

SAR TEST REPORT

For

Sun Cupid Technology (HK) Ltd.

16/F,CEO TOWER,77 WING HONG STREET,CHEUNG SHA WAN,KOWLOON,HONG KONG.

FCC ID: 2ADINT1001L

Report Type: Original Report		Product Type: Tablet	
Report Number:	SZ1210628-25933E-SA		
Report Date:	2021-09-08		
Reviewed By:	Hubery Cai		
	SAR Engineer		
Bay Area Compliance Laboratories Corp. (Shenzhen) 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn			

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk “★”. BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk ‘*’. Customer model name, addresses, names, trademarks etc. are not considered data.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Attestation of Test Results			
EUT Information	EUT Description	Tablet	
	Tested Model	T1001L	
	FCC ID	2ADINT1001L	
	Serial Number	SZ1210628-25933E-SA-S_BI5	
	Test Date	2021/08/27 to 2021/09/06	
MODE		Max. SAR Level(s) Reported(W/kg)	Limit (W/kg)
GSM 850	1g Body SAR	0.43	1.6
PCS 1900	1g Body SAR	1.25	
WCDMA Band 2	1g Body SAR	0.72	
WCDMA Band 4	1g Body SAR	1.17	
WCDMA Band 5	1g Body SAR	0.66	
LTE Band 7	1g Body SAR	1.28	
LTE Band 12	1g Body SAR	0.98	
LTE Band 13	1g Body SAR	1.08	
LTE Band 14	1g Body SAR	1.11	
LTE Band 25&2	1g Body SAR	0.93	
LTE Band 26&5	1g Body SAR	1.05	
LTE Band 30	1g Body SAR	0.80	
LTE Band 41	1g Body SAR	0.68	
LTE Band 66&4	1g Body SAR	1.21	
LTE Band 71	1g Body SAR	0.79	
WIFI 2.4G	1g Body SAR	0.49	
WIFI 5.2G	1g Body SAR	0.54	
WIFI 5.8G	1g Body SAR	0.41	
Simultaneous	1g Body SAR	1.56	
	1g Body SAR	1.56(Hotspot)	

Applicable Standards	FCC 47 CFR part 2.1093 Radiofrequency radiation exposure evaluation: portable devices
	IEEE1528:2013 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
	IEC 62209-1:2016 Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz)
	IEC 62209-2:2010 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices-Human models, instrumentation, and procedures-Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)
	KDB procedures KDB 447498 D01 General RF Exposure Guidance v06 KDB 648474 D04 Handset SAR v01r03 KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04 KDB 865664 D02 RF Exposure Reporting v01r02 KDB 941225 D01 3G SAR Procedures v03r01 KDB 941225 D05 SAR for LTE Devices v02r05 KDB 941225 D06 Hotspot Mode v02r01 KDB 616217 D04 SAR for laptop and tablets v01r02
Note: This wireless device has been shown to be capable of compliance for localized specific absorption rate (SAR) for General Population/Uncontrolled Exposure limits specified in FCC 47 CFR part 2.1093 and has been tested in accordance with the measurement procedures specified in IEEE 1528-2013 and RF exposure KDB procedures. The results and statements contained in this report pertain only to the device(s) evaluated.	

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY.....	5
EUT DESCRIPTION	6
TECHNICAL SPECIFICATION	7
REFERENCE, STANDARDS, AND GUIDELINES.....	8
SAR LIMITS.....	9
FACILITIES	10
DESCRIPTION OF TEST SYSTEM.....	11
EQUIPMENT LIST AND CALIBRATION.....	18
EQUIPMENTS LIST & CALIBRATION INFORMATION.....	18
SAR MEASUREMENT SYSTEM VERIFICATION	19
LIQUID VERIFICATION	19
SYSTEM ACCURACY VERIFICATION.....	23
SAR SYSTEM VALIDATION DATA.....	24
EUT TEST STRATEGY AND METHODOLOGY.....	33
TEST POSITIONS FOR HAND-HELD USAGE OF THE DEVICE, NOT AT THE HEAD OR TORSO	33
TEST POSITIONS FOR BODY SUPPORTED AND OTHER CONFIGURATIONS	34
TEST DISTANCE FOR SAR EVALUATION.....	35
SAR EVALUATION PROCEDURE	36
CONDUCTED OUTPUT POWER MEASUREMENT	37
PROVISION APPLICABLE	37
TEST PROCEDURE	37
RADIO CONFIGURATION	37
MAXIMUM TARGET OUTPUT POWER	51
TEST RESULTS:.....	53
STANDALONE SAR TEST EXCLUSION CONSIDERATIONS.....	121
ANTENNA DISTANCE TO EDGE	121
SAR MEASUREMENT RESULTS	127
SAR TEST DATA	127
SAR MEASUREMENT VARIABILITY.....	147
SAR SIMULTANEOUS TRANSMISSION DESCRIPTION.....	148
SAR PLOTS	156
APPENDIX A MEASUREMENT UNCERTAINTY	157
APPENDIX B EUT TEST POSITION PHOTOS.....	159
APPENDIX C PROBE CALIBRATION CERTIFICATES	160
APPENDIX D DIPOLE CALIBRATION CERTIFICATES	161

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZ1210628-25933E-SA	Original Report	2021-09-08

EUT DESCRIPTION

This report has been prepared on behalf of **Sun Cupid Technology (HK) Ltd.** and their product **Tablet**, Model: **T1001L**, FCC ID: **2ADINT1001L** or the EUT (Equipment under Test) as referred to in the rest of this report.

**All measurement and test data in this report was gathered from production sample serial number: SZ1210628-25933E-SA-S_BI5 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2021-06-30.*

Note: The coat should be used with the product, not alone

Technical Specification

Device Type:	Portable
Exposure Category:	Population / Uncontrolled
Antenna Type(s):	Internal Antenna
DTM Type:	Class B
Multi-slot Class:	GPRS/EGPRS (Class 12)
Proximity sensor for SAR reduction:	None
Body-Worn Accessories:	Headset
Face-Head Accessories:	None
Operation Mode :	GPRS/ EDGE Data, WCDMA(R99 (Voice+Data), HSDPA/HSUPA/HSPA+), FDD-LTE, TDD-LTE, WLAN, Bluetooth/BLE
Frequency Band:	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 13: 777-787MHz(TX); 746-756MHz(RX) LTE Band 14: 788-798MHz(TX); 758-768MHz(RX) LTE Band 25: 1850-1915MHz(TX); 1930-1995MHz(RX) LTE Band 26: 814-849MHz(TX); 859-894MHz(RX) LTE Band 30: 2305-2315MHz(TX); 2350-2360MHz(RX) LTE Band 41: 2496-2690MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX) LTE Band 71: 663-698MHz(TX);617-652MHz(RX) 2.4GWi-Fi:2412~2462MHz 5G WIFI Band 1: 5150~5250 MHz, Band 4: 5725~5850 MHz Bluetooth : 2402 MHz-2480 MHz
Conducted RF Power:	GSM 850 : 33.38 dBm PCS 1900: 29.56 dBm WCDMA Band 2: 22.93 dBm WCDMA Band 4: 24.18 dBm WCDMA Band 5: 23.92 dBm LTE Band 2: 23.39 dBm LTE Band 4: 24.27 dBm LTE Band 5: 23.97 dBm LTE Band 7: 23.13 dBm LTE Band 12: 24.05 dBm LTE Band 13: 24.08 dBm LTE Band 14: 23.80 dBm LTE Band 25: 23.66 dBm LTE Band 26: 24.35 dBm LTE Band 30: 23.24 dBm LTE Band 41: 23.69 dBm LTE Band 66: 24.17 dBm LTE Band 71: 23.38 dBm WLAN 2.4G: 17.45 dBm WLAN 5.2G: 11.45 dBm WLAN 5.8G :9.48 dBm Bluetooth(BDR/EDR): 3.84 dBm
Power Source:	Rechargeable Battery
Normal Operation:	Body-Support

REFERENCE, STANDARDS, AND GUIDELINES

FCC:

The Report and Order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 1.6 mW/g as recommended by the ANSI/IEEE standard C95.1-1992 [6] for an uncontrolled environment (Paragraph 65). According to the Supplement C of OET Bulletin 65 "Evaluating Compliance with FCC Guide-lines for Human Exposure to Radio frequency Electromagnetic Fields", released on Jun 29, 2001 by the FCC, the device should be evaluated at maximum output power (radiated from the antenna) under "worst-case" conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in North America is 1.6 mW/g average over 1 gram of tissue mass.

CE:

The order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 2 mW/g as recommended by EN62209-1 for an uncontrolled environment. According to the Standard, the device should be evaluated at maximum output power (radiated from the antenna) under "worst-case" conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in Europe is 2 mW/g average over 10 gram of tissue mass.

The test configurations were laid out on a specially designed test fixture to ensure the reproducibility of measurements. Each configuration was scanned for SAR. Analysis of each scan was carried out to characterize the above effects in the device.

SAR Limits**FCC Limit(1g Tissue)**

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1 g of tissue)	1.60	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

CE Limit(10g Tissue)

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 10 g of tissue)	2.0	10
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

Population/Uncontrolled Environments are defined as locations where there is the exposure of individual 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 people who are aware of the potential for exposure (i.e. as a result of employment or occupation).

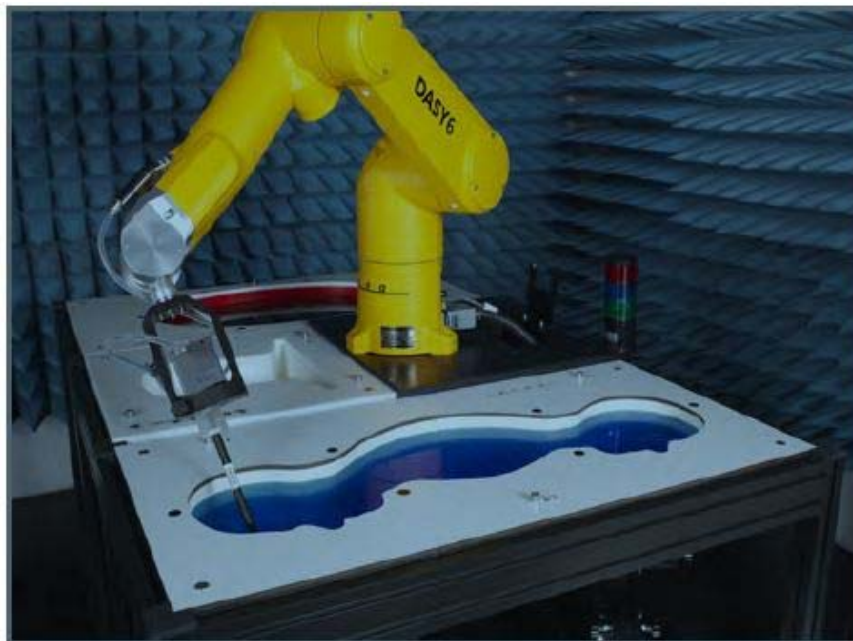
General Population/Uncontrolled environments Spatial Peak limit 1.6W/kg (FCC) & 2 W/kg (CE) applied to the EUT.

