6	RMC12.2K	Bottom of laptop	0	0.001	23.5	24.5	0.00		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Back of display screen	25	0.107	23.5	24.5	0.14		AWAN



Index.	Band	Frequency		Modulation or Sub-Test	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz			(mm)	(W/Kg)					
	WCDMA Band V	4132	826.4	RMC12.2K	Back of display screen	25	0.123	23.38	24.5	0.16		AWAN
	WCDMA Band V	4233	846.6	RMC12.2K	Back of display screen	25	0.094	23.46	24.5	0.12		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Bottom Face	0	0.228	23.5	24.5	0.29		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Side 1	0	0.787	23.5	24.5	0.99		AWAN
	WCDMA Band V	4132	826.4	RMC12.2K	Side 1	0	0.806	23.38	24.5	1.04		AWAN
#103	WCDMA Band V	4233	846.6	RMC12.2K	Side 1	0	0.824	23.46	24.5	1.05		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Side 2	0	0.175	23.5	24.5	0.22		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Side 3	0	0.031	23.5	24.5	0.04		AWAN
	WCDMA Band V	4182	836.6	RMC12.2K	Side 4	0	0.001	23.5	24.5	0.00		AWAN

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 2	18900	1880	20M	QPSK	1	49	Bottom of laptop	0	0.001	23.03	24	0.00		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Bottom of laptop	0	0.001	21.99	23	0.00		South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Back of display screen	25	0.514	23.03	24	0.64		South Star
#62	LTE Band 2	18700	1860	20M	QPSK	1	99	Back of display screen	25	0.5	22.73	24	0.67		South Star
	LTE Band 2	19100	1900	20M	QPSK	1	0	Back of display screen	25	0.463	22.81	24	0.61		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Back of display screen	25	0.425	21.99	23	0.54		South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Bottom Face	0	0.595	23.03	24	0.74		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Bottom Face	0	0.497	21.99	23	0.63		South Star
	LTE Band 2	18700	1860	20M	QPSK	1	0	Side 1	0	0.744	17.4	18	0.85	Power Reduction	South Star
#50	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 1	0	0.81	17.38	18	0.93	Power Reduction	South Star
	LTE Band 2	19100	1900	20M	QPSK	1	0	Side 1	0	0.76	17.31	18	0.89	Power Reduction	South Star
	LTE Band 2	18900	1880	20M	QPSK	50	50	Side 1	0	0.649	16.42	17	0.74	Power Reduction	South Star
	LTE Band 2	18900	1880	20M	QPSK	100	0	Side 1	0	0.654	16.52	17	0.73	Power Reduction	South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 1	14	0.57	23.03	24	0.71		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 1	14	0.478	21.99	23	0.60		South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 2	0	0.099	23.03	24	0.12		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 2	0	0.067	21.99	23	0.09		South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 3	0	0.068	23.03	24	0.09		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 3	0	0.047	21.99	23	0.06		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 4	0	0.001	23.03	24	0.00		South Star
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 4	0	0.001	21.99	23	0.00		South Star
	LTE Band 2	18900	1880	20M	QPSK	1	49	Bottom of laptop	0	0.001	23.03	24	0.00		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Bottom of laptop	0	0.001	21.99	23	0.00		AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Back of display screen	25	0.178	23.03	24	0.22		AWAN
	LTE Band 2	18700	1860	20M	QPSK	1	99	Back of display screen	25	0.172	22.73	24	0.23		AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Bottom Face	0	0.204	23.03	24	0.26		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Bottom Face	0	0.173	21.99	23	0.22		AWAN
	LTE Band 2	18700	1860	20M	QPSK	1	0	Side 1	0	0.241	17.4	18	0.28	Power Reduction	AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 1	0	0.259	17.38	18	0.30	Power Reduction	AWAN
	LTE Band 2	19100	1900	20M	QPSK	1	0	Side 1	0	0.264	17.31	18	0.31	Power Reduction	AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	50	Side 1	0	0.231	16.42	17	0.26	Power Reduction	AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 1	14	0.198	23.03	24	0.25		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 1	14	0.166	21.99	23	0.21		AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 2	0	0.034	23.03	24	0.04		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 2	0	0.023	21.99	23	0.03		AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 3	0	0.022	23.03	24	0.03		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 3	0	0.016	21.99	23	0.02		AWAN
	LTE Band 2	18900	1880	20M	QPSK	1	49	Side 4	0	0.001	23.03	24	0.00		AWAN
	LTE Band 2	18900	1880	20M	QPSK	50	0	Side 4	0	0.001	21.99	23	0.00		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Bottom of laptop	0	0.052	22.62	24	0.07		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Bottom of laptop	0	0.001	21.58	23	0.00		South Star
#93	LTE Band 5	20525	836.5	10M	QPSK	1	0	Back of display screen	25	0.224	22.62	24	0.31		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Back of display screen	25	0.125	21.58	23	0.17		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Bottom Face	0	0.304	22.62	24	0.42		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Bottom Face	0	0.274	21.58	23	0.38		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 1	0	0.456	22.62	24	0.63		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 1	0	0.275	21.58	23	0.38		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 2	0	0.22	22.62	24	0.30		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 2	0	0.199	21.58	23	0.28		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 3	0	0.001	22.62	24	0.00		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 3	0	0.001	21.58	23	0.00		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 4	0	0.001	22.62	24	0.00		South Star
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 4	0	0.001	21.58	23	0.00		South Star
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Bottom of laptop	0	0.047	22.62	24	0.07		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Bottom of laptop	0	0.001	21.58	23	0.00		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Back of display screen	25	0.206	22.62	24	0.28		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Back of display screen	25	0.115	21.58	23	0.16		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Bottom Face	0	0.279	22.62	24	0.38		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Bottom Face	0	0.252	21.58	23	0.35		AWAN
#88	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 1	0	0.769	22.62	24	1.06		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 1	0	0.702	21.58	23	0.97		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	50	0	Side 1	0	0.688	21.52	23	0.97		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 2	0	0.202	22.62	24	0.28		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 2	0	0.183	21.58	23	0.25		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 3	0	0.001	22.62	24	0.00		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 3	0	0.001	21.58	23	0.00		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	1	0	Side 4	0	0.001	22.62	24	0.00		AWAN
	LTE Band 5	20525	836.5	10M	QPSK	25	0	Side 4	0	0.001	21.58	23	0.00		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Bottom of laptop	0	0.001	23.58	24	0.00		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Bottom of laptop	0	0.001	22.68	23	0.00		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Back of display screen	25	0.317	23.58	24	0.35		South Star
#14	LTE Band 7	21100	2535	20M	QPSK	1	99	Back of display screen	25	0.356	23.54	24	0.40		South Star
	LTE Band 7	21350	2560	20M	QPSK	1	99	Back of display screen	25	0.293	23.52	24	0.33		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Back of display screen	25	0.217	22.68	23	0.23		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Bottom Face	0	0.75	23.58	24	0.83		South Star
	LTE Band 7	21100	2535	20M	QPSK	1	99	Bottom Face	0	0.736	23.54	24	0.82		South Star
	LTE Band 7	21350	2560	20M	QPSK	1	99	Bottom Face	0	0.723	23.52	24	0.81		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Bottom Face	0	0.569	22.68	23	0.61		South Star
	LTE Band 7	21350	2560	20M	QPSK	100	0	Bottom Face	0	0.562	22.72	23	0.60		South Star
	LTE Band 7	21350	2560	20M	QPSK	1	0	Side 1	0	0.264	16.36	16.5	0.27	Power Reduction	South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 1	0	0.853	15.94	16.5	0.97	Power Reduction	South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 7	21100	2535	20M	QPSK	1	0	Side 1	0	0.52	16.2	16.5	0.56	Power Reduction	South Star
	LTE Band 7	21100	2535	20M	QPSK	50	0	Side 1	0	0.414	15.21	15.5	0.44	Power Reduction	South Star
	LTE Band 7	21100	2535	20M	QPSK	100	0	Side 1	0	0.409	15.26	15.5	0.43	Power Reduction	South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 1	14	0.923	23.58	24	1.02		South Star
#02	LTE Band 7	21100	2535	20M	QPSK	1	99	Side 1	14	0.991	23.54	24	1.10		South Star
	LTE Band 7	21350	2560	20M	QPSK	1	99	Side 1	14	0.76	23.52	24	0.85		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 1	14	0.553	22.68	23	0.60		South Star
	LTE Band 7	21350	2560	20M	QPSK	100	0	Side 1	14	0.546	22.72	23	0.58		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 2	0	0.402	23.58	24	0.44		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 2	0	0.341	22.68	23	0.37		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 3	0	0.068	23.58	24	0.08		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 3	0	0.001	22.68	23	0.00		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 4	0	0.044	23.58	24	0.05		South Star
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 4	0	0.001	22.68	23	0.00		South Star
	LTE Band 7	20850	2510	20M	QPSK	1	99	Bottom of laptop	0	0.001	23.58	24	0.00		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Bottom of laptop	0	0.001	22.68	23	0.00		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Back of display screen	25	0.077	23.58	24	0.09		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Back of display screen	25	0.052	22.68	23	0.06		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Bottom Face	0	0.182	23.58	24	0.20		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Bottom Face	0	0.138	22.68	23	0.15		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 1	0	0.207	15.94	16.5	0.24	Power Reduction	AWAN
	LTE Band 7	21100	2535	20M	QPSK	50	0	Side 1	0	0.11	15.21	15.5	0.12	Power Reduction	AWAN
	LTE Band 7	21100	2535	20M	QPSK	1	99	Side 1	14	0.225	23.54	24	0.25		AWAN
	LTE Band 7	21350	2560	20M	QPSK	1	99	Side 1	14	0.185	23.52	24	0.21		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 1	14	0.134	22.68	23	0.14		AWAN
	LTE Band 7	21350	2560	20M	QPSK	100	0	Side 1	14	0.131	22.72	23	0.14		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 2	0	0.092	23.58	24	0.10		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 2	0	0.081	22.68	23	0.09		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 3	0	0.0165	23.58	24	0.02		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 3	0	0.001	22.68	23	0.00		AWAN
	LTE Band 7	20850	2510	20M	QPSK	1	99	Side 4	0	0.003	23.58	24	0.00		AWAN
	LTE Band 7	21350	2560	20M	QPSK	50	50	Side 4	0	0.001	22.68	23	0.00		AWAN