FACILITIES

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect data is located at 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

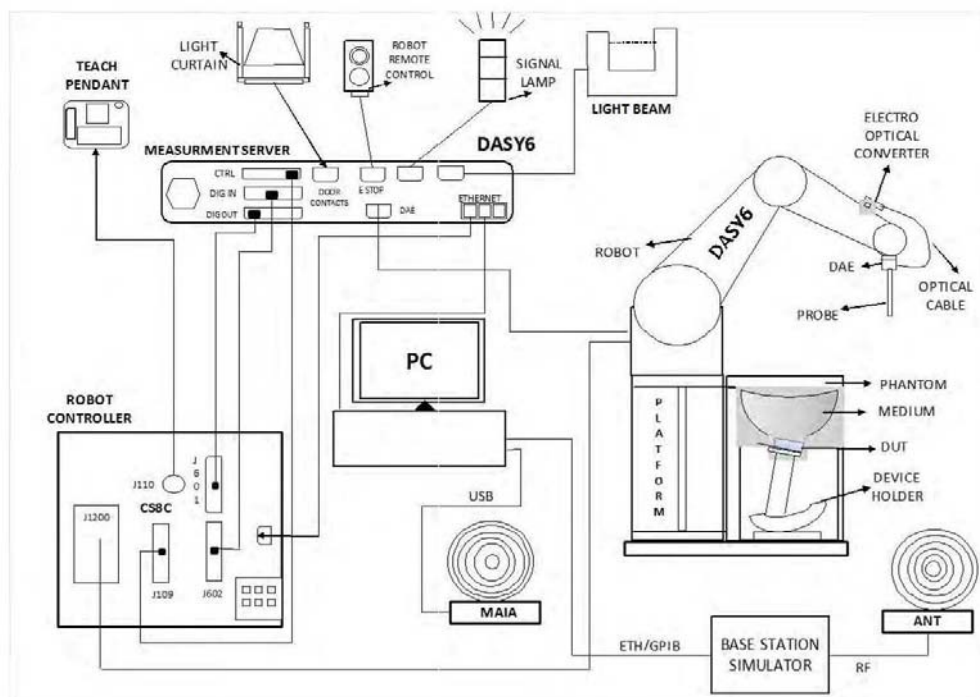
DESCRIPTION OF TEST SYSTEM

These measurements were performed with the automated near-field scanning system DASY6 from Schmid & Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:



DASY6 System Description

The DASY6 system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot (Staubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, 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.
- 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.
- 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.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 professional operating system and the DASY52 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

DASY6 Measurement Server

The DASY6 measurement server is based on a PC/104 CPU board with a 400 MHz Intel ULV Celeron, 128 MB chip-disk and 128 MB RAM. The necessary circuits for communication with the DAE4 (or DAE3) electronics box, as well as the 16-bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board.



The measurement server performs all real-time data evaluations of field measurements and surface detection, controls robot movements, and handles safety operations. The PC operating system cannot interfere with these time-critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port, which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Connection of devices from any other supplier could seriously damage the measurement server.

Data Acquisition Electronics

The data acquisition electronics (DAE4) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of both the DAE4 as well as of the DAE3 box is 200M Ω ; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

EX3DV4 E-Field Probes

Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
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
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

SAM Twin Phantom

The SAM Twin Phantom (shown in front of DASY6) is a fiberglass shell phantom with shell thickness 2 mm, except in the ear region where the thickness is increased to 6 mm. The phantom has three measurement areas: 1) Left Head, 2) Right Head, and 3) Flat Section. For larger devices, the use of the ELI-Phantom (shown behind DASY6) is required. For devices such as glasses with a wireless link, the Face Down Phantom is the most suitable (between the SAM Twin and ELI phantoms).

When the phantom is mounted inside allocated slot of the DASY6 platform, phantom reference points can be taught directly in the DASY5 V5.2 software. When the DASY6 platform is used to mount the

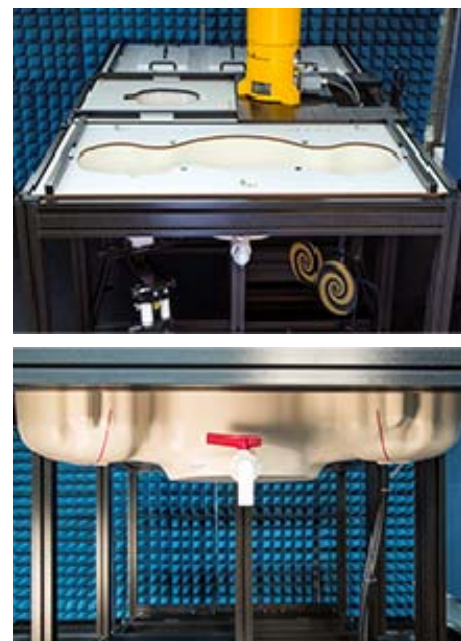
Phantom, some of the phantom teaching points cannot be reached by the robot in DASY5 V5.2. A special tool called P1a-P2aX-Former is provided to transform two of the three points, P1 and P2, to reachable locations. To use these new teaching points, a revised phantom configuration file is required.

In addition to our standard broadband liquids, the phantom can be used with the following tissue simulating liquids:

Sugar-water-based liquids can be left permanently in the phantom. Always cover the liquid when the system is not in use to prevent changes in liquid parameters due to water evaporation.

DGBE-based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom, and the phantom should be dried when the system is not in use (desirable at least once a week).

Do not use other organic solvents without previously testing the solvent resistivity of the phantom. Approximately 25 liters of liquid is required to fill the SAM Twin phantom.



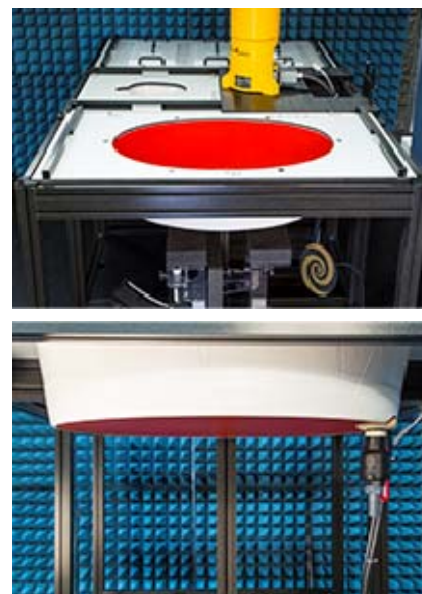
ELI Phantom

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6 GHz. ELI is fully compatible with the latest draft of the standard IEC 62209-2 and the use of all known tissue simulating liquids. ELI has been optimized for performance and can be integrated into a SPEAG standard phantom table. A cover is provided to prevent evaporation of water and changes in liquid parameters. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points.

The phantom can be used with the following tissue simulating liquids:

- Sugar-water-based liquids can be left permanently in the phantom. Always cover the liquid when the system is not in use to prevent changes in liquid parameters due to water evaporation.
- DGBE-based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom, and the phantom should be dried when the system is not in use (desirable at least once a week).
- Do not use other organic solvents without previously testing the solvent resistivity of the phantom.

Approximately 25 liters of liquid is required to fill the ELI phantom.



Robots

The DASY6 system uses the high-precision industrial robots TX60L, TX90XL, and RX160L from Staubli SA (France). The TX robot family - the successor of the well-known RX robot family - continues to offer the features important for DASY6 applications:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchrony motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

The robots are controlled by the Staubli CS8c robot controllers. All information regarding the use and maintenance of the robot arm and the robot controller is provided

Calibration Frequency Points for EX3DV4 E-Field Probes SN: 7441 Calibrated: 2021/02/23

Calibration Frequency Point(MHz)	Frequency Range(MHz)		Conversion Factor		
	From	To	X	Y	Z
750 Head	650	850	10.28	10.28	10.28
900 Head	850	1000	9.80	9.80	9.80
1450 Head	1350	1550	8.61	8.61	8.61
1750 Head	1650	1850	8.39	8.39	8.39
1900 Head	1850	1950	8.02	8.02	8.02
2000 Head	1950	2100	8.07	8.07	8.07
2300 Head	2200	2400	7.92	7.92	7.92
2450 Head	2400	2550	7.63	7.63	7.63
2600 Head	2550	2700	7.33	7.33	7.33
3300 Head	3200	3400	7.21	7.21	7.21
3500 Head	3400	3600	6.96	6.96	6.96
3700 Head	3600	3800	6.65	6.65	6.65
3900 Head	3800	4000	6.66	6.66	6.66
4400 Head	4300	4500	6.45	6.45	6.45
4600 Head	4500	4700	6.30	6.30	6.30
4800 Head	4700	4900	6.24	6.24	6.24
4950 Head	4900	5050	5.95	5.95	5.95

Calibration Frequency Points for EX3DV4 E-Field Probes SN: 7329 Calibrated: 2020/11/30

Calibration Frequency Point(MHz)	Frequency Range(MHz)		Conversion Factor		
	From	To	X	Y	Z
750 Head	650	850	10.13	10.13	10.13
900 Head	850	1000	9.79	9.79	9.79
1450 Head	1350	1550	8.66	8.66	8.66
1750 Head	1650	1850	8.41	8.41	8.41
1900 Head	1850	2000	8.14	8.14	8.14
2100 Head	2000	2200	8.15	8.15	8.15
2300 Head	2200	2400	7.80	7.80	7.80
2450 Head	2400	2550	7.44	7.44	7.44
2600 Head	2550	2700	7.29	7.29	7.29
5200 Head	5090	5250	5.55	5.55	5.55
5300 Head	5250	5410	5.28	5.28	5.28
5600 Head	5490	5700	4.76	4.76	4.76
5800 Head	5700	5910	4.72	4.72	4.72

Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 15mm 2 step integral, with 1.5mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the DASY5 software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1g cube is 0mm, with the side length of the 10g cube is 21.5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of $7 \times 7 \times 7$ (5mmx5mmx5mm) providing a volume of 30 mm in the X & Y & Z axis.

Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEC 62209-1:2016

Recommended Tissue Dielectric Parameters for Head and Body

Table A.3 – Dielectric properties of the head tissue-equivalent liquid

Frequency MHz	Relative permittivity ϵ_r	Conductivity (σ) S/m
300	45,3	0,87
450	43,5	0,87
<i>750</i>	<i>41,9</i>	<i>0,89</i>
835	41,5	0,90
900	41,5	0,97
1 450	40,5	1,20
<i>1 500</i>	<i>40,4</i>	<i>1,23</i>
<i>1 640</i>	<i>40,2</i>	<i>1,31</i>
<i>1 750</i>	<i>40,1</i>	<i>1,37</i>
1 800	40,0	1,40
1 900	40,0	1,40
2 000	40,0	1,40
<i>2 100</i>	<i>39,8</i>	<i>1,49</i>
<i>2 300</i>	<i>39,5</i>	<i>1,67</i>
2 450	39,2	1,80
<i>2 600</i>	<i>39,0</i>	<i>1,96</i>
3 000	38,5	2,40
<i>3 500</i>	<i>37,9</i>	<i>2,91</i>
<i>4 000</i>	<i>37,4</i>	<i>3,43</i>
<i>4 500</i>	<i>36,8</i>	<i>3,94</i>
<i>5 000</i>	<i>36,2</i>	<i>4,45</i>
<i>5 200</i>	<i>36,0</i>	<i>4,66</i>
<i>5 400</i>	<i>35,8</i>	<i>4,86</i>
<i>5 600</i>	<i>35,5</i>	<i>5,07</i>
<i>5 800</i>	<i>35,3</i>	<i>5,27</i>
6 000	35,1	5,48

NOTE For convenience, permittivity and conductivity values at those frequencies which are not part of the original data provided by Drossos et al. [33] or the extension to 5 800 MHz are provided (i.e. the values shown *in italics*). These values were linearly interpolated between the values in this table that are immediately above and below these values, except the values at 6 000 MHz that were linearly extrapolated from the values at 3 000 MHz and 5 800 MHz.