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Bottom of laptop	0	0.001	23.47	24	0.00		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Bottom of laptop	0	0.001	22.33	23	0.00		South Star
#94	LTE Band 12	23095	707.5	10M	QPSK	1	49	Back of display screen	25	0.13	23.47	24	0.15		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Back of display screen	25	0.059	22.33	23	0.07		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Bottom Face	0	0.2	23.47	24	0.23		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Bottom Face	0	0.174	22.33	23	0.20		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 1	0	0.334	23.47	24	0.38		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 1	0	0.211	22.33	23	0.25		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 2	0	0.106	23.47	24	0.12		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 2	0	0.075	22.33	23	0.09		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 3	0	0.001	23.47	24	0.00		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 3	0	0.001	22.33	23	0.00		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 4	0	0.001	23.47	24	0.00		South Star
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 4	0	0.001	22.33	23	0.00		South Star
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Bottom of laptop	0	0.001	23.47	24	0.00		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Bottom of laptop	0	0.001	22.33	23	0.00		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Back of display screen	25	0.121	23.47	24	0.14		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Back of display screen	25	0.054	22.33	23	0.06		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Bottom Face	0	0.183	23.47	24	0.21		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Bottom Face	0	0.161	22.33	23	0.19		AWAN
#96	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 1	0	0.537	23.47	24	0.61		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 1	0	0.498	22.33	23	0.58		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 2	0	0.533	23.47	24	0.60		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 2	0	0.064	22.33	23	0.08		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 3	0	0.001	23.47	24	0.00		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 3	0	0.001	22.33	23	0.00		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	1	49	Side 4	0	0.001	23.47	24	0.00		AWAN
	LTE Band 12	23095	707.5	10M	QPSK	25	25	Side 4	0	0.001	22.33	23	0.00		AWAN
#100	LTE Band 17	23790	710	10M	QPSK	1	49	Side 1	0	0.496	23.3	24	0.58		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Bottom of laptop	0	0.001	23.57	24	0.00		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Bottom of laptop	0	0.001	22.54	23	0.00		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
#95	LTE Band 13	23230	782	10M	QPSK	1	49	Back of display screen	25	0.187	23.57	24	0.21		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Back of display screen	25	0.084	22.54	23	0.09		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Bottom Face	0	0.338	23.57	24	0.37		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Bottom Face	0	0.27	22.54	23	0.30		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 1	0	0.344	23.57	24	0.38		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 1	0	0.271	22.54	23	0.30		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 2	0	0.076	23.57	24	0.08		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 2	0	0.06	22.54	23	0.07		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 3	0	0.001	23.57	24	0.00		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 3	0	0.001	22.54	23	0.00		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 4	0	0.001	23.57	24	0.00		South Star
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 4	0	0.001	22.54	23	0.00		South Star
	LTE Band 13	23230	782	10M	QPSK	1	49	Bottom of laptop	0	0.001	23.57	24	0.00		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Bottom of laptop	0	0.001	22.54	23	0.00		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Back of display screen	25	0.176	23.57	24	0.19		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Back of display screen	25	0.079	22.54	23	0.09		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Bottom Face	0	0.333	23.57	24	0.37		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Bottom Face	0	0.263	22.54	23	0.29		AWAN
#97	LTE Band 13	23230	782	10M	QPSK	1	49	Side 1	0	0.976	23.57	24	1.08		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 1	0	0.888	22.54	23	0.99		AWAN
	LTE Band 13	23230	782	10M	QPSK	50	0	Side 1	0	0.865	22.78	23	0.91		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 2	0	0.072	23.57	24	0.08		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 2	0	0.047	22.54	23	0.05		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 3	0	0.001	23.57	24	0.00		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 3	0	0.001	22.54	23	0.00		AWAN
	LTE Band 13	23230	782	10M	QPSK	1	49	Side 4	0	0.001	23.57	24	0.00		AWAN
	LTE Band 13	23230	782	10M	QPSK	25	25	Side 4	0	0.001	22.54	23	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Bottom of laptop	0	0.001	23.41	24	0.00		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Bottom of laptop	0	0.001	22.39	23	0.00		South Star
#92	LTE Band 26	26865	831.5	15M	QPSK	1	37	Back of display screen	25	0.192	23.41	24	0.22		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Back of display screen	25	0.104	22.39	23	0.12		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Bottom Face	0	0.263	23.41	24	0.30		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Bottom Face	0	0.242	22.39	23	0.28		South Star
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 1	0	0.369	23.41	24	0.42		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 1	0	0.292	22.39	23	0.34		South Star
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 2	0	0.184	23.41	24	0.21		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 2	0	0.146	22.39	23	0.17		South Star
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 3	0	0.001	23.41	24	0.00		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 3	0	0.001	22.39	23	0.00		South Star
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 4	0	0.001	23.41	24	0.00		South Star
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 4	0	0.001	22.39	23	0.00		South Star
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Bottom of laptop	0	0.001	23.41	24	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Bottom of laptop	0	0.001	22.39	23	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Back of display screen	25	0.184	23.41	24	0.21		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Back of display screen	25	0.099	22.39	23	0.11		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Bottom Face	0	0.251	23.41	24	0.29		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Bottom Face	0	0.232	22.39	23	0.27		AWAN
#90	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 1	0	0.766	23.41	24	0.88		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 1	0	0.711	22.39	23	0.82		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	75	19	Side 1	0	0.698	22.5	23	0.78		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 2	0	0.177	23.41	24	0.20		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 2	0	0.136	22.39	23	0.16		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 3	0	0.001	23.41	24	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 3	0	0.001	22.39	23	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	1	37	Side 4	0	0.001	23.41	24	0.00		AWAN
	LTE Band 26	26865	831.5	15M	QPSK	36	19	Side 4	0	0.001	22.39	23	0.00		AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Bottom of laptop	0	0.001	23.89	24	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Bottom of laptop	0	0.001	22.81	23	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Back of display screen	25	0.192	23.89	24	0.20		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Back of display screen	25	0.131	22.81	23	0.14		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Bottom Face	0	0.788	23.89	24	0.81		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Bottom Face	0	0.684	22.81	23	0.72		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 30	27710	2310	10M	QPSK	50	0	Bottom Face	0	0.663	22.86	23	0.69		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 1	0	0.946	19.26	19.5	1.00	Power Reduction	South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 1	0	0.754	18.04	18.5	0.84	Power Reduction	South Star
	LTE Band 30	27710	2310	10M	QPSK	50	0	Side 1	0	0.731	18.11	18.5	0.80	Power Reduction	South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 1	14	0.327	23.89	24	0.34		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 1	14	0.274	22.81	23	0.29		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 2	0	0.755	23.89	24	0.77		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 2	0	0.645	22.81	23	0.67		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 3	0	0.001	23.89	24	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 3	0	0.001	22.81	23	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 4	0	0.001	23.89	24	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 4	0	0.001	22.81	23	0.00		South Star
	LTE Band 30	27710	2310	10M	QPSK	1	0	Bottom of laptop	0	0.001	23.89	24	0.00		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Bottom of laptop	0	0.001	22.81	23	0.00		AWAN
#24	LTE Band 30	27710	2310	10M	QPSK	1	0	Back of display screen	25	0.197	23.89	24	0.20		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Back of display screen	25	0.135	22.81	23	0.14		AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Bottom Face	0	0.808	23.89	24	0.83		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Bottom Face	0	0.704	22.81	23	0.74		AWAN
	LTE Band 30	27710	2310	10M	QPSK	50	0	Bottom Face	0	0.698	22.86	23	0.72		AWAN
#43	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 1	0	1.01	19.26	19.5	1.07	Power Reduction	AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 1	0	0.714	18.04	18.5	0.79	Power Reduction	AWAN
	LTE Band 30	27710	2310	10M	QPSK	50	0	Side 1	0	0.716	18.11	18.5	0.78	Power Reduction	AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 1	14	0.337	23.89	24	0.35		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 1	14	0.282	22.81	23	0.30		AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 2	0	0.769	23.89	24	0.79		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 2	0	0.661	22.81	23	0.69		AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 3	0	0.001	23.89	24	0.00		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 3	0	0.001	22.81	23	0.00		AWAN
	LTE Band 30	27710	2310	10M	QPSK	1	0	Side 4	0	0.001	23.89	24	0.00		AWAN
	LTE Band 30	27710	2310	10M	QPSK	25	0	Side 4	0	0.001	22.81	23	0.00		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Bottom of laptop	0	0.001	23.19	24	0.00		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Bottom of laptop	0	0.001	22.28	23	0.00		South Star
#16	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Back of display screen	25	0.242	23.19	24	0.29		South Star
	LTE Band 41	39790	2510	20M	QPSK	1	0	Back of display screen	25	0.183	23.12	24	0.23		South Star
	LTE Band 41	39750	2506	20M	QPSK	1	0	Back of display screen	25	0.173	23.07	24	0.22		South Star
	LTE Band 41	40620	2593	20M	QPSK	1	99	Back of display screen	25	0.145	23.18	24	0.18		South Star
	LTE Band 41	41055	2636.5	20M	QPSK	1	99	Back of display screen	25	0.132	22.72	24	0.18		South Star
	LTE Band 41	41490	2680	20M	QPSK	1	0	Back of display screen	25	0.117	23.16	24	0.14		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Back of display screen	25	0.088	22.28	23	0.10		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Bottom Face	0	0.37	23.19	24	0.45		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Bottom Face	0	0.316	22.28	23	0.38		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	0	Side 1	0	0.35	17.94	18	0.36	Power Reduction	South Star
#36	LTE Band 41	39790	2510	20M	QPSK	1	99	Side 1	0	0.85	17.71	18	0.91	Power Reduction	South Star
	LTE Band 41	39750	2506	20M	QPSK	1	99	Side 1	0	0.793	17.67	18	0.86	Power Reduction	South Star
	LTE Band 41	40620	2593	20M	QPSK	1	99	Side 1	0	0.168	17.75	18	0.18	Power Reduction	South Star
	LTE Band 41	41055	2636.5	20M	QPSK	1	0	Side 1	0	0.224	17.73	18	0.24	Power Reduction	South Star
	LTE Band 41	41490	2680	20M	QPSK	1	99	Side 1	0	0.38	17.85	18	0.40	Power Reduction	South Star
	LTE Band 41	41055	2636.5	20M	QPSK	50	25	Side 1	0	0.172	16.85	17	0.18	Power Reduction	South Star
	LTE Band 41	41055	2636.5	20M	QPSK	100	0	Side 1	0	0.195	16.86	17	0.20	Power Reduction	South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 1	14	0.436	23.19	24	0.53		South Star
	LTE Band 41	39790	2510	20M	QPSK	1	0	Side 1	14	0.388	23.12	24	0.48		South Star
	LTE Band 41	39750	2506	20M	QPSK	1	0	Side 1	14	0.396	23.07	24	0.49		South Star
	LTE Band 41	40620	2593	20M	QPSK	1	99	Side 1	14	0.196	23.18	24	0.24		South Star
	LTE Band 41	41055	2636.5	20M	QPSK	1	99	Side 1	14	0.1	22.72	24	0.14		South Star
	LTE Band 41	41490	2680	20M	QPSK	1	0	Side 1	14	0.156	23.16	24	0.19		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 1	14	0.381	22.28	23	0.45		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 2	0	0.311	23.19	24	0.38		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 2	0	0.259	22.28	23	0.31		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 3	0	0.04	23.19	24	0.05		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 3	0	0.001	22.28	23	0.00		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 4	0	0.001	23.19	24	0.00		South Star
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 4	0	0.001	22.28	23	0.00		South Star
#10	LTE Band 38	38000	2595	20M	QPSK	1	99	Side 1	0	0.662	23.44	24	0.76		South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Bottom of laptop	0	0.001	23.19	24	0.00		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Bottom of laptop	0	0.001	22.28	23	0.00		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Back of display screen	25	0.0512686	23.19	24	0.06		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Back of display screen	25	0.018643127	22.28	23	0.02		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Bottom Face	0	0.37	23.19	24	0.45		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Bottom Face	0	0.316	22.28	23	0.38		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	0	Side 1	0	0.35	17.94	18	0.36	Power Reduction	AWAN
	LTE Band 41	39790	2510	20M	QPSK	1	99	Side 1	0	0.153	17.71	18	0.17	Power Reduction	AWAN
	LTE Band 41	39750	2506	20M	QPSK	1	99	Side 1	0	0.168	17.67	18	0.18	Power Reduction	AWAN
	LTE Band 41	40620	2593	20M	QPSK	1	99	Side 1	0	0.168	17.75	18	0.18	Power Reduction	AWAN
	LTE Band 41	41055	2636.5	20M	QPSK	1	0	Side 1	0	0.224	17.73	18	0.24	Power Reduction	AWAN
	LTE Band 41	41490	2680	20M	QPSK	1	99	Side 1	0	0.38	17.85	18	0.40	Power Reduction	AWAN
	LTE Band 41	41055	2636.5	20M	QPSK	50	25	Side 1	0	0.172	16.85	17	0.18	Power Reduction	AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 1	14	0.092	23.19	24	0.11		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 1	14	0.083	22.28	23	0.10		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 2	0	0.065	23.19	24	0.08		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 2	0	0.054	22.28	23	0.06		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 3	0	0.084	23.19	24	0.10		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 3	0	0.001	22.28	23	0.00		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	1	99	Side 4	0	0.001	23.19	24	0.00		AWAN
	LTE Band 41	40185	2549.5	20M	QPSK	50	50	Side 4	0	0.001	22.28	23	0.00		AWAN
	LTE Band 38	38000	2595	20M	QPSK	1	99	Side 1	0	0.142	23.44	24	0.16		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Bottom of laptop	0	0.001	23.68	24	0.00		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Bottom of laptop	0	0.001	22.63	23	0.00		South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Back of display screen	25	0.455	23.68	24	0.49		South Star
#65	LTE Band 66	132322	1745	20M	QPSK	1	99	Back of display screen	25	0.47	23.64	24	0.51		South Star
	LTE Band 66	132572	1770	20M	QPSK	1	0	Back of display screen	25	0.446	23.47	24	0.50		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Back of display screen	25	0.417	22.63	23	0.45		South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Bottom Face	0	0.666	23.68	24	0.72		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Bottom Face	0	0.484	22.63	23	0.53		South Star
	LTE Band 66	132322	1745	20M	QPSK	1	99	Side 1	0	0.895	20.64	21	0.97	Power Reduction	South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 1	0	0.807	20.53	21	0.90	Power Reduction	South Star



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
#56	LTE Band 66	132572	1770	20M	QPSK	1	99	Side 1	0	0.901	20.56	21	1.00	Power Reduction	South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 1	0	0.651	19.6	20	0.71	Power Reduction	South Star
	LTE Band 66	132322	1745	20M	QPSK	50	50	Side 1	0	0.692	19.52	20	0.77	Power Reduction	South Star
	LTE Band 66	132572	1770	20M	QPSK	50	0	Side 1	0	0.679	19.33	20	0.79	Power Reduction	South Star
	LTE Band 66	132072	1720	20M	QPSK	100	0	Side 1	0	0.661	19.79	20	0.69	Power Reduction	South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 1	14	0.263	23.68	24	0.28		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 1	14	0.209	22.63	23	0.23		South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 2	0	0.136	23.68	24	0.15		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 2	0	0.094	22.63	23	0.10		South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 3	0	0.098	23.68	24	0.11		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 3	0	0.076	22.63	23	0.08		South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 4	0	0.001	23.68	24	0.00		South Star
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 4	0	0.001	22.63	23	0.00		South Star
#58	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Side 1	0	0.642	20.68	21	0.69	Power Reduction	South Star
	LTE Band 66	132072	1720	20M	QPSK	1	49	Bottom of laptop	0	0.001	23.68	24	0.00		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Bottom of laptop	0	0.001	22.63	23	0.00		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Back of display screen	25	0.386	23.68	24	0.42		AWAN
	LTE Band 66	132322	1745	20M	QPSK	1	99	Back of display screen	25	0.401	23.64	24	0.44		AWAN
	LTE Band 66	132572	1770	20M	QPSK	1	0	Back of display screen	25	0.379	23.47	24	0.43		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Back of display screen	25	0.353	22.63	23	0.38		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Bottom Face	0	0.562	23.68	24	0.61		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Bottom Face	0	0.411	22.63	23	0.45		AWAN
	LTE Band 66	132322	1745	20M	QPSK	1	99	Side 1	0	0.895	20.64	21	0.97	Power Reduction	AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 1	0	0.686	20.53	21	0.76	Power Reduction	AWAN
	LTE Band 66	132572	1770	20M	QPSK	1	99	Side 1	0	0.636	20.56	21	0.70	Power Reduction	AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 1	0	0.554	19.6	20	0.61	Power Reduction	AWAN
	LTE Band 66	132322	1745	20M	QPSK	50	50	Side 1	0	0.588	19.52	20	0.66	Power Reduction	AWAN
	LTE Band 66	132572	1770	20M	QPSK	50	0	Side 1	0	0.572	19.33	20	0.67	Power Reduction	AWAN
	LTE Band 66	132072	1720	20M	QPSK	100	0	Side 1	0	0.562	19.79	20	0.59	Power Reduction	AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 1	14	0.226	23.68	24	0.24		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 1	14	0.182	22.63	23	0.20		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 2	0	0.114	23.68	24	0.12		AWAN



Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing	SAR _{1g}	Burst Avg Power (dBm)	Max tune-up (dBm)	Reported SAR _{1g}	Note	Antenna
		Ch.	MHz						(mm)	(W/Kg)					
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 2	0	0.081	22.63	23	0.09		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 3	0	0.083	23.68	24	0.09		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 3	0	0.064	22.63	23	0.07		AWAN
	LTE Band 66	132072	1720	20M	QPSK	1	49	Side 4	0	0.001	23.68	24	0.00		AWAN
	LTE Band 66	132072	1720	20M	QPSK	50	0	Side 4	0	0.001	22.63	23	0.00		AWAN
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Side 1	0	0.546	20.68	21	0.59	Power Reduction	AWAN

11.6 SAR Variability Measurement

Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	Note	Original SAR _{1g}	First SAR _{1g}	First Ratio SAR _{1g}
	Ch.	MHz									(W/kg)	(W/kg)	
LTE Band 2	18900	1880	20M	QPSK	1	49	Side 1	0	-	original #50_once	0.81	0.805	0.62%
LTE Band 7	20850	2510	20M	QPSK	1	99	Side 1	14	-	original #2_once	0.991	0.953	3.83%
LTE Band 30	27710	2310	10M	QPSK	1	0	Side 1	0	-	original #43_once	0.946	0.932	1.48%
LTE Band 66	132572	1770	20M	QPSK	1	0	Side 1	0	-	original #56_once	0.901	0.897	0.44%
LTE Band 13	23230	782	10M	QPSK	1	49	Side 1	0	-	original #97_once	0.976	0.954	2.25%
WCDMA Band V	4233	846.6	-	RMC12.2K	-	-	Side 1	0	-	original #103_once	0.824	0.802	2.67%

Detailed evaluations please refer KDB 865664 on "SAR test reduction according to KDB" section.

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

1. The original highest measured Reported SAR 1 g is ≥ 0.80 W/kg, repeat that measurement once.
2. Perform a second repeated measurement the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.2 , the original or repeated measurement is ≥ 1.45 W/kg (~ 10 % from the 1-g SARlimit).



11.7 Spot Check

Band	Mode	Frequency		Data Rate	Test Position	Spacing (mm)	SAR _{1g} (W/Kg)	Burst Avg Power (dBm)	Max tune-up (dBm)	Duty Cycle (%)	Reported SAR _{1g}	Note	Antenna	Deviation
		Ch.	MHz											
WLAN 2.4GHz	802.11b	11	2462	1 Mbps	Bottom of laptop	0	0.606	13.38	13.5	99.62	0.63	Ant Main	AWAN	
WLAN 2.4GHz	802.11b	11	2462	1 Mbps	Bottom of laptop	0	0.594	13.38	13.5	99.62	0.61	Ant Main	AWAN	-1.92%
WLAN 2.4GHz	802.11b	11	2462	1 Mbps	Bottom of laptop	0	0.387	13.42	13.5	99.57	0.40	Ant Aux	AWAN	
WLAN 2.4GHz	802.11b	11	2462	1 Mbps	Bottom of laptop	0	0.356	13.42	13.5	99.57	0.36	Ant Aux	AWAN	-8.08%
Bluetooth	---	78	2480	1 Mbps	Bottom of laptop	0	0.178	10.06	11.5	77.30	0.32	Ant Aux	AWAN	
Bluetooth	---	78	2480	1 Mbps	Bottom of laptop	0	0.169	10.06	11.5	77.30	0.31	Ant Aux	AWAN	-4.98%
WLAN 5GHz	802.11ac 160 MHz	50	5250	VHT0	Bottom of laptop	0	0.617	11.11	12	92.73	0.82	Ant Main	AWAN	
WLAN 5GHz	802.11ac 160 MHz	50	5250	VHT0	Bottom of laptop	0	0.598	11.11	12	92.73	0.79	Ant Main	AWAN	-3.06%
WLAN 5GHz	802.11ac 160 MHz	50	5250	VHT0	Bottom of laptop	0	0.141	11.78	12	92.78	0.16	Ant Aux	AWAN	
WLAN 5GHz	802.11ac 160 MHz	50	5250	VHT0	Bottom of laptop	0	0.132	11.78	12	92.78	0.15	Ant Aux	AWAN	-6.25%
WLAN 5GHz	802.11ac 80 MHz	138	5690	VHT0	Bottom of laptop	0	0.754	11.78	12	95.34	0.83	Ant Main	AWAN	
WLAN 5GHz	802.11ac 80 MHz	138	5690	VHT0	Bottom of laptop	0	0.723	11.78	12	95.34	0.80	Ant Main	AWAN	-4.09%
WLAN 5GHz	802.11ac 80 MHz	138	5690	VHT0	Bottom of laptop	0	0.154	11.76	12	95.29	0.17	Ant Aux	AWAN	
WLAN 5GHz	802.11ac 80 MHz	138	5690	VHT0	Bottom of laptop	0	0.143	11.76	12	95.29	0.16	Ant Aux	AWAN	-7.02%
WLAN 5GHz	802.11ac 80 MHz	155	5775	VHT0	Bottom of laptop	0	0.863	11.85	12	95.34	0.94	Ant Main	AWAN	
WLAN 5GHz	802.11ac 80 MHz	155	5775	VHT0	Bottom of laptop	0	0.812	11.85	12	95.34	0.88	Ant Main	AWAN	-5.87%
WLAN 5GHz	802.11ac 80 MHz	155	5775	VHT0	Bottom of laptop	0	0.15	11.83	12	95.29	0.16	Ant Aux	AWAN	
WLAN 5GHz	802.11ac 80 MHz	155	5775	VHT0	Bottom of laptop	0	0.142	11.83	12	95.29	0.16	Ant Aux	AWAN	-5.49%



11.8 SAR Exposure Limit

Human Exposure	Population Uncontrolled Exposure (W/kg)	Occupational Controlled Exposure (W/kg)
Spatial Peak SAR* (head or Body)	1.60	8.00
Spatial Peak SAR** (Whole Body)	0.08	0.40
Spatial Peak SAR*** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 2. Safety Limits for Controlled / Uncontrolled Environment Exposure

Notes

- * The Spatial Peak value of the SAR averaged over any 1 gram of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
- ** The Spatial Average value of the SAR averaged over the whole – body.
- *** The Spatial Peak value of the SAR averaged over any 10 grams of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Population / Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Occupational / Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

12. References

- [1] Std. C95.1-1999, "*American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz*", New York.
- [2] NCRP, National Council on Radiation Protection and Measurements, "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields", NCRP report NO. 86, 1986.
- [3] T. Schmid, O. Egger, and N. Kuster, "Automatic E-field scanning system for dosimetric assessments", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.
- [4] K. Pokovi^c, T. Schmid, and N. Kuster, "Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.
- [5] K. Pokovi^c, T. Schmid, and N. Kuster, "E-field probe with improved isotropy in brain simulating liquids", in Proceedings of the ELMAR, Zadar, Croatia, 23-25 June, 1996, pp.172-175.
- [6] N. Kuster, and Q. Balzano, "Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz", IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [7] Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.
- [8] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.
- [9] Std. C95.3-1991, "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, Aug. 1992.
- [10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10KHz-300GHz, Jan. 1995.
- [11] IEEE Std 1528™-2013 - IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques

Appendix A - System Performance Check

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/11

System Performance Check at 750MHz_Head

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 □SN1004

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

Medium parameters used: $f = 750$ MHz; $\sigma = 0.897$ S/m; $\epsilon_r = 42.59$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 750 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 750MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.86 W/kg

System Performance Check at 750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 57.90 V/m; Power Drift = -0.00 dB

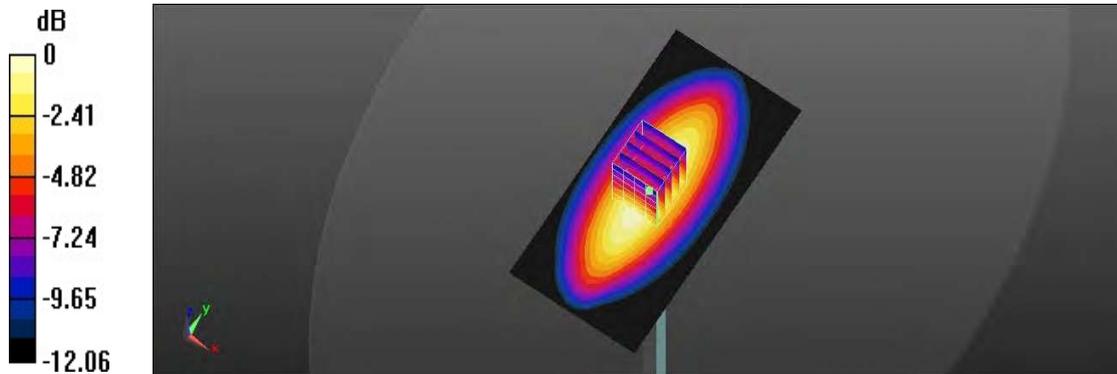
Peak SAR (extrapolated) = 3.24 W/kg

SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.44 W/kg

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.5%

Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.86 W/kg = 4.56 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/12

System Performance Check at 750MHz_Head

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1004

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

Medium parameters used: $f = 750$ MHz; $\sigma = 0.901$ S/m; $\epsilon_r = 42.018$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 750 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 750MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.89 W/kg

System Performance Check at 750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.07 V/m; Power Drift = -0.11 dB

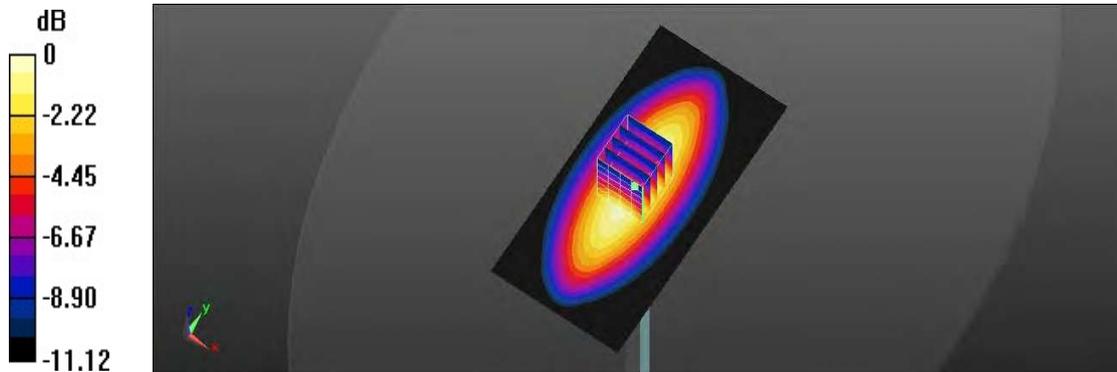
Peak SAR (extrapolated) = 3.27 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.39 W/kg

Smallest distance from peaks to all points 3 dB below = 20.5 mm

Ratio of SAR at M2 to SAR at M1 = 64.8%

Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.86 W/kg = 4.56 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/9

System Performance Check at 835MHz_Head

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.373$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 835 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.44 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 62.71 V/m; Power Drift = 0.16 dB

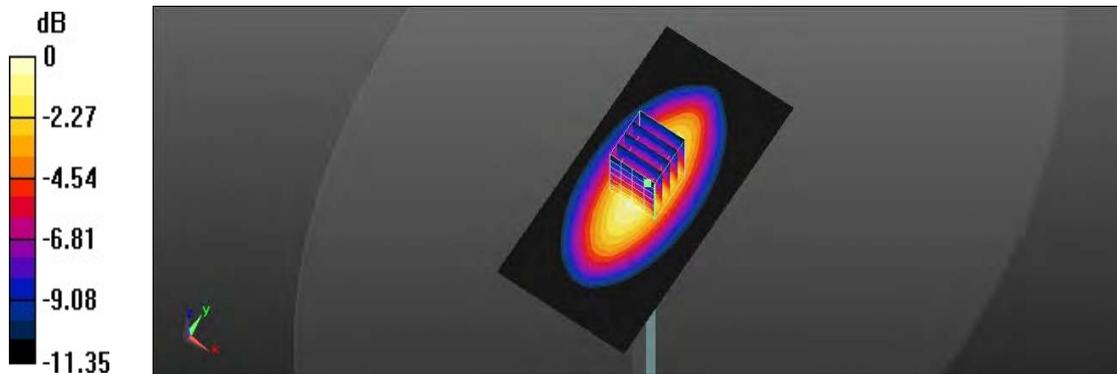
Peak SAR (extrapolated) = 4.12 W/kg

SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.65 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 3.56 W/kg