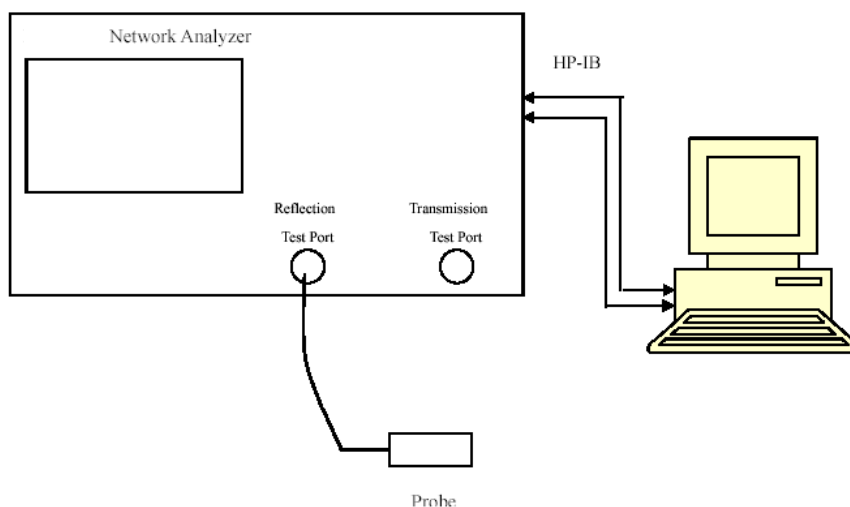
EQUIPMENT LIST AND CALIBRATION

Equipments List & Calibration Information

Equipment	Model	S/N	Calibration Date	Calibration Due Date
DASY5 Test Software	DASY52 52.10.2	N/A	NCR	NCR
DASY6 Measurement Server	DASY6 6.0.31	N/A	NCR	NCR
Data Acquisition Electronics	DAE4	1562	2021/01/19	2022/01/18
E-Field Probe	EX3DV4	7441	2021/02/23	2022/02/22
E-Field Probe	EX3DV4	7329	2020/11/30	2021/11/29
Mounting Device	MD4HHTV5	SD 000 H01 KA	NCR	NCR
SAM Twin Phantom	SAM-Twin V8.0	1962	NCR	NCR
Dipole, 750MHz	D750V3	1194	2020/1/13	2023/1/12
Dipole, 1800MHz	D1800V2	2d018	2020/10/15	2023/10/14
Dipole, 1900MHz	D1900V2	5d231	2020/1/14	2023/1/13
Dipole, 2300MHz	D2300V2	1103	2020/1/13	2023/1/12
Dipole, 2450MHz	D2450V2	751	2020/10/13	2023/10/12
Dipole, 2600MHz	D2600V2	1162	2019/10/2	2022/10/1
Dipole, 5GHz	D5GHZV2	1301	2020/01/10	2023/01/09
Simulated Tissue Liquid Head(500-9500MHz)	HBBL600-10000V6	180622-2	Each Time	
Network Analyzer	8753D	3410A08288	2021/7/06	2022/7/05
Dielectric Assessment Kit	DAK-3.5	1248	NCR	NCR
MXG Analog Signal Generator	N5181A	MY48180408	2021/7/06	2022/7/05
USB wideband power sensor	U2021XA	MY54250003	2021/7/06	2022/7/05
Power Amplifier	5S1G4	71377	NCR	NCR
Directional Coupler	4242-10	3307	NCR	NCR
Attenuator	6dB	773-6	NCR	NCR
Wireless communication tester	8960	MY48367501	2021/7/06	2022/7/05
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	116218	2021/7/06	2022/7/05

SAR MEASUREMENT SYSTEM VERIFICATION

Liquid Verification



Liquid Verification Setup Block Diagram

Liquid Verification Results

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	$\Delta\epsilon_r$	$\Delta\sigma$	
673	Simulated Tissue Liquid Head	41.671	0.903	42.31	0.88	-1.51	2.61	± 5
680.5	Simulated Tissue Liquid Head	42.738	0.881	42.27	0.89	1.11	-1.01	± 5
688	Simulated Tissue Liquid Head	41.69	0.908	42.23	0.89	-1.28	2.02	± 5
704	Simulated Tissue Liquid Head	42.701	0.879	42.15	0.89	1.31	-1.24	± 5
707.5	Simulated Tissue Liquid Head	41.822	0.9	42.13	0.89	-0.73	1.12	± 5
711	Simulated Tissue Liquid Head	41.708	0.905	42.11	0.89	-0.95	1.69	± 5
750	Simulated Tissue Liquid Head	42.705	0.878	41.90	0.89	1.92	-1.35	± 5

*Liquid Verification above was performed on 2021/09/05.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	$\Delta\epsilon_r$	$\Delta\sigma$	
750	Simulated Tissue Liquid Head	42.677	0.885	41.90	0.89	1.85	-0.56	± 5
782	Simulated Tissue Liquid Head	41.575	0.909	41.75	0.89	-0.42	2.13	± 5
793	Simulated Tissue Liquid Head	42.779	0.886	41.7	0.90	2.59	-1.56	± 5
824.2	Simulated Tissue Liquid Head	41.648	0.89	41.55	0.90	0.24	-1.11	± 5
826.4	Simulated Tissue Liquid Head	41.906	0.892	41.54	0.90	0.88	-0.89	± 5
821.5	Simulated Tissue Liquid Head	41.75	0.884	41.53	0.90	0.53	-1.78	± 5
831.5	Simulated Tissue Liquid Head	41.619	0.893	41.5	0.90	0.29	-0.78	± 5
836.6	Simulated Tissue Liquid Head	41.999	0.892	41.5	0.90	1.2	-0.89	± 5
841.5	Simulated Tissue Liquid Head	41.832	0.888	41.5	0.91	0.8	-2.42	± 5
846.6	Simulated Tissue Liquid Head	41.594	0.889	41.5	0.91	0.23	-2.31	± 5
848.8	Simulated Tissue Liquid Head	41.864	0.894	41.5	0.91	0.88	-1.76	± 5

*Liquid Verification above was performed on 2021/09/04.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	$\Delta\epsilon_r$	$\Delta\sigma$	
1712.4	Simulated Tissue Liquid Head	40.661	1.342	40.13	1.34	1.32	0.15	± 5
1720	Simulated Tissue Liquid Head	40.536	1.346	40.13	1.35	1.01	-0.3	± 5
1732.6	Simulated Tissue Liquid Head	40.311	1.354	40.11	1.36	0.5	-0.44	± 5
1745	Simulated Tissue Liquid Head	40.178	1.38	40.1	1.37	0.19	0.73	± 5
1752.6	Simulated Tissue Liquid Head	40.183	1.375	40.1	1.38	0.21	-0.36	± 5
1770	Simulated Tissue Liquid Head	40.067	1.367	40.1	1.39	-0.08	-1.65	± 5
1800	Simulated Tissue Liquid Head	40.072	1.411	40.0	1.40	0.18	0.79	± 5

*Liquid Verification above was performed on 2021/09/01.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/ m)	ϵ_r	σ (S/ m)	$\Delta\epsilon_r$	$\Delta\sigma$	
1850.2	Simulated Tissue Liquid Head	39.585	1.384	40.0	1.40	-1.04	-1.14	± 5
1852.4	Simulated Tissue Liquid Head	39.303	1.391	40.0	1.40	-1.74	-0.64	± 5
1860	Simulated Tissue Liquid Head	39.945	1.392	40.0	1.40	-0.14	-0.57	± 5
1880	Simulated Tissue Liquid Head	39.874	1.399	40.0	1.40	-0.31	-0.07	± 5
1882.5	Simulated Tissue Liquid Head	39.588	1.38	40.0	1.40	-1.03	-1.43	± 5
1900	Simulated Tissue Liquid Head	39.332	1.393	40.0	1.40	-1.67	-0.5	± 5
1905	Simulated Tissue Liquid Head	39.899	1.388	40.0	1.40	-0.25	-0.86	± 5
1907.6	Simulated Tissue Liquid Head	39.913	1.406	40.0	1.40	-0.22	0.43	± 5
1909.8	Simulated Tissue Liquid Head	39.721	1.378	40.0	1.40	-0.7	-1.57	± 5

*Liquid Verification above was performed on 2021/09/05.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/ m)	ϵ_r	σ (S/ m)	$\Delta\epsilon_r$	$\Delta\sigma$	
2300	Simulated Tissue Liquid Head	39.251	1.680	39.5	1.67	-0.63	0.6	± 5
2310	Simulated Tissue Liquid Head	39.781	1.717	39.47	1.68	0.79	2.2	± 5

*Liquid Verification above was performed on 2021/08/27.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/ m)	ϵ_r	σ (S/ m)	$\Delta\epsilon_r$	$\Delta\sigma$	
2412	Simulated Tissue Liquid Head	38.477	1.737	39.28	1.77	-2.04	-1.86	± 5
2437	Simulated Tissue Liquid Head	38.539	1.754	39.22	1.79	-1.74	-2.01	± 5
2450	Simulated Tissue Liquid Head	38.331	1.805	39.20	1.80	-2.22	0.28	± 5
2462	Simulated Tissue Liquid Head	38.801	1.813	39.17	1.82	-0.94	-0.38	± 5
2506	Simulated Tissue Liquid Head	38.648	1.81	39.12	1.86	-1.21	-2.69	± 5
2510	Simulated Tissue Liquid Head	38.407	1.843	39.12	1.86	-1.82	-0.91	± 5
2535	Simulated Tissue Liquid Head	38.329	1.852	39.09	1.89	-1.95	-2.01	± 5

*Liquid Verification above was performed on 2021/09/02.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	$\Delta\epsilon_r$	$\Delta\sigma$	
2560	Simulated Tissue Liquid Head	38.134	1.944	39.05	1.92	-2.35	1.25	± 5
2593	Simulated Tissue Liquid Head	38.175	1.947	39.02	1.96	-2.17	-0.66	± 5
2600	Simulated Tissue Liquid Head	37.933	1.947	39.00	1.96	-2.74	-0.66	± 5
2680	Simulated Tissue Liquid Head	38.483	1.974	38.9	1.97	-1.07	0.2	± 5

*Liquid Verification above was performed on 2021/08/27.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	$\Delta\epsilon_r$	$\Delta\sigma$	
5180	Simulated Tissue Liquid Head	36.956	4.613	36.02	4.65	2.6	-0.8	± 5
5200	Simulated Tissue Liquid Head	36.789	4.635	36.00	4.66	2.19	-0.54	± 5
5240	Simulated Tissue Liquid Head	36.62	4.665	35.96	4.70	1.84	-0.74	± 5
5250	Simulated Tissue Liquid Head	36.435	4.674	35.95	4.71	1.35	-0.76	± 5
5745	Simulated Tissue Liquid Head	35.555	5.243	35.36	5.21	0.55	0.63	± 5
5785	Simulated Tissue Liquid Head	35.37	5.3	35.32	5.26	0.14	0.76	± 5
5800	Simulated Tissue Liquid Head	35.36	5.285	35.30	5.27	0.17	0.28	± 5
5825	Simulated Tissue Liquid Head	35.197	5.314	35.28	5.29	-0.24	0.45	± 5

*Liquid Verification was performed on 2021/09/06.

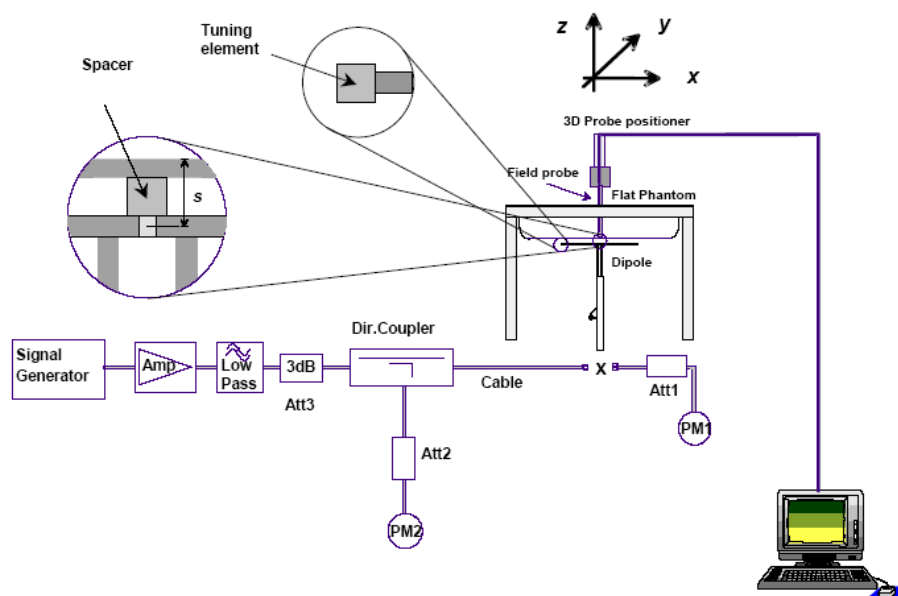
System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 10\%$. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

The spacing distances in the **System Verification Setup Block Diagram** is given by the following:

- $s = 15 \text{ mm} \pm 0,2 \text{ mm}$ for $300 \text{ MHz} \leq f \leq 1\,000 \text{ MHz}$;
- $s = 10 \text{ mm} \pm 0,2 \text{ mm}$ for $1\,000 \text{ MHz} < f \leq 3\,000 \text{ MHz}$;
- $s = 10 \text{ mm} \pm 0,2 \text{ mm}$ for $3\,000 \text{ MHz} < f \leq 6\,000 \text{ MHz}$.