0 dB = 3.56 W/kg = 5.51 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/10

System Performance Check at 835MHz_Head

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.905 \text{ S/m}$; $\epsilon_r = 42.286$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 835 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.42 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 62.69 V/m; Power Drift = -0.05 dB

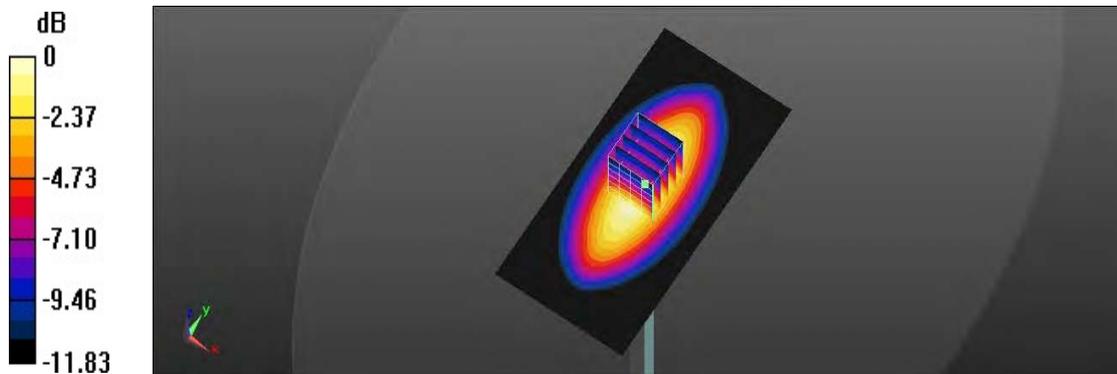
Peak SAR (extrapolated) = 4.00 W/kg

SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.55 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 61.1%

Maximum value of SAR (measured) = 3.43 W/kg



0 dB = 3.43 W/kg = 5.35 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/7

System Performance Check at 1750MHz_Head

DUT: Dipole D1750V2; Type: D1750V2; Serial: D1750V2 - SN1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 40.679$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1750 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1750MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 15.0 W/kg

System Performance Check at 1750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 105.2 V/m; Power Drift = 0.03 dB

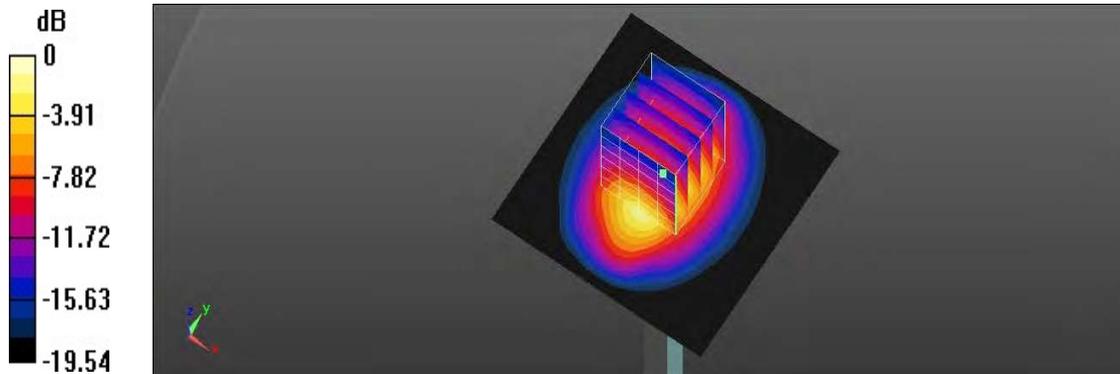
Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 9.63 W/kg; SAR(10 g) = 4.99 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 53.6%

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg = 11.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/8

System Performance Check at 1750MHz_Head

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1750 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1750MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.3 W/kg

System Performance Check at 1750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 102.5 V/m; Power Drift = 0.04 dB

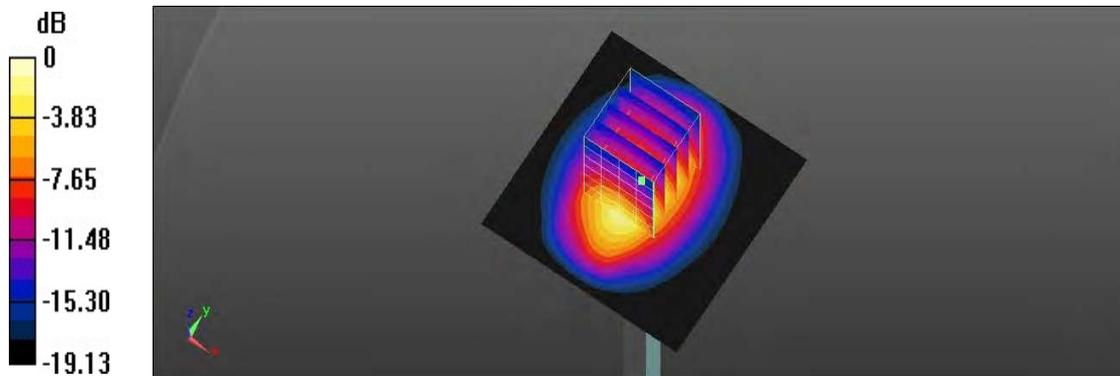
Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 9.3 W/kg; SAR(10 g) = 4.9 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 53.8%

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.5 W/kg = 11.61 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/5

System Performance Check at 1900MHz_Head

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.429$ S/m; $\epsilon_r = 40.352$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1900 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 16.1 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 107.6 V/m; Power Drift = 0.06 dB

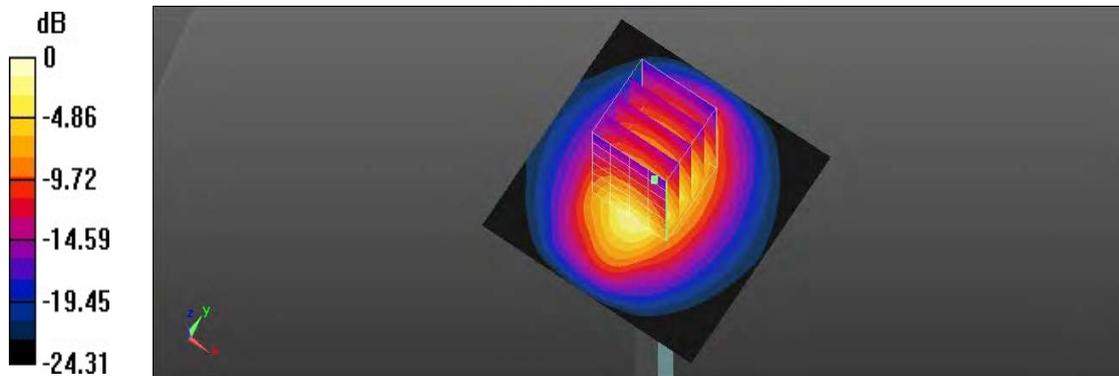
Peak SAR (extrapolated) = 19.3 W/kg

SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.38 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 53.9%

Maximum value of SAR (measured) = 16.1 W/kg



0 dB = 16.1 W/kg = 12.07 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/6

System Performance Check at 1900MHz_Head

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.454$ S/m; $\epsilon_r = 39.865$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1900 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 16.2 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 105.7 V/m; Power Drift = 0.14 dB

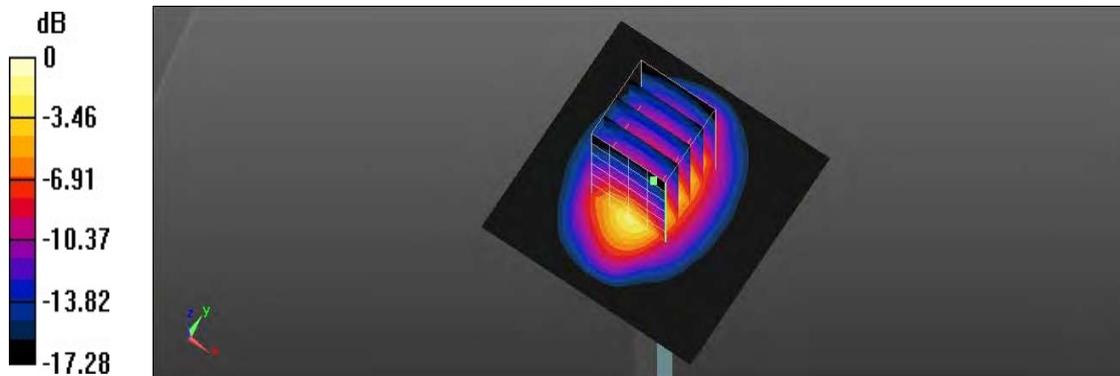
Peak SAR (extrapolated) = 19.6 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.24 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 52.2%

Maximum value of SAR (measured) = 16.3 W/kg



0 dB = 16.3 W/kg = 12.12 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/3

System Performance Check at 2300MHz_Head

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1005

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2300$ MHz; $\sigma = 1.663$ S/m; $\epsilon_r = 40.263$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.57, 7.57, 7.57) @ 2300 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2300MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 18.9 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.1 V/m; Power Drift = 0.07 dB

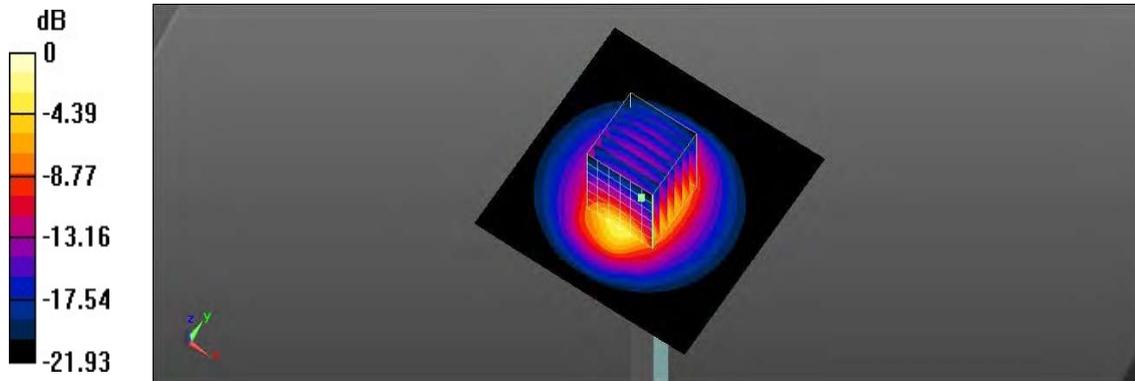
Peak SAR (extrapolated) = 23.5 W/kg

SAR(1 g) = 11.2 W/kg; SAR(10 g) = 5.23 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48%

Maximum value of SAR (measured) = 18.9 W/kg



0 dB = 18.9 W/kg = 12.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/4

System Performance Check at 2300MHz_Head

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1005

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2300$ MHz; $\sigma = 1.654$ S/m; $\epsilon_r = 40.19$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.57, 7.57, 7.57) @ 2300 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2300MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 21.3 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 110.2 V/m; Power Drift = 0.18 dB

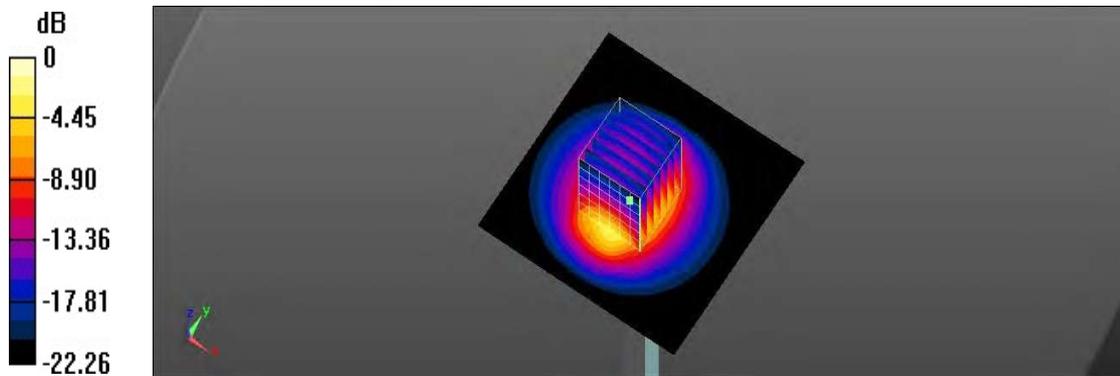
Peak SAR (extrapolated) = 26.4 W/kg

SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.89 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48%

Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg = 13.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/1

System Performance Check at 2600MHz_Head

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.98$ S/m; $\epsilon_r = 39.026$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.2, 7.2, 7.2) @ 2600 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 24.7 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 112.9 V/m; Power Drift = -0.01 dB