System Verification Setup Block Diagram



System Accuracy Check Results

Date	Frequency Band (MHz)	Liquid Type	Input Power (mW)	Measured SAR (W/kg)		Normalized to 1W (W/kg)	Target Value (W/Kg)	Delta (%)	Tolerance (%)
2021/9/4	750	Head	100	1g	0.810	8.10	8.55	-5.263	± 10
2021/9/5	750	Head	100	1g	0.868	8.68	8.55	1.520	± 10
2021/9/1	1800	Head	100	1g	3.88	38.8	39.3	-1.272	± 10
2021/9/5	1900	Head	100	1g	4.07	40.7	40.3	0.993	± 10
2021/8/27	2300	Head	100	1g	4.58	45.8	47.1	-2.760	± 10
2021/9/2	2450	Head	100	1g	5.16	51.6	53.0	-2.642	± 10
2021/8/27	2600	Head	100	1g	5.82	58.2	55.4	5.054	± 10
2021/9/6	5250	Head	100	1g	7.85	78.5	80.7	-2.726	± 10
2021/9/6	5800	Head	25	1g	2.07	82.8	80.2	3.242	± 10

*The SAR values above are normalized to 1 Watt forward power.

SAR SYSTEM VALIDATION DATA

System Performance 750 MHz (2021.09.04)

DUT: Dipole 750MHz; Type: D750V3; Serial: 1194

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

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.878 \text{ S/m}$; $\epsilon_r = 42.705$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(10.28, 10.28, 10.28)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 750MHz Pin=100mW/Area Scan (101x161x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.830 W/kg

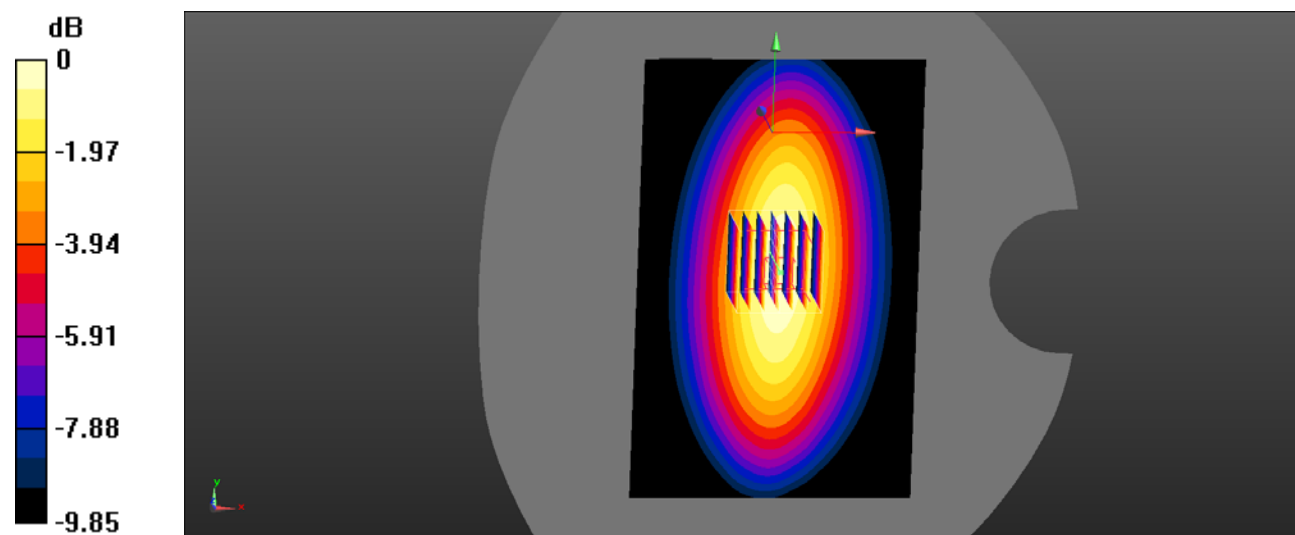
Head 750MHz Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.03 V/m ; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.810 W/kg ; SAR(10 g) = 0.513 W/kg

Maximum value of SAR (measured) = 0.837 W/kg



$0 \text{ dB} = 0.839 \text{ W/kg} = -0.76 \text{ dBW/kg}$

System Performance 750 MHz (2021.09.05)**DUT: Dipole 750MHz; Type: D750V3; Serial: 1194**

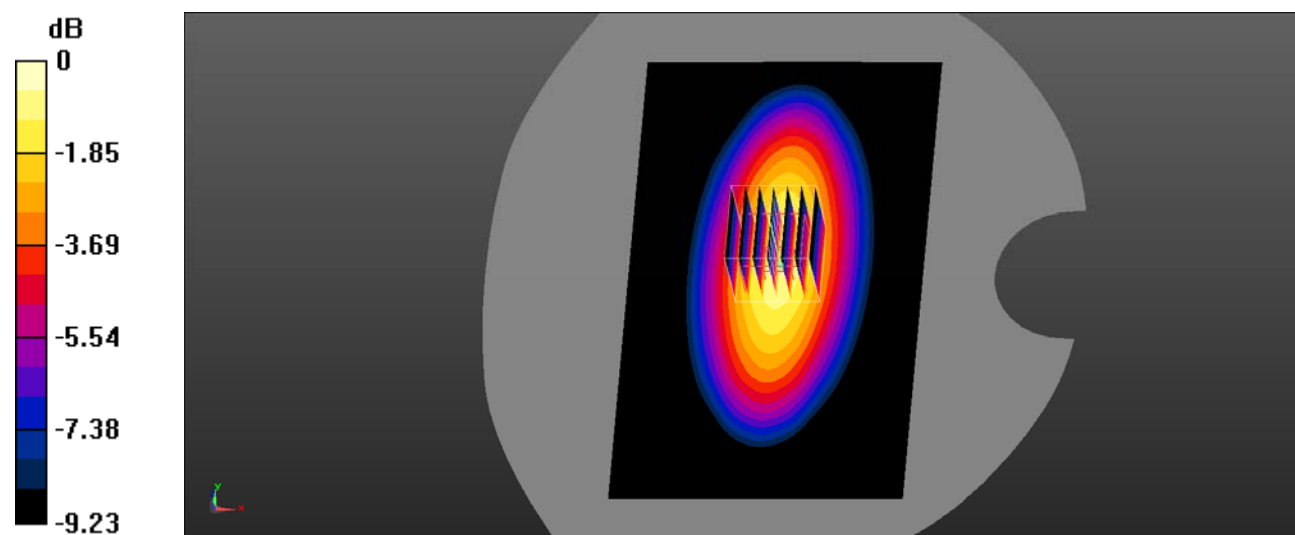
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.885 \text{ S/m}$; $\epsilon_r = 42.677$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(10.28, 10.28, 10.28)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 750MHz Pin=100mW/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$ Maximum value of SAR (interpolated) = 0.949 W/kg **Head 750MHz Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 33.89 V/m ; Power Drift = -0.05 dB Peak SAR (extrapolated) = 1.31 W/kg **SAR(1 g) = 0.868 W/kg ; SAR(10 g) = 0.563 W/kg** Maximum value of SAR (measured) = 1.12 W/kg  $0 \text{ dB} = 1.12 \text{ W/kg} = 0.49 \text{ dBW/kg}$

System Performance 1800 MHz Head**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 2d018**

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.411 \text{ S/m}$; $\epsilon_r = 40.072$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(8.39, 8.39, 8.39)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 1800MHz Pin=100mW 2/Area Scan (81x101x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 5.55 W/kg

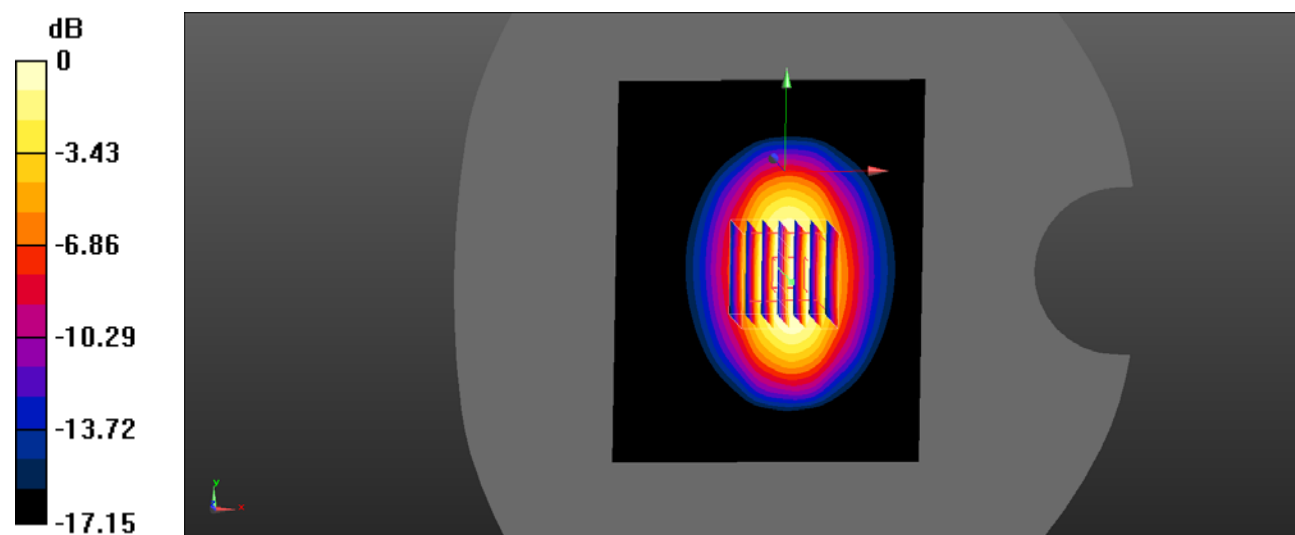
Head 1800MHz Pin=100mW 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.26 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 6.88 W/kg

SAR(1 g) = 3.88 W/kg; SAR(10 g) = 2.01 W/kg

Maximum value of SAR (measured) = 4.27 W/kg

 $0 \text{ dB} = 4.27 \text{ W/kg} = 6.30 \text{ dBW/kg}$

System Performance 1900 MHz Head

DUT: Dipole 1900MHz; Type: D1900V2; Serial: 5d231

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.393$ S/m; $\epsilon_r = 39.332$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(8.02, 8.02, 8.02)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 1900MHz Pin=100mW 2/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.73 W/kg

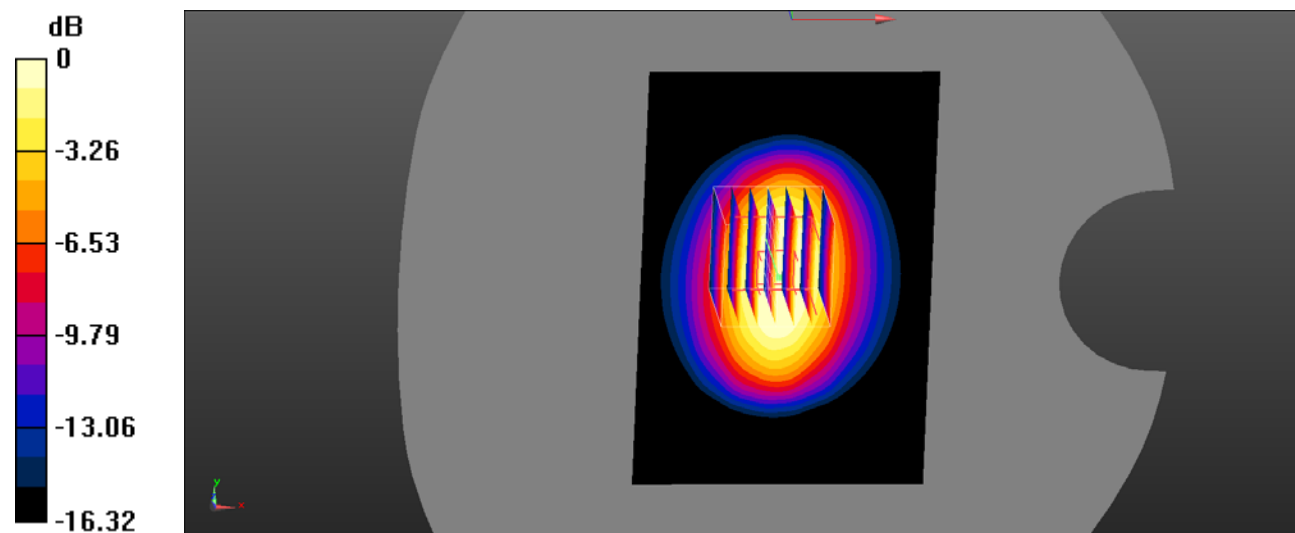
Head 1900MHz Pin=100mW 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.06 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 7.34 W/kg

SAR(1 g) = 4.07 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 4.59 W/kg



0 dB = 4.59 W/kg = 6.62 dBW/kg

System Performance 2300 MHz Head**DUT: Dipole 2300MHz; Type: D2300V2; Serial: 1103**

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

Medium parameters used: $f = 2300$ MHz; $\sigma = 1.680$ S/m; $\epsilon_r = 39.251$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(7.92, 7.92, 7.92)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 2300MHz Pin=100m/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.17 W/kg

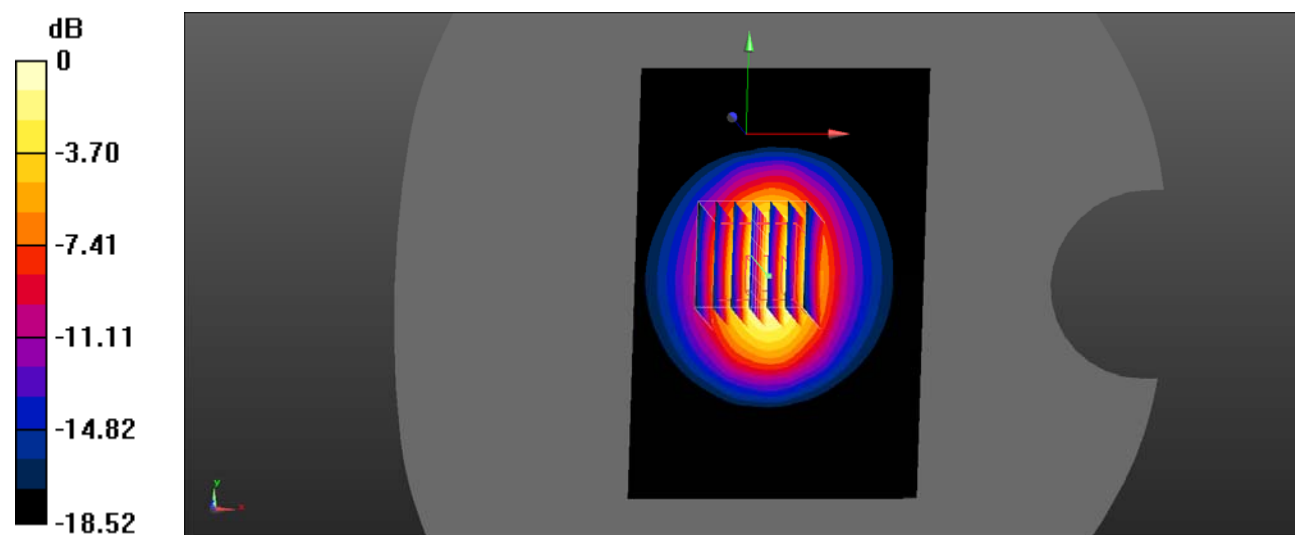
Head 2300MHz Pin=100m/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.46 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 10.1 W/kg

SAR(1 g) = 4.58 W/kg; SAR(10 g) = 2.26 W/kg

Maximum value of SAR (measured) = 6.08 W/kg



0 dB = 6.08 W/kg = 7.84 dBW/kg

System Performance 2450 MHz Head**DUT: Dipole 2450MHz; Type: D2450V2; Serial: 751**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.805$ S/m; $\epsilon_r = 38.331$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(7.63, 7.63, 7.63)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 2450MHz Pin=100mW/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.44 W/kg

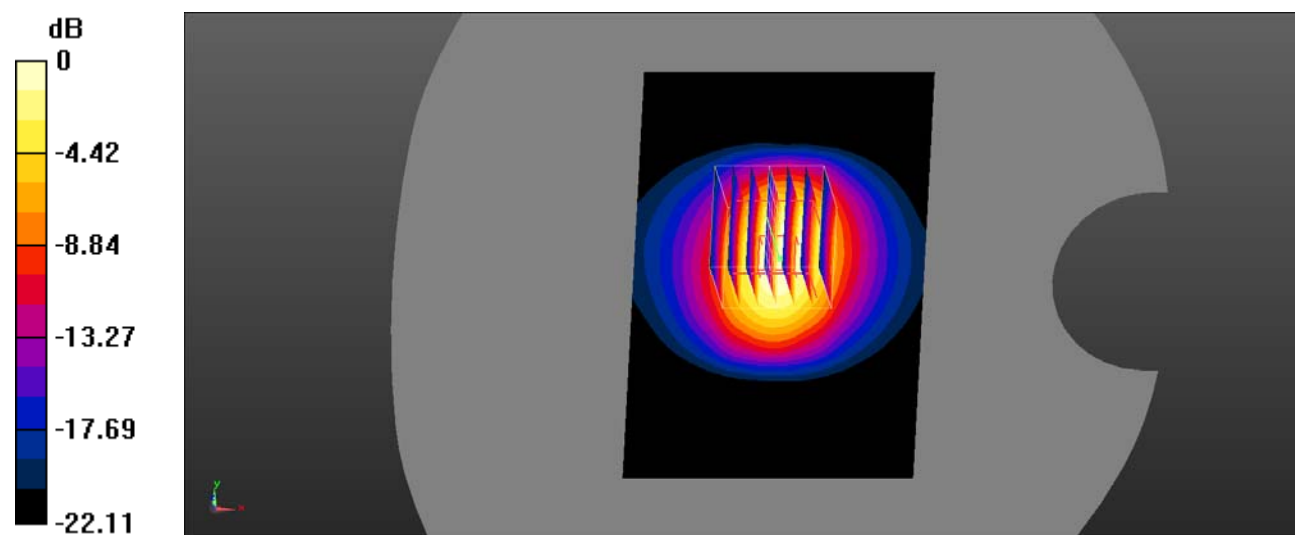
Head 2450MHz Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.29 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 11.4 W/kg

SAR(1 g) = 5.16 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 6.45 W/kg



0 dB = 6.45 W/kg = 8.10 dBW/kg

System Performance 2600 MHz Head

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1073

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

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.947$ S/m; $\epsilon_r = 37.933$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV2 – SN7441; ConvF(7.33, 7.33, 7.33)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 2600MHz Pin=100mW/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.74 W/kg

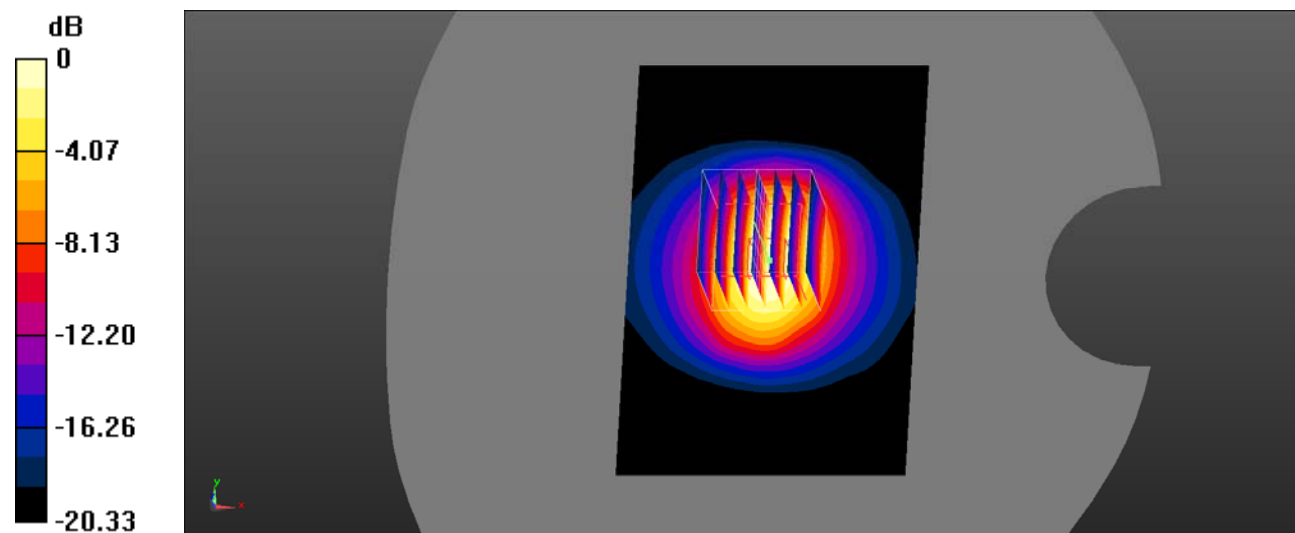
Head 2600MHz Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.57 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 11.7 W/kg

SAR(1 g) = 5.82 W/kg; SAR(10 g) = 2.59 W/kg

Maximum value of SAR (measured) = 6.15 W/kg



0 dB = 6.15 W/kg = 7.89 dBW/kg

System Performance 5250 MHz Head**DUT: Dipole 5GHz Type: D5GHZV2; Serial: 1301**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.674$ S/m; $\epsilon_r = 36.435$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(5.55, 5.55, 5.55)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 5250MHz Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 17.8 W/kg

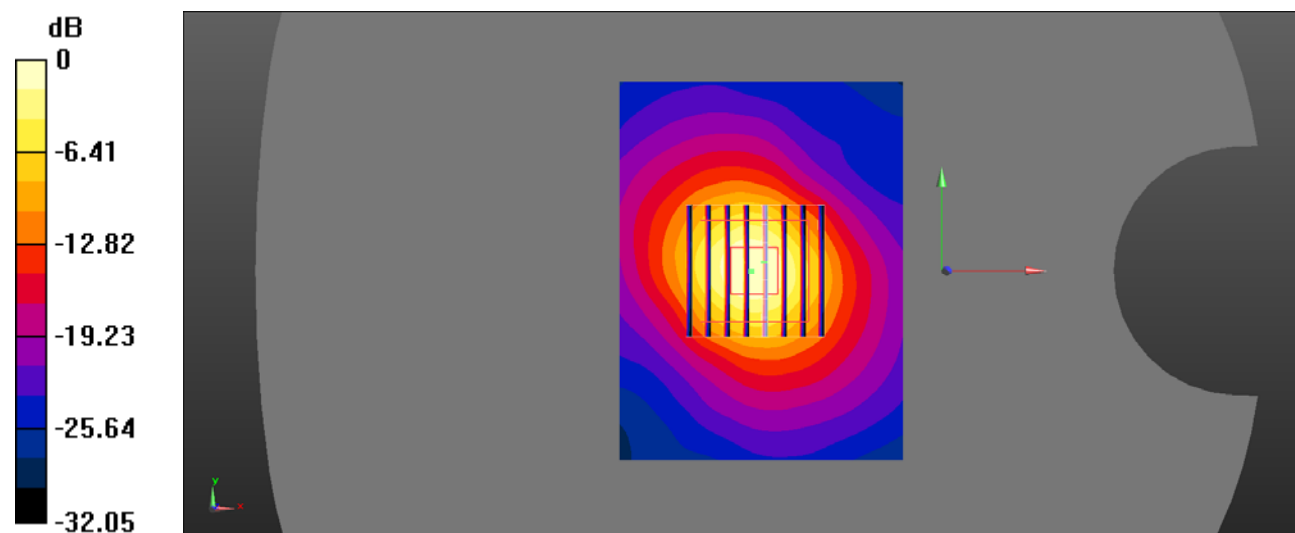
Head 5250MHz Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 50.64 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 28.5 W/kg

SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.31 W/kg

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



0 dB = 16.2 W/kg = 12.1 dBW/kg

System Performance 5800 MHz Head**DUT: Dipole 5GHz Type: D5GHZV2; Serial: 1301**

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.285$ S/m; $\epsilon_r = 35.36$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.72, 4.72, 4.72)
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 1/19/2021
- Phantom: SAM-Twin V8.0 P1aP2a; Type: QD 000 P41 AA ; Serial: 1962
- Measurement SW: DASY52, Version 52.10 (2);

Head 5800MHz Pin=25mW/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.12 W/kg

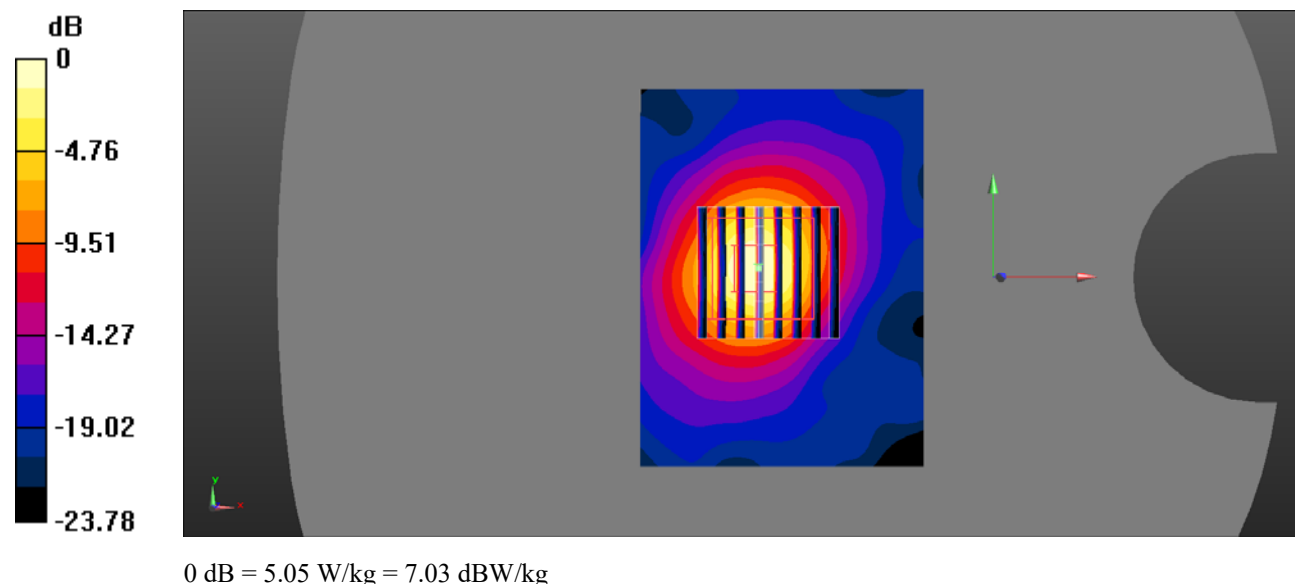
Head 5800MHz Pin=25mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 19.12 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 8.26 W/kg

SAR(1 g) = 2.07 W/kg; SAR(10 g) = 0.576 W/kg

Maximum value of SAR (measured) = 5.05 W/kg



EUT TEST STRATEGY AND METHODOLOGY

Test Positions for Hand-held usage of the device, not at the head or torso

The device shall be placed directly against the flat phantom as shown in Figure J.1, for those sides of the device that are in contact with the hand during intended use.

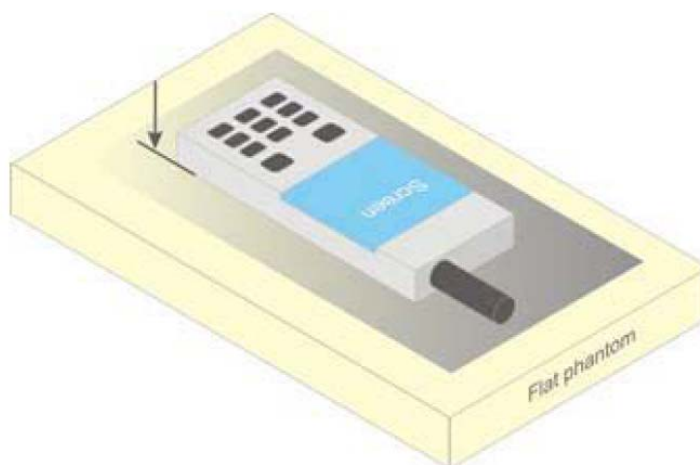


Figure J.1 – Test position for hand-held devices, not used at the head or torso

Test positions for body Supported and other configurations

A typical example of a body supported device is a wireless enabled laptop device that among other orientations may be supported on the thighs of a sitting user. To represent this orientation, the device shall be positioned with its base against the flat phantom. Other orientations may be specified by the manufacturer in the user instructions. If the intended use is not specified, the device shall be tested directly against the flat phantom in all usable orientations

The screen portion of the device shall be in an open position at a 90° angle as seen in Figure 7a (left side), or at an operating angle specified for intended use by the manufacturer in the operating instructions. Where a body supported device has an integral screen required for normal operation, then the screen-side will not need to be tested if it ordinarily remains 200 mm from the body. Where a screen mounted antenna is present, this position shall be repeated with the screen against the flat phantom as shown in Figure 7a) (right side), if this is consistent with the intended use.

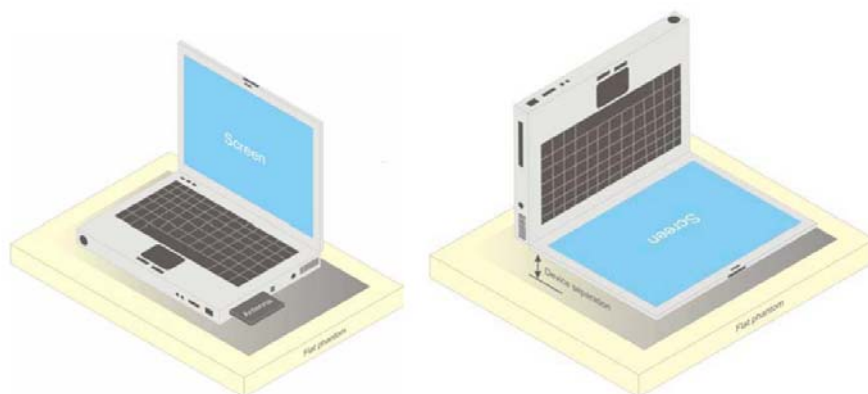
Other devices that fall into this category include tablet type portable computers and credit card transaction authorisation terminals, point-of-sale and/or inventory terminals. Where these devices may be torso or limb-supported, the same principles for body-supported devices are applied. The example in Figure 7b) shows a tablet form factor portable computer for which SAR should be separately assessed with

- d) each surface and
- e) the separation distances

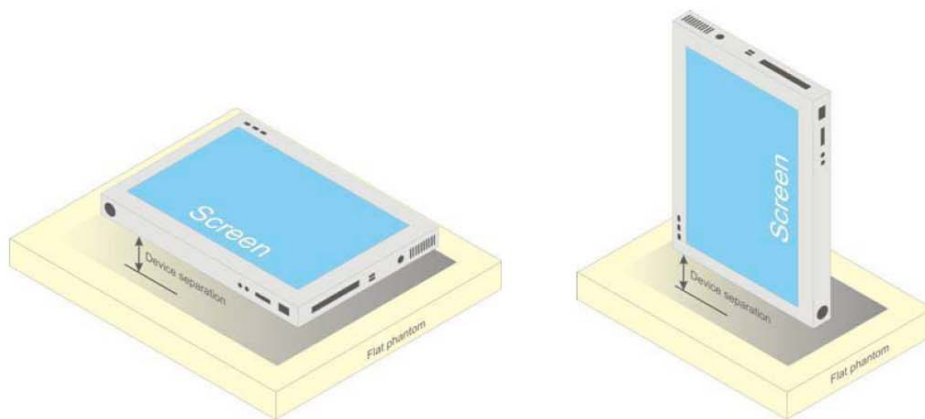
positioned against the flat phantom that correspond to the intended use as specified by the manufacturer. If the intended use is not specified in the user instructions, the device shall be tested directly against the flat phantom in all usable orientations.

Some body-supported devices may allow testing with an external power supply (e.g. a.c.adapter) supplemental to the battery, but it shall be verified and documented in the measurement report that SAR is still conservative.

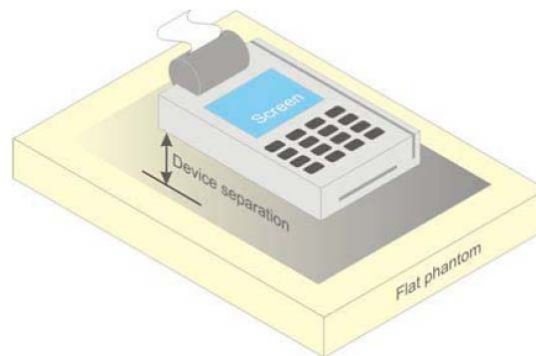
For devices that employ an external antenna with variable positions (e.g. swivel antenna), see 6.1.4.5 and Figure 6.



a) Portable computer with external antenna plug-in-radio-card (left side) or with internal antenna located in screen section (right side)



b) Tablet form factor portable computer



c) Wireless credit card transaction authorisation terminal

Figure 7 – Test positions for body supported devices

Test Distance for SAR Evaluation

For this case the EUT(Equipment Under Test) is set 0mm away from the phantom, the test distance is 0mm.

SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or radiating structures of the EUT, the horizontal grid spacing was 15 mm x 15 mm, and the SAR distribution was determined by integrated grid of 1.5mm x 1.5mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

- 1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
- 2) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the "Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the averages.

All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

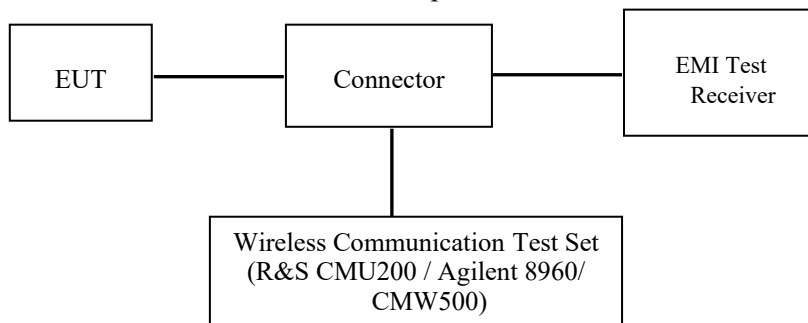
CONDUCTED OUTPUT POWER MEASUREMENT

Provision Applicable

The measured peak output power should be greater and within 5% than EMI measurement.

Test Procedure

The RF output of the transmitter was connected to the input of the EMI Test Receiver through Connector.



GSM/WCDMA/LTE

Radio Configuration

The power measurement was configured by the Wireless Communication Test Set.