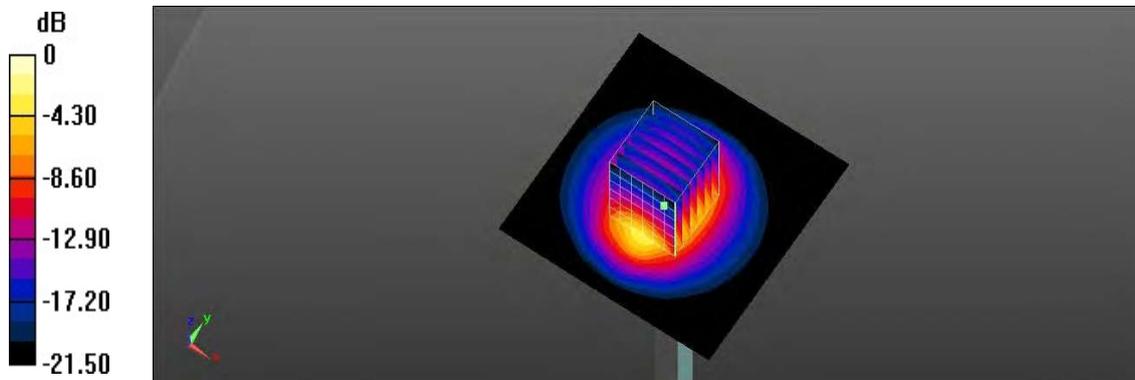
Peak SAR (extrapolated) = 30.0 W/kg

SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.97 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 24.4 W/kg



0 dB = 24.4 W/kg = 13.87 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/2

System Performance Check at 2600MHz_Head

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 38.937$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.2, 7.2, 7.2) @ 2600 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 23.2 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.9 V/m; Power Drift = 0.02 dB

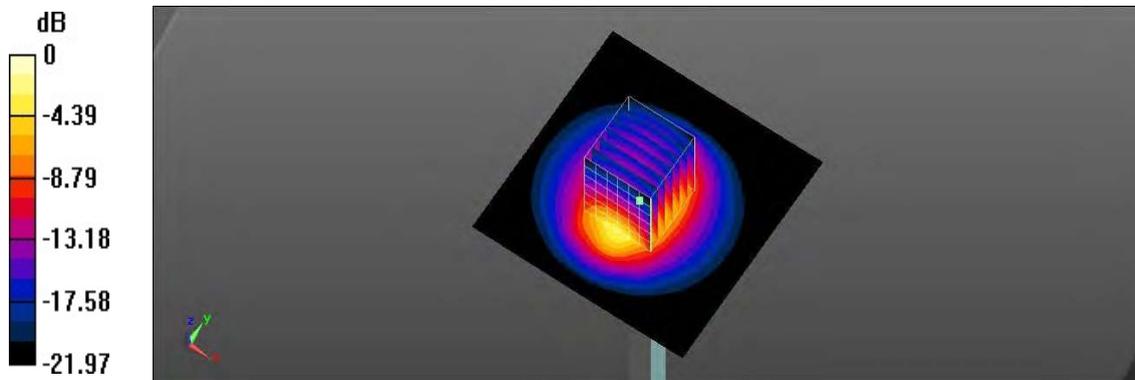
Peak SAR (extrapolated) = 28.7 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.49 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48.6%

Maximum value of SAR (measured) = 23.3 W/kg



0 dB = 23.3 W/kg = 13.67 dBW/kg

Appendix B - SAR Measurement Data

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/6

84_WCDMA Band II CH 9262_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band II (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.412$ S/m; $\epsilon_r = 40.039$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1852.4 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.862 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.86 V/m; Power Drift = -0.01 dB

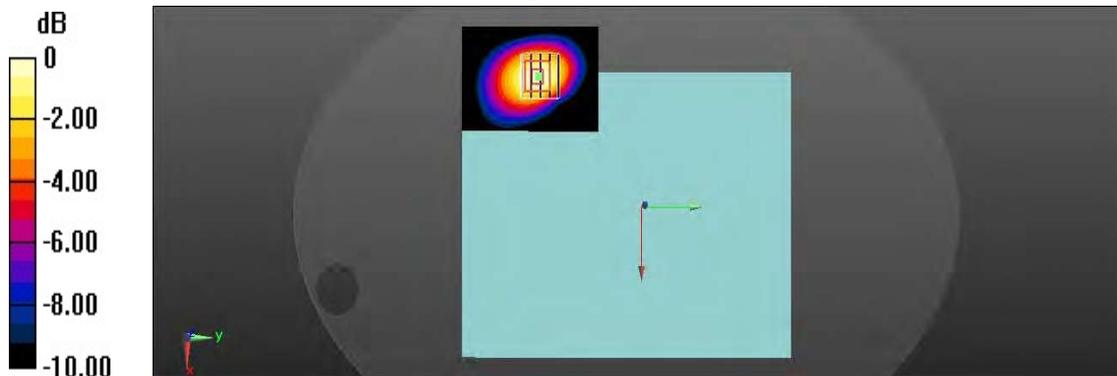
Peak SAR (extrapolated) = 0.970 W/kg

SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.347 W/kg

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.8%

Maximum value of SAR (measured) = 0.827 W/kg



0 dB = 0.827 W/kg = -0.82 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/5

73_WCDMA Band II CH 9400_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.412$ S/m; $\epsilon_r = 40.406$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1880 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.33 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.50 V/m; Power Drift = -0.13 dB

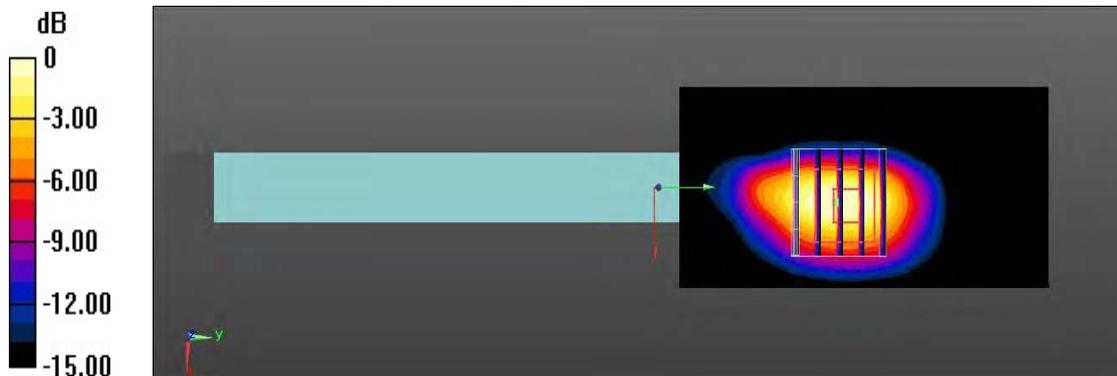
Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.780 W/kg; SAR(10 g) = 0.381 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 49.1%

Maximum value of SAR (measured) = 1.26 W/kg



0 dB = 1.26 W/kg = 1.00 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/8

81_WCDMA Band IV CH 1312_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.342$ S/m; $\epsilon_r = 40.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1712.4 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.706 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.92 V/m; Power Drift = 0.05 dB

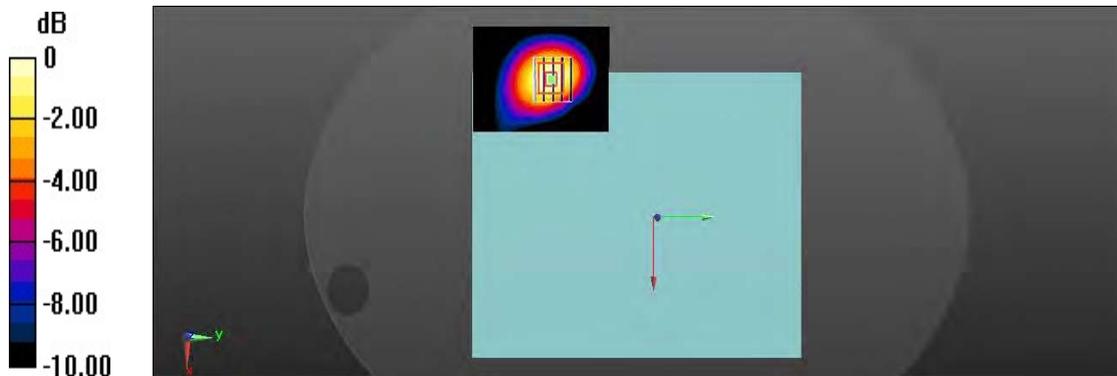
Peak SAR (extrapolated) = 0.789 W/kg

SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.297 W/kg

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 62.1%

Maximum value of SAR (measured) = 0.679 W/kg



0 dB = 0.679 W/kg = -1.68 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/7

76_WCDMA Band IV CH 1513_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.385$ S/m; $\epsilon_r = 40.671$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1752.6 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.62 V/m; Power Drift = -0.11 dB

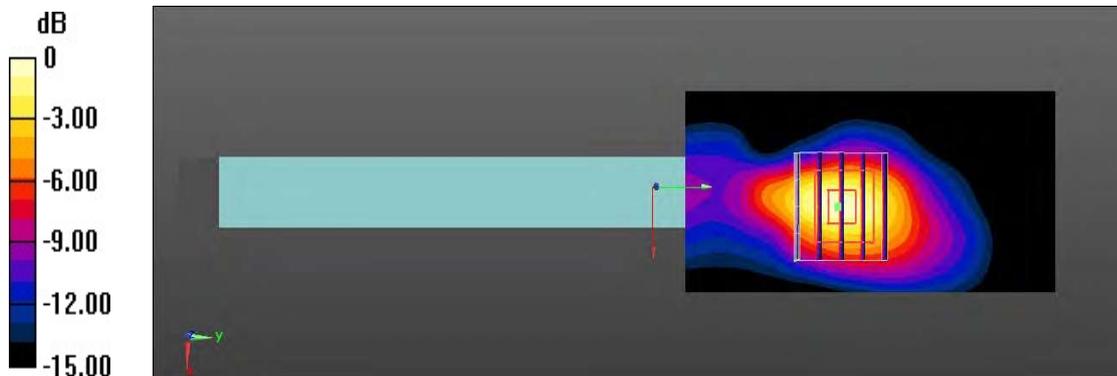
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.788 W/kg; SAR(10 g) = 0.406 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 51.5%

Maximum value of SAR (measured) = 1.26 W/kg



0 dB = 1.26 W/kg = 1.00 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/10

105_WCDMA Band V CH 4132_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.896$ S/m; $\epsilon_r = 42.406$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 826.4 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.176 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.28 V/m; Power Drift = -0.05 dB

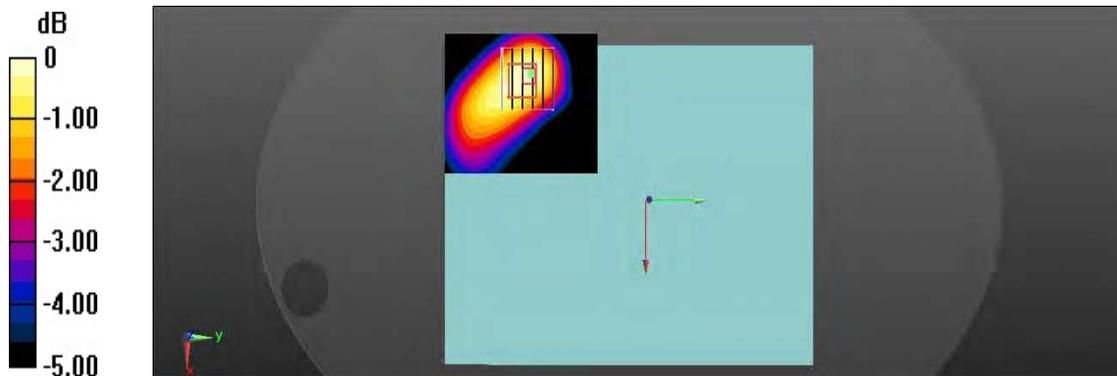
Peak SAR (extrapolated) = 0.204 W/kg

SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.096 W/kg

Smallest distance from peaks to all points 3 dB below = 25.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.1%

Maximum value of SAR (measured) = 0.176 W/kg



0 dB = 0.176 W/kg = -7.54 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/9

103_WCDMA Band V CH 4233_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, WCDMA Band V (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 847$ MHz; $\sigma = 0.921$ S/m; $\epsilon_r = 42.203$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 846.6 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.15 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 38.37 V/m; Power Drift = -0.09 dB