GSM/GPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900

Press Connection control to choose the different menus

Press RESET > choose all the reset all settings

Connection Press Signal Off to turn off the signal and change settings

Network Support > GSM + GPRS or GSM + EGSM

Main Service > Packet Data

Service selection > Test Mode A – Auto Slot Config. off

MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting

> Slot configuration > Uplink/Gamma

> 33 dBm for GPRS 850

> 30 dBm for GPRS 1900

BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel

Frequency Offset > + 0 Hz

Mode > BCCH and TCH

BCCH Level > -85 dBm (May need to adjust if link is not stable)

BCCH Channel > choose desired test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off

P0 > 4 dB

Slot Config > Unchanged (if already set under MS signal)

TCH > choose desired test channel

Hopping > Off

Main Timeslot > 3

Network Coding Scheme > CS4 (GPRS)

Bit Stream > 2E9-1 PSR Bit Stream

AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input

Connection Press Signal on to turn on the signal and change settings

WCDMA Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	β_c	2/15	12/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	$\beta_d(\text{SF})$	64			
	β_c/β_d	2/15	12/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	$A_{hs}=\beta_{hs}/\beta_c$	30/15			

HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	β_c	11/15	6/15	15/15	2/15	15/15
	β_d	15/15	15/15	9/15	15/15	0
	β_{cc}	209/225	12/15	30/15	2/15	5/15
	β_c / β_d	11/15	6/15	15/9	2/15	-
	β_{hs}	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	$A_{hs} = \beta_{hs} / \beta_c$	30/15				
HSUPA Specific Settings	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCI	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO4 E-TFCI 92 E-TFCI PO 18		E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27

FDD-LTE

For UE Power Class 1 and 3, the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2-1 due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
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

For UE Power Class 1 and 3 the specific requirements and identified sub clauses are specified in Table 6.2.4-1 along with the allowed A-MPR values that may be used to meet these requirements. The allowed A-MPR values specified below in Table 6.2.4.-1 to 6.2.4-15 are in addition to the allowed MPR requirements specified in sub clause 6.2.3.

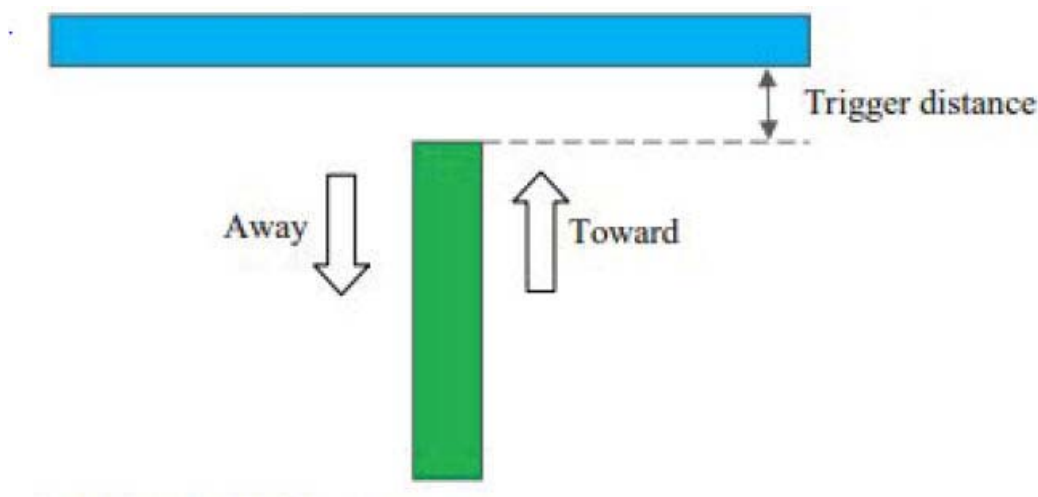
Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
NS_05	6.6.3.3.1	1	10, 15, 20	Table 6.2.4-4	
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	≥ 50	≤ 1
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 5.6-1	N/A
NS_08	6.6.3.3.3	19	10, 15	Table 6.2.4-2	
NS_09	6.6.3.3.4	21	10, 15	> 44	≤ 3
				> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	
NS_11	6.6.2.2.1	23	1.4, 3, 5, 10, 15, 20	Table 6.2.4-5	
NS_12	6.6.3.3.5	26	1.4, 3, 5	Table 6.2.4-6	
NS_13	6.6.3.3.6	26	5	Table 6.2.4-7	
NS_14	6.6.3.3.7	26	10, 15	Table 6.2.4-8	
NS_15	6.6.3.3.8	26	1.4, 3, 5, 10, 15	Table 6.2.4-9 Table 6.2.4-10	
NS_16	6.6.3.3.9	27	3, 5, 10	Table 6.2.4-11, Table 6.2.4-12, Table 6.2.4-13	
NS_17	6.6.3.3.10	28	5, 10	Table 5.6-1	N/A
NS_18	6.6.3.3.11	28	5	≥ 2	≤ 1
			10, 15, 20	≥ 1	≤ 4
NS_19	6.6.3.3.12	44	10, 15, 20	Table 6.2.4-14	
NS_20	6.2.2 6.6.2.2.1 6.6.3.2	23	5, 10, 15, 20	Table 6.2.4-15	
...					
NS_32	-	-	-	-	-

Proximity Sensor Operation

Triggering distances (Per KDB 616717)

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (6000MHz) and lowest (600MHz) frequency was used for proximity sensor triggering testing. It should be applied to determine proximity sensor triggering distances for the back surface and individual edges of a tablet.
2. Capacitive proximity sensor placed coincident with antenna elements at the left end of the pos are utilized to determine when the device comes in proximity of the user's body at the front or back or left side or right surface of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support. sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna
3. The device employs proximity sensors that detect the presence of the user's body or handhold at the front or back or left side or right side of the device. When back surface or edge of body worn condition is detected, GSM 850/GSM 1900/WCDMA II /WCDMA IV/WCDMA V / LTE Band 25<E Band 2 / LTE Band 66<E Band 4/ LTE Band 26<E Band 5 /LTE Band 7/ LTE Band 12/ LTE Band 13/ LTE Band 14 /LTE Band 30/LTE Band 41/ LTE Band 71/WLAN2.4G/WLAN5G reduced power will be active. Other mode or frequency band can't be active. (P-sensor can't work at detecting presence of the user's body at the bottom, top edges of the device.)



The minimum detection distances determined as below:

Proximity Sensor Triggering Distance(mm) and Triggering Power(dBm)

GSM 850:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Front edge	Toward	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0	33.0	33.0
	Away	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0
Back edge	Toward	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0	33.0	33.0
	Away	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0
Left edge	Toward	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
	Away	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0

GSM 1900:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Front edge	Toward	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5	27.5	27.5
	Away	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5
Back edge	Toward	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5	27.5	27.5
	Away	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5
Left edge	Toward	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
	Away	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5

Note: For GSM Mode(s), the maximum time based average power (4Slots) were used for calculation.

WCDMA 2:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0	23.0	23.0
	Away	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0
Back edge	Toward	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0	23.0	23.0
	Away	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0
Left edge	Toward	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
	Away	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0

WCDMA 4:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5
Back edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5
Left edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5

WCDMA 5:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0
Back edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0
Left edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

LTE Band 25 & LTE Band 2:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Back edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Left edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

LTE Band 66 & LTE Band 4:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5
Back edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5
Left edge	Toward	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
	Away	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5

LTE Band 26 & LTE Band 5:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5	24.5	24.5
	Away	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5
Back edge	Toward	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5	24.5	24.5
	Away	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5
Left edge	Toward	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
	Away	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5

LTE Band 7:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5
Back edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5
Left edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5

LTE Band 12:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5	24.5	24.5
	Away	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5
Back edge	Toward	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5	24.5	24.5
	Away	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5
Left edge	Toward	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
	Away	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5

LTE Band 13:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5	24.5	24.5
	Away	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5
Back edge	Toward	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5	24.5	24.5
	Away	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5
Left edge	Toward	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
	Away	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5

LTE Band 14:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0
Back edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0
Left edge	Toward	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Away	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

LTE Band 30:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5	23.5	23.5
	Away	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5
Back edge	Toward	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5	23.5	23.5
	Away	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5
Left edge	Toward	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
	Away	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5

LTE Band 41:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0
Back edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0
Left edge	Toward	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Away	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

LTE Band 71:

Distance		0	1	2	3	4	5	6	7	8	15	19	20	21	22	23	30
Top edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5
Back edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5
Left edge	Toward	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
	Away	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5

WLAN 2.4G :

Distance		0	1	2	3	4	9	10	11	12	13	14	15	16	17	18	20
Top edge	Toward	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	18.0	18.0	18.0	18.0
	Away	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	18.0	18.0
Back edge	Toward	13.0	13.0	13.0	13.0	13.0	13.0	13.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
	Away	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Right edge	Toward	13.0	13.0	13.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
	Away	13.0	13.0	13.0	13.0	13.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0

WLAN 5.2G :

Distance		0	1	2	3	4	9	10	11	12	13	14	15	16	17	18	20
Top edge	Toward	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	12.0	12.0	12.0	12.0
	Away	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	12.0	12.0
Back edge	Toward	6.0	6.0	6.0	6.0	6.0	6.0	6.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Away	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Right edge	Toward	6.0	6.0	6.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Away	6.0	6.0	6.0	6.0	6.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

WLAN 5.8G :

Distance		0	1	2	3	4	9	10	11	12	13	14	15	16	17	18	20
Top edge	Toward	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	10.0
	Away	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0
Back edge	Toward	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	Away	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Right edge	Toward	4.0	4.0	4.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	Away	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Note: each side minimum detection distance was performed with below:

Toward: moving toward the phantom

Away: Moving away from the phantom

Summary of trigger distances:

Band	Back edge (mm)		Top edge (mm)		Left edge (mm)	
	Toward	Away	Toward	Away	Toward	Away
2G/3G/4G	20	22	20	22	5	7

Note: The SAR sensor located in GSM850 / GSM 1900 / WCDMA II / WCDMA IV/ WCDMA V/ LTE Band 7 / LTE Band 12/ LTE Band 13/LTE Band 14/ LTE Band 25/ LTE Band 26/ LTE Band66 / LTE Band 40-low / LTE Band40-up / LTE Band 41

Antenna

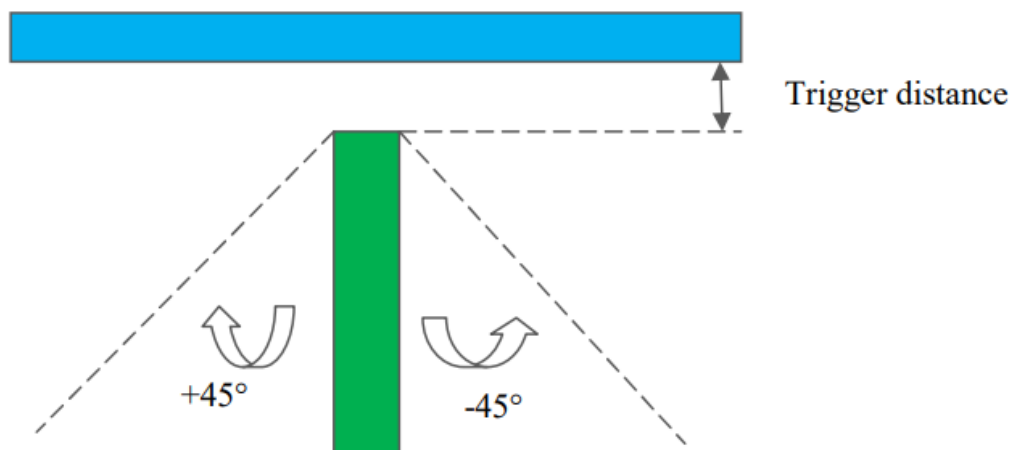
Band	Back edge (mm)		Top edge (mm)		Right edge (mm)	
	Toward	Away	Toward	Away	Toward	Away
WLAN 5G	10	12	15	17	2	4

Note: The SAR sensor located in WLAN5G antenna

Tilt angle

The influence of device tilt angles to proximity sensor triggering was determined by positioning each device edge that contains a transmitting antenna, perpendicular to the flat phantom, at 4 mm separation.

Rotating the device around the edge next to the phantom in $\leq 10^\circ$ increments until the device is $\pm 45^\circ$ from the vertical position at 0° . And the maximum output power remains in the reduced mode.



Proximity Sensor Status Table

Minimum Distance(mm)	45	-40	-30	-20	-10	0	10	20	30	40	45
4	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

Resulting test positions for SAR measurements

Wireless Technologies	Position	Triggering Distance(mm)	Worst case distance For SAR(mm)
WWAN	Top	20	19
	Back	20	19
	Left	5	4

Wireless Technologies	Position	Triggering Distance(mm)	Worst case distance For SAR(mm)
WWAN	Top	15	14
	Back	10	9
	Right	2	1

Maximum Target Output Power**Full Power Target power**

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
GPRS850 1 TX Slot	33.5	33.5	33.5
GPRS850 2 TX Slot	33.0	33.0	33.0
GPRS850 3 TX Slot	31.0	31.0	31.0
GPRS850 4 TX Slot	30.0	30.0	30.0
EGPRS850 1 TX Slot	27.0	27.0	27.0
EGPRS850 2 TX Slot	26.0	26.0	26.0
EGPRS850 3 TX Slot	23.5	23.5	23.5
EGPRS850 4 TX Slot	23.0	23.0	23.0
GPRS1900 1 TX Slot	30.0	30.0	30.0
GPRS1900 2 TX Slot	29.0	29.0	29.0
GPRS1900 3 TX Slot	27.5	27.5	27.5
GPRS1900 4 TX Slot	26.5	26.5	26.5
EGPRS1900 1 TX Slot	26.0	26.0	26.0
EGPRS1900 2 TX Slot	25.0	25.0	25.0
EGPRS1900 3 TX Slot	23.0	23.0	23.0
EGPRS1900 4 TX Slot	21.0	21.0	21.0
WCDMA Band 2	23.0	23.0	23.0
WCDMA Band 4	24.5	24.5	24.5
WCDMA Band 5	24.0	24.0	24.0
LTE Band 2	23.5	23.5	23.5
LTE Band 4	24.5	24.5	24.5
LTE Band 5	24.0	24.0	24.0
LTE Band 7	23.5	23.5	23.5
LTE Band 12	24.5	24.5	24.5
LTE Band 13	24.5	24.5	24.5
LTE Band 14	24.0	24.0	24.0
LTE Band 25	24.0	24.0	24.0
LTE Band 26	24.5	24.5	24.5
LTE Band 30	23.5	23.5	23.5
LTE Band 41	24.0	24.0	24.0
LTE Band 66	24.5	24.5	24.5
LTE Band 71	23.5	23.5	23.5
WLAN 2.4G	18.0	18.0	18.0
WLAN 5.2G	12.0	12.0	12.0
WLAN 5.8G	10.0	10.0	10.0
Bluetooth BDR/EDR	4.0	4.0	4.0

Reduction Target power

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
GPRS850 1 TX Slot	30.5	30.5	30.5
GPRS850 2 TX Slot	30.0	30.0	30.0
GPRS850 3 TX Slot	28.0	28.0	28.0
GPRS850 4 TX Slot	27.0	27.0	27.0
EGPRS850 1 TX Slot	24.0	24.0	24.0
EGPRS850 2 TX Slot	26.0	26.0	26.0
EGPRS850 3 TX Slot	20.5	20.5	20.5
EGPRS850 4 TX Slot	20.0	20.0	20.0
GPRS1900 1 TX Slot	23.0	23.0	23.0
GPRS1900 2 TX Slot	22.0	22.0	22.0
GPRS1900 3 TX Slot	20.5	20.5	20.5
GPRS1900 4 TX Slot	19.5	19.5	19.5
EGPRS1900 1 TX Slot	19.0	19.0	19.0
EGPRS1900 2 TX Slot	18.0	18.0	18.0
EGPRS1900 3 TX Slot	16.0	16.0	16.0
EGPRS1900 4 TX Slot	14.0	14.0	14.0
WCDMA Band 2	13.0	13.0	13.0
WCDMA Band 4	15.5	15.5	15.5
WCDMA Band 5	23.0	23.0	23.0
LTE Band 2	13.5	13.5	13.5
LTE Band 4	15.5	15.5	15.5
LTE Band 5	23.0	23.0	23.0
LTE Band 7 1RB	13.5	13.5	13.5
LTE Band 7 50%RB	12.0	12.0	12.0
LTE Band 7 100%RB	12.0	12.0	12.0
LTE Band 12	21.5	21.5	21.5
LTE Band 13	22.5	22.5	22.5
LTE Band 14	23.0	23.0	23.0
LTE Band 25	14.0	14.0	14.0
LTE Band 26	23.5	23.5	23.5
LTE Band 30 1RB	12.5	12.5	12.5
LTE Band 30 50%RB	11.5	11.5	11.5
LTE Band 41	14.0	14.0	14.0
LTE Band 66 1RB	15.5	15.5	15.5
LTE Band 66 50%RB	14.0	14.0	14.0
LTE Band 66 100%RB	14.0	14.0	14.0
LTE Band 71	13.5	13.5	13.5
WLAN 2.4G	13.0	13.0	13.0
WLAN 5.2G	6.0	6.0	6.0
WLAN 5.8G	4.0	4.0	4.0
Bluetooth BDR/EDR	4.0	4.0	4.0

Test Results:**GPRS:**

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	33.32	32.54	30.51	29.40
	190	836.6	33.38	32.57	30.67	29.55
	251	848.8	33.37	32.52	30.57	29.39
PCS 1900	512	1850.2	29.56	28.81	27.17	25.61
	661	1880	29.38	28.59	26.82	25.90
	810	1909.8	29.08	28.43	26.98	25.85

EGPRS:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	26.68	25.37	23.12	21.88
	190	836.6	26.71	25.52	23.23	22.03
	251	848.8	26.87	25.63	23.25	22.74
PCS 1900	512	1850.2	25.76	24.52	22.48	21.02
	661	1880	25.06	24.11	21.93	20.45
	810	1909.8	24.78	23.18	21.95	20.06

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

The time based average power for GPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	24.32	26.54	26.26	26.40
	190	836.6	24.38	26.57	26.42	26.55
	251	848.8	24.37	26.52	26.32	26.39
PCS 1900	512	1850.2	20.56	22.81	22.92	22.61
	661	1880	20.38	22.59	22.57	22.90
	810	1909.8	20.08	22.43	22.73	22.85

The time based average power for EGPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	17.68	19.37	18.87	18.88
	190	836.6	17.71	19.52	18.98	19.03
	251	848.8	17.87	19.63	19.00	19.74
PCS 1900	512	1850.2	16.76	18.52	18.23	18.02
	661	1880	16.06	18.11	17.68	17.45
	810	1909.8	15.78	17.18	17.70	17.06

Note:

1. Rohde & Schwarz Radio Communication Tester (CMU200) was used for the measurement of GSM peak and average output power for active timeslots.
2. For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3. For GPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 3(850 MHz band) and 3(1900 MHz band).

WCDMA Band 2:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		22.91	22.93	22.92
	HSDPA	1	21.90	21.94	21.93
		2	21.49	21.53	21.62
		3	21.44	21.34	21.66
		4	21.57	21.47	21.67
	HSUPA	1	21.94	22.01	21.97
		2	21.44	22.15	22.07
		3	21.49	22.47	22.42
		4	21.63	22.38	22.02
		5	21.70	22.14	22.43
	HSPA+	1	21.43	21.51	21.43

WCDMA Band 4:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		24.18	24.06	24.09
	HSDPA	1	23.10	23.17	23.09
		2	23.21	23.62	22.43
		3	23.18	23.33	23.21
		4	23.20	23.55	23.59
	HSUPA	1	22.70	22.67	22.65
		2	22.49	22.24	22.72
		3	22.04	22.76	22.33
		4	23.11	22.67	22.58
		5	24.00	24.35	22.65
	HSPA+	1	23.24	22.45	22.24

WCDMA Band 5:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		23.91	23.92	23.91
	HSDPA	1	22.95	22.86	23.04
		2	22.51	22.53	22.53
		3	22.76	22.48	22.46
		4	22.80	22.80	22.95
	HSUPA	1	22.94	23.44	23.22
		2	23.53	23.11	23.27
		3	23.42	23.41	23.72
		4	23.74	23.49	23.07
		5	23.08	23.00	23.36
	HSPA+	1	23.51	24.57	24.72

Note:

1. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

LTE Band 2:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1850.7MHz	1880MHz	1909.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.17	23.13	23.04
		RB Size=1, RB Offset=3	0	0	23.30	23.34	23.29
		RB Size=1, RB Offset=5	0	0	23.19	23.24	23.00
		RB Size=3, RB Offset=0	1	1	23.24	23.25	23.23
		RB Size=3, RB Offset=3	1	1	23.17	23.13	23.13
		RB Size=6, RB Offset=0	1	1	22.26	22.12	22.11
	16QAM	RB Size=1, RB Offset=0	1	1	22.19	22.15	22.02
		RB Size=1, RB Offset=3	1	1	22.25	22.36	22.23
		RB Size=1, RB Offset=5	1	1	22.21	22.25	22.07
		RB Size=3, RB Offset=0	2	2	22.37	22.07	22.15
		RB Size=3, RB Offset=3	2	2	22.37	22.18	22.18
		RB Size=6, RB Offset=0	2	2	21.25	21.24	21.07
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1851.5MHz	1880MHz	1908.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.24	23.21	23.19
		RB Size=1, RB Offset=8	0	0	23.22	23.26	23.23
		RB Size=1, RB Offset=14	0	0	23.35	23.23	23.17
		RB Size=6, RB Offset=0	1	1	22.22	22.14	22.17
		RB Size=6, RB Offset=9	1	1	22.29	22.19	22.26
		RB Size=15, RB Offset=0	1	1	22.22	22.16	22.11
	16QAM	RB Size=1, RB Offset=0	1	1	22.77	22.31	22.25
		RB Size=1, RB Offset=8	1	1	22.75	22.41	22.08
		RB Size=1, RB Offset=14	1	1	22.75	22.38	22.21
		RB Size=6, RB Offset=0	2	2	21.35	21.28	21.08
		RB Size=6, RB Offset=9	2	2	21.27	21.34	21.10
		RB Size=15, RB Offset=0	2	2	21.33	21.14	21.18

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1852.5MHz	1880MHz	1907.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.24	23.12	23.06
		RB Size=1, RB Offset=13	0	0	23.37	23.34	23.27
		RB Size=1, RB Offset=24	0	0	23.24	23.13	23.08
		RB Size=15, RB Offset=0	1	1	22.22	22.22	22.07
		RB Size=15, RB Offset=10	1	1	22.36	22.20	22.15
		RB Size=25, RB Offset=0	1	1	22.31	22.12	22.22
	16QAM	RB Size=1, RB Offset=0	1	1	22.05	22.46	22.11
		RB Size=1, RB Offset=13	1	1	22.15	22.42	22.35
		RB Size=1, RB Offset=24	1	1	22.09	22.36	22.14
		RB Size=15, RB Offset=0	2	2	21.31	21.21	21.19
		RB Size=15, RB Offset=10	2	2	21.33	21.18	21.19
		RB Size=25, RB Offset=0	2	2	21.23	21.24	21.19
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1855MHz	1880MHz	1905MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.19	23.15	23.27
		RB Size=1, RB Offset=25	0	0	23.47	23.47	23.43
		RB Size=1, RB Offset=49	0	0	23.24	23.17	23.23
		RB Size=25, RB Offset=0	1	1	22.26	22.21	22.11
		RB Size=25, RB Offset=25	1	1	22.38	22.33	22.30
		RB Size=50, RB Offset=0	1	1	22.26	22.20	22.20
	16QAM	RB Size=1, RB Offset=0	1	1	22.73	22.26	22.20
		RB Size=1, RB Offset=25	1	1	22.95	22.50	22.46
		RB Size=1, RB Offset=49	1	1	22.77	22.25	22.07
		RB Size=25, RB Offset=0	2	2	21.45	21.25	21.34
		RB Size=25, RB Offset=25	2	2	21.36	21.26	21.51
		RB Size=50, RB Offset=0	2	2	21.32	21.23	21.27

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1857.5MHz	1880MHz	1902.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.29	23.23	23.17
		RB Size=1, RB Offset=38	0	0	23.23	23.13	23.24
		RB Size=1, RB Offset=74	0	0	23.11	23.03	23.03
		RB Size=36, RB Offset=0	1	1	22.33	22.15	22.30
		RB Size=36, RB Offset=39	1	1	22.32	22.19	22.34
		RB Size=75, RB Offset=0	1	1	22.21	22.26	22.39
	16QAM	RB