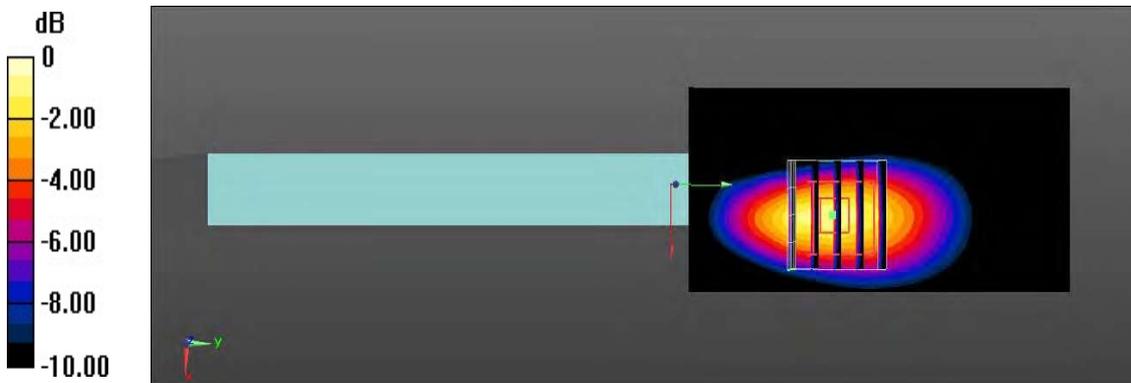
Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.824 W/kg; SAR(10 g) = 0.442 W/kg

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 48.5%

Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/6

62_LTE Band 2 CH 18700_QPSK_BW 20M_1RB Size 99RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.419$ S/m; $\epsilon_r = 40.003$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1860 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.738 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.01 V/m; Power Drift = -0.04 dB

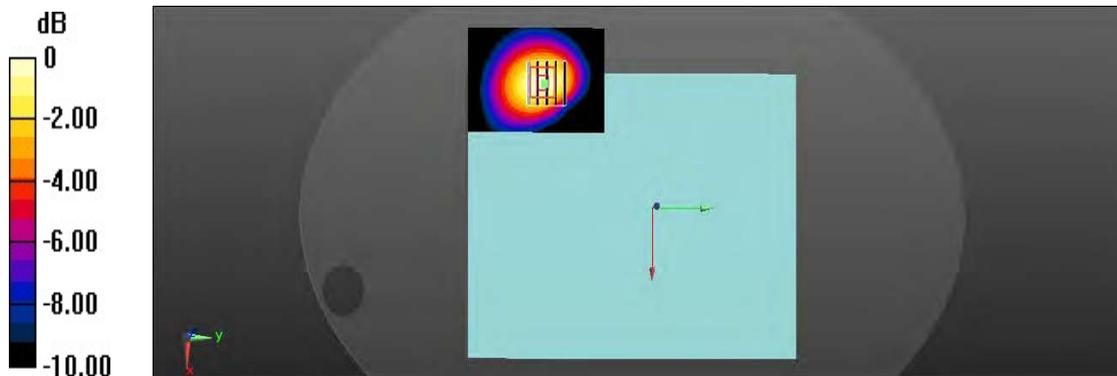
Peak SAR (extrapolated) = 0.828 W/kg

SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.304 W/kg

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.4%

Maximum value of SAR (measured) = 0.704 W/kg



0 dB = 0.704 W/kg = -1.52 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/5

50_LTE Band 2 CH 18900_QPSK_BW 20M_1RB Size 49RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.412$ S/m; $\epsilon_r = 40.406$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.78, 7.78, 7.78) @ 1880 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.41 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.45 V/m; Power Drift = -0.13 dB

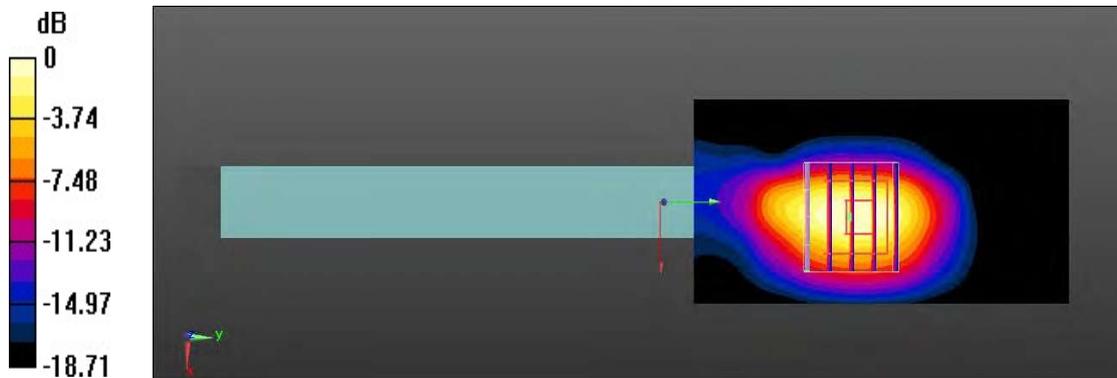
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.810 W/kg; SAR(10 g) = 0.399 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 50.2%

Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/10

93_LTE Band 5 CH 20525_QPSK_BW 10M_1RB Size 0RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.902$ S/m; $\epsilon_r = 42.336$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 836.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.260 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.03 V/m; Power Drift = -0.03 dB

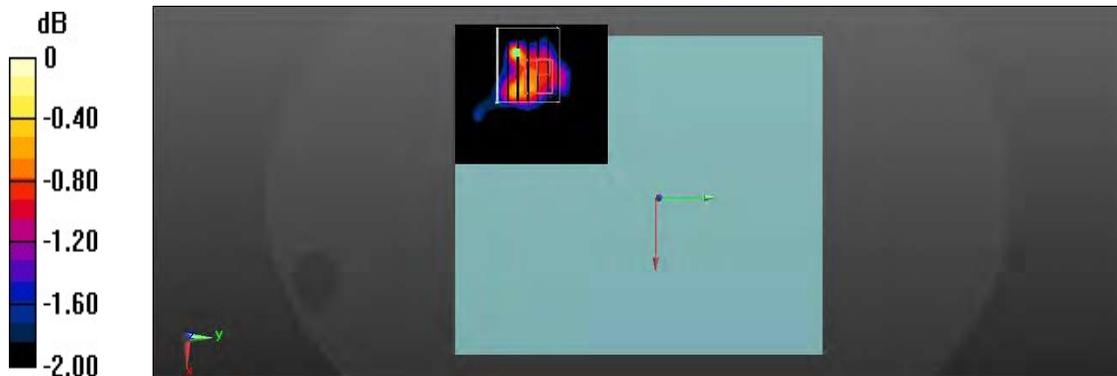
Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.164 W/kg

Smallest distance from peaks to all points 3 dB below = 25.6 mm

Ratio of SAR at M2 to SAR at M1 = 77.9%

Maximum value of SAR (measured) = 0.287 W/kg



0 dB = 0.287 W/kg = -5.42 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/9

88_LTE Band 5 CH 20525_QPSK_BW 10M_1RB Size 0RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 42.351$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 836.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 37.05 V/m; Power Drift = -0.00 dB

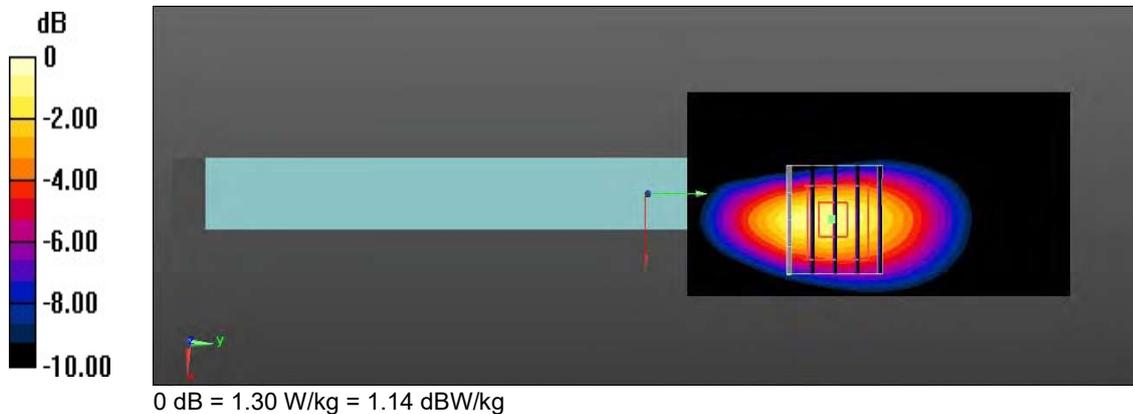
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.414 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48.4%

Maximum value of SAR (measured) = 1.30 W/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/2

14_LTE Band 7 CH 21100_QPSK_BW 20M_1RB Size 99RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.902$ S/m; $\epsilon_r = 39.208$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.38, 7.38, 7.38) @ 2535 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.569 W/kg

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

Reference Value = 16.89 V/m; Power Drift = -0.01 dB

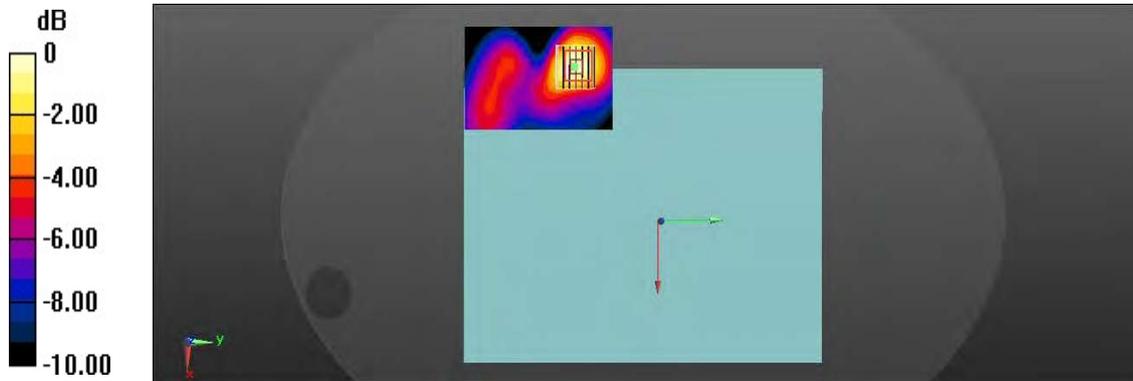
Peak SAR (extrapolated) = 0.677 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.189 W/kg

Smallest distance from peaks to all points 3 dB below = 15 mm

Ratio of SAR at M2 to SAR at M1 = 52.2%

Maximum value of SAR (measured) = 0.550 W/kg



0 dB = 0.550 W/kg = -2.60 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/1

02_LTE Band 7 CH 21100_QPSK_BW 20M_1RB Size 99RB_Side 1_14mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.912$ S/m; $\epsilon_r = 39.297$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.38, 7.38, 7.38) @ 2535 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.80 W/kg

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

Reference Value = 27.68 V/m; Power Drift = -0.17 dB

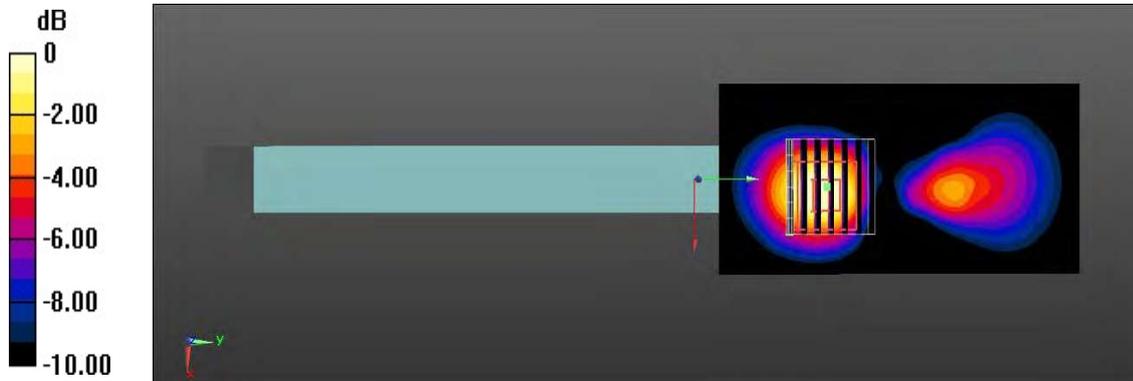
Peak SAR (extrapolated) = 2.04 W/kg

SAR(1 g) = 0.991 W/kg; SAR(10 g) = 0.462 W/kg

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.7%

Maximum value of SAR (measured) = 1.57 W/kg



0 dB = 1.57 W/kg = 1.96 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/12

94_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 49RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.862$ S/m; $\epsilon_r = 42.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 707.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.177 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.86 V/m; Power Drift = -0.04 dB

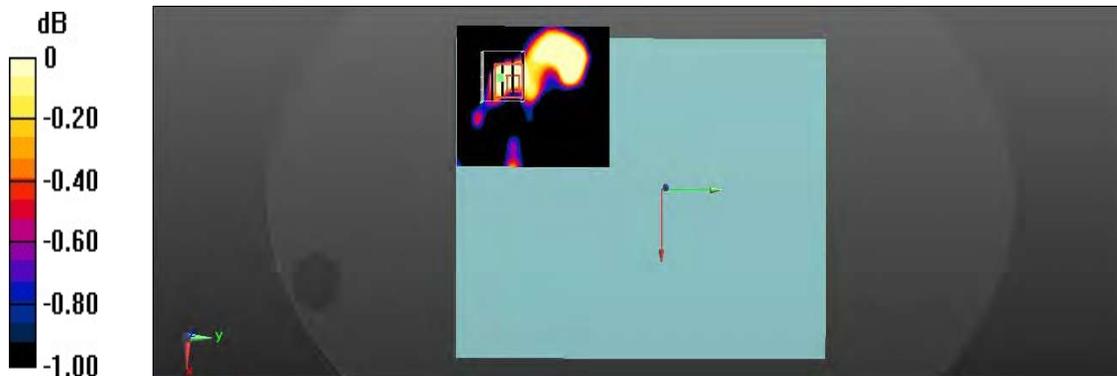
Peak SAR (extrapolated) = 0.155 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.102 W/kg

Smallest distance from peaks to all points 3 dB below = 22.4 mm

Ratio of SAR at M2 to SAR at M1 = 89.2%

Maximum value of SAR (measured) = 0.146 W/kg



0 dB = 0.146 W/kg = -8.36 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/11

96_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 49RB_Side1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.867$ S/m; $\epsilon_r = 43.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 707.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.718 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.48 V/m; Power Drift = -0.13 dB

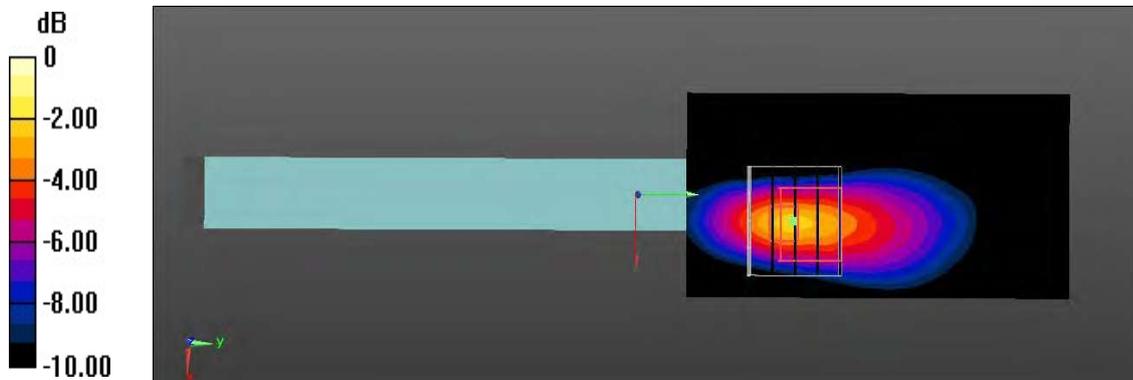
Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.537 W/kg; SAR(10 g) = 0.267 W/kg

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 30.2%

Maximum value of SAR (measured) = 1.22 W/kg



0 dB = 1.22 W/kg = 0.86 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/11

100_LTE Band 17 CH 23790_QPSK_BW 10M_1RB Size 49RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 710$ MHz; $\sigma = 0.869$ S/m; $\epsilon_r = 43.163$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 710 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.577 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.28 V/m; Power Drift = -0.08 dB

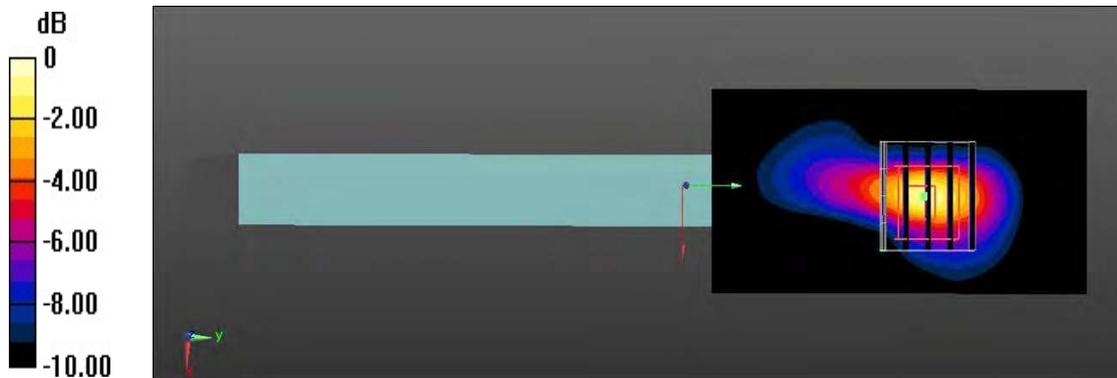
Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.232 W/kg

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 32.3%

Maximum value of SAR (measured) = 0.666 W/kg



0 dB = 0.666 W/kg = -1.77 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/12

95_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 49RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.583$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 782 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.249 W/kg

Zoom Scan (5x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.64 V/m; Power Drift = -0.11 dB

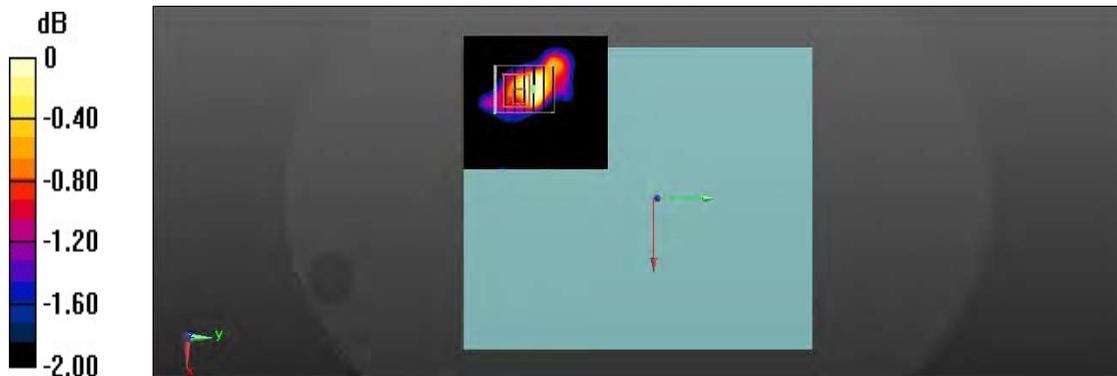
Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.140 W/kg

Smallest distance from peaks to all points 3 dB below = 17.9 mm

Ratio of SAR at M2 to SAR at M1 = 65.5%

Maximum value of SAR (measured) = 0.240 W/kg



0 dB = 0.240 W/kg = -6.20 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/11

97_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 49RB_Side1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 42.155$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.54, 9.54, 9.54) @ 782 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.35 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 41.95 V/m; Power Drift = 0.07 dB

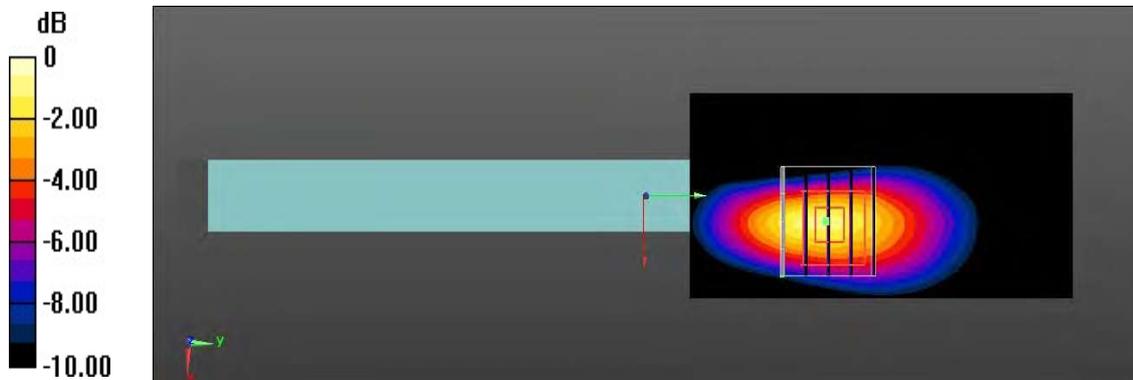
Peak SAR (extrapolated) = 2.30 W/kg

SAR(1 g) = 0.976 W/kg; SAR(10 g) = 0.520 W/kg

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/10

92_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 37RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.902$ S/m; $\epsilon_r = 42.336$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 831.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.251 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.35 V/m; Power Drift = -0.10 dB

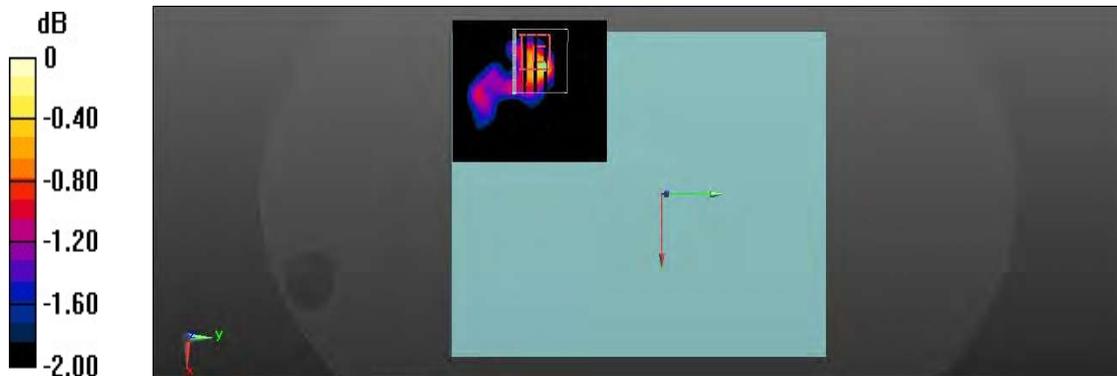
Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.192 W/kg; SAR(10 g) = 0.143 W/kg

Smallest distance from peaks to all points 3 dB below = 22.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.6%

Maximum value of SAR (measured) = 0.270 W/kg



0 dB = 0.270 W/kg = -5.69 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/9

90_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 37RB_Side1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.905$ S/m; $\epsilon_r = 42.423$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.26, 9.26, 9.26) @ 831.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 37.55 V/m; Power Drift = -0.15 dB

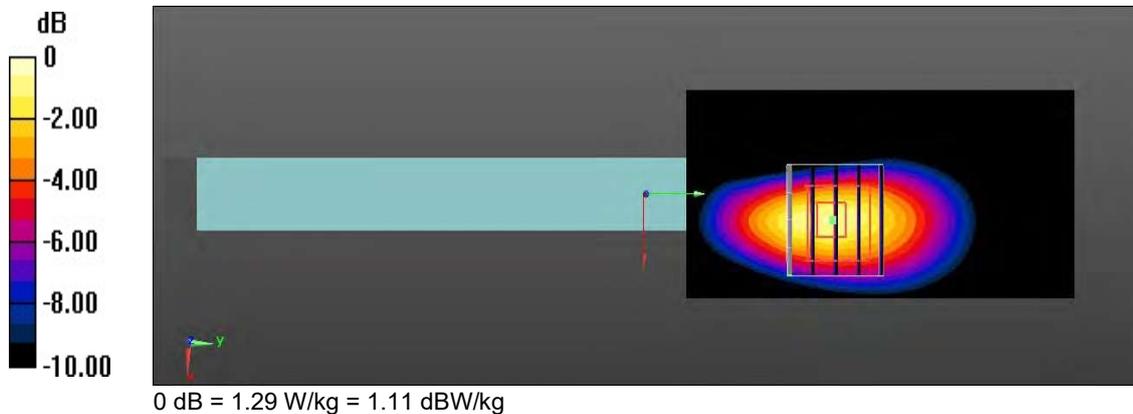
Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.414 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48.7%

Maximum value of SAR (measured) = 1.29 W/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/4

24_LTE Band 30 CH 27710_QPSK_BW 10M_1RB Size 0RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.667$ S/m; $\epsilon_r = 40.142$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.57, 7.57, 7.57) @ 2310 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.291 W/kg

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

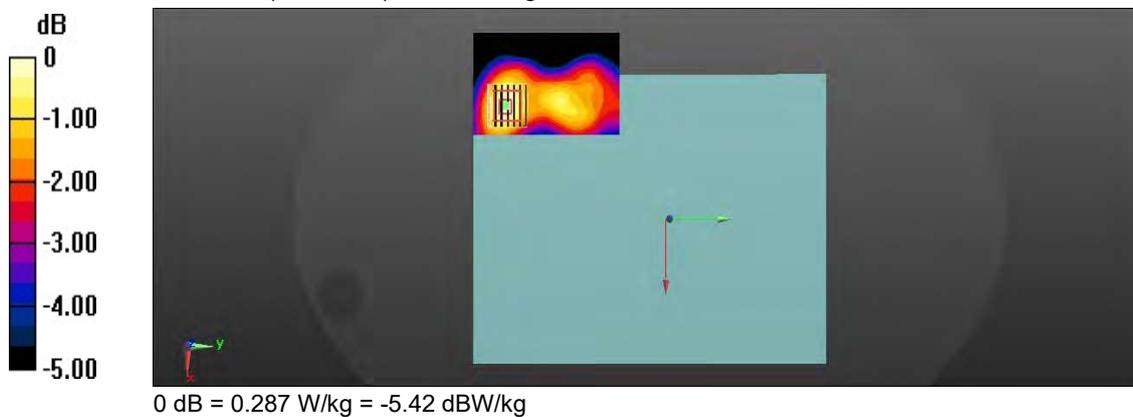
Reference Value = 13.66 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.117 W/kg

Ratio of SAR at M2 to SAR at M1 = 56.9%

Maximum value of SAR (measured) = 0.287 W/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/3

43_LTE Band 30 CH 27710_QPSK_BW 10M_1RB Size 0RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.676$ S/m; $\epsilon_r = 40.215$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.57, 7.57, 7.57) @ 2310 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.75 W/kg

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

Reference Value = 26.41 V/m; Power Drift = -0.16 dB

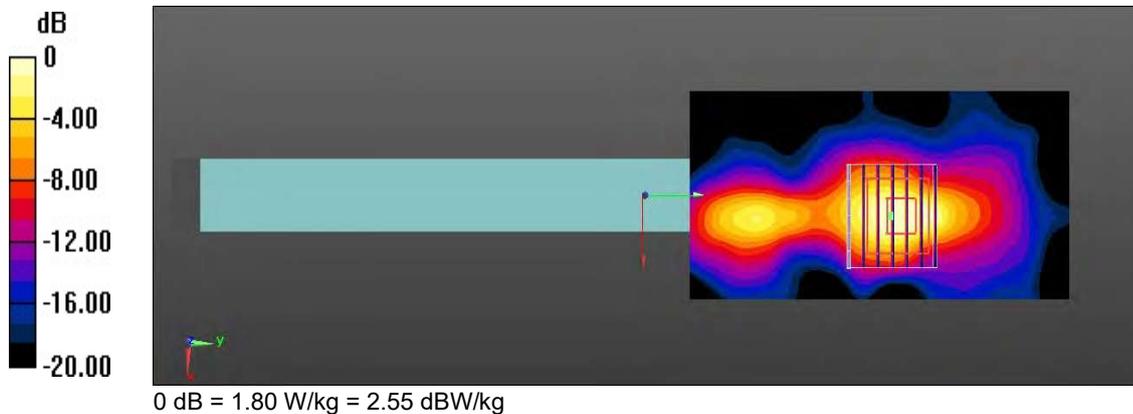
Peak SAR (extrapolated) = 2.27 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.444 W/kg

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 44.5%

Maximum value of SAR (measured) = 1.80 W/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/2

16_LTE Band 41 CH 40185_QPSK_BW 20M_1RB Size 99RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1.59

Medium parameters used: $f = 2550$ MHz; $\sigma = 1.915$ S/m; $\epsilon_r = 39.152$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.38, 7.38, 7.38) @ 2549.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.382 W/kg

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

Reference Value = 14.02 V/m; Power Drift = 0.03 dB

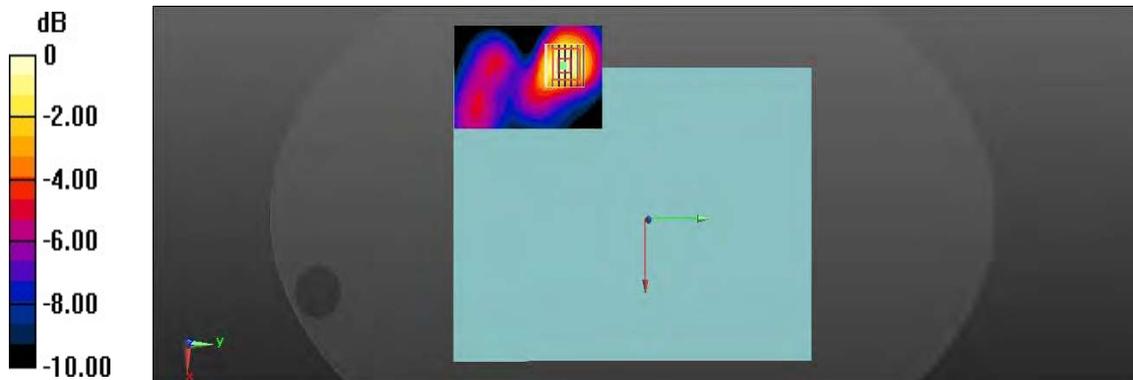
Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.242 W/kg; SAR(10 g) = 0.127 W/kg

Smallest distance from peaks to all points 3 dB below = 14.3 mm

Ratio of SAR at M2 to SAR at M1 = 51.8%

Maximum value of SAR (measured) = 0.376 W/kg



0 dB = 0.376 W/kg = -4.25 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/1

36_LTE Band 41 CH 39790_QPSK_BW 20M_1RB Size 99RB_Side1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1.59

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.887$ S/m; $\epsilon_r = 39.343$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.38, 7.38, 7.38) @ 2510 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.84 W/kg

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

Reference Value = 22.54 V/m; Power Drift = -0.06 dB

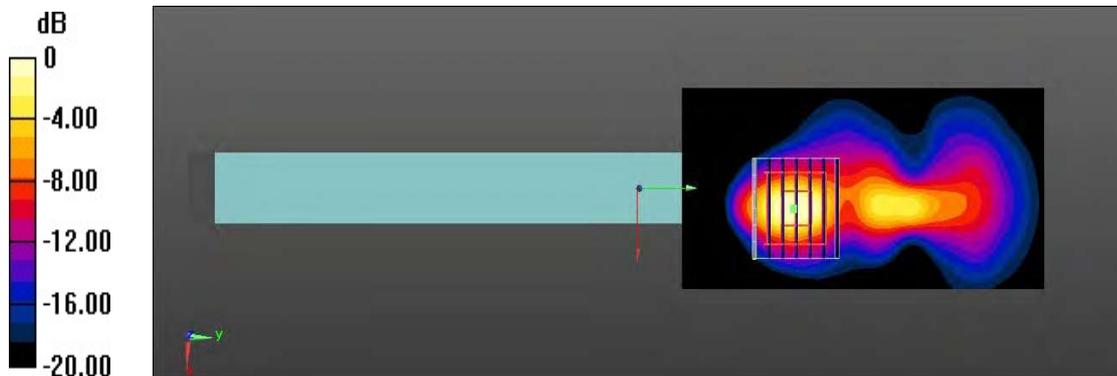
Peak SAR (extrapolated) = 2.29 W/kg

SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.309 W/kg

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 43.4%

Maximum value of SAR (measured) = 1.68 W/kg



0 dB = 1.68 W/kg = 2.25 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/1

10_LTE Band 38 CH 38000_QPSK_BW 20M_1RB Size 99RB_Side1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 2595 MHz; Duty Cycle: 1:1.59

Medium parameters used (interpolated): $f = 2595$ MHz; $\sigma = 1.974$ S/m; $\epsilon_r = 39.043$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.2, 7.2, 7.2) @ 2595 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.14 W/kg

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

Reference Value = 9.117 V/m; Power Drift = 0.15 dB

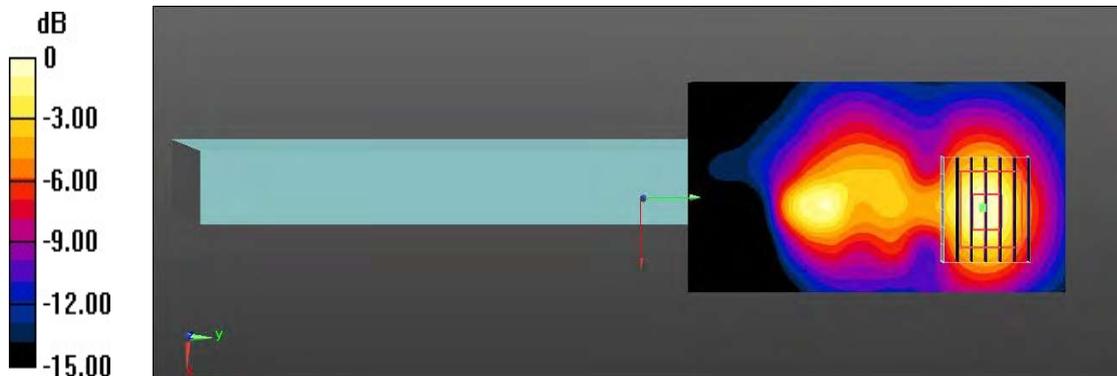
Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.662 W/kg; SAR(10 g) = 0.290 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 47.7%

Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 1.12 W/kg = 0.49 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/8

65_LTE Band 66 CH 132322_QPSK_BW 20M_1RB Size 99RB_Back of display screen_25mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.367$ S/m; $\epsilon_r = 40.494$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1745 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (51x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.689 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.50 V/m; Power Drift = -0.02 dB

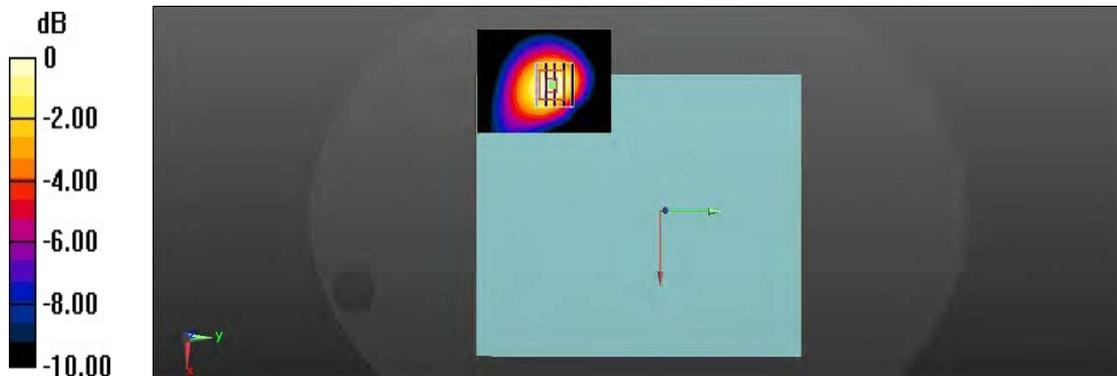
Peak SAR (extrapolated) = 0.767 W/kg

SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.288 W/kg

Smallest distance from peaks to all points 3 dB below = 16.5 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

Maximum value of SAR (measured) = 0.657 W/kg



0 dB = 0.657 W/kg = -1.82 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/7

56_LTE Band 66 CH 132572_QPSK_BW 20M_1RB Size 99RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.625$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1770 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.51 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.69 V/m; Power Drift = -0.13 dB

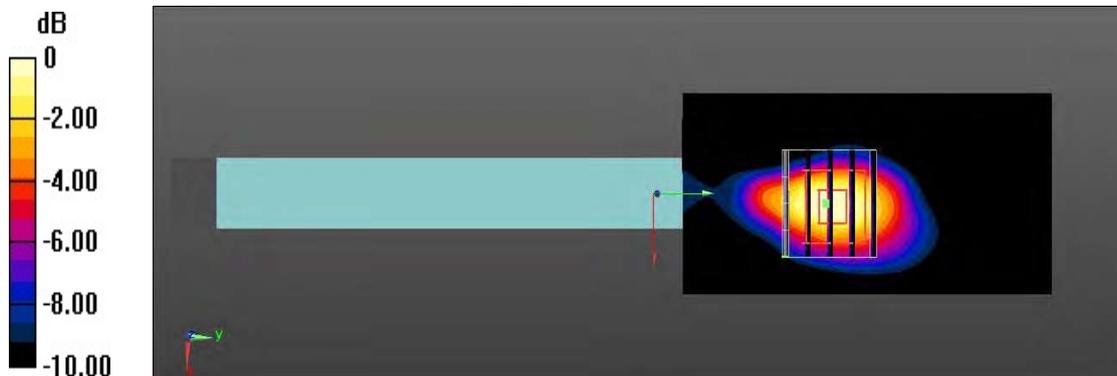
Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 0.901 W/kg; SAR(10 g) = 0.467 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 52.1%

Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2020/12/7

58_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 0RB_Side 1_0mm

DUT: BR1100FK, B1100FK, BR1100CK, B1100CK ; Type: Notebook PC

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.369$ S/m; $\epsilon_r = 40.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.14, 8.14, 8.14) @ 1732.5 MHz; Calibrated: 2020/5/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2020/3/18
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (41x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.09 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.18 V/m; Power Drift = -0.12 dB

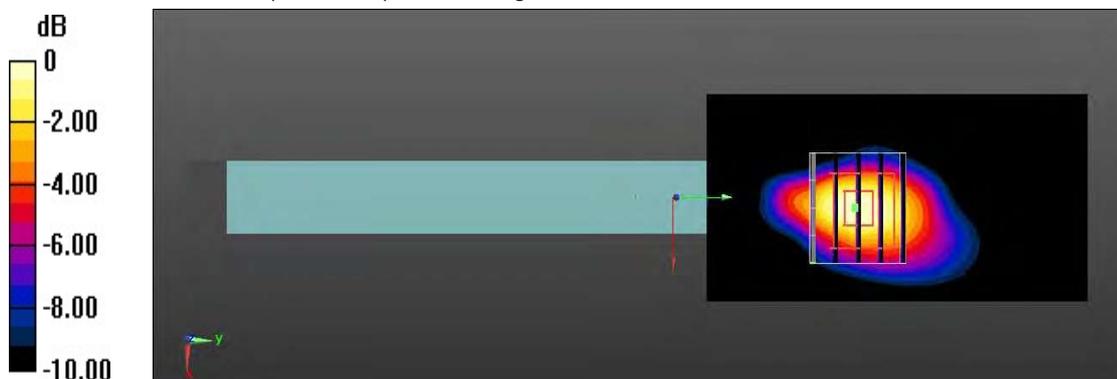
Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.642 W/kg; SAR(10 g) = 0.335 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 52.7%

Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg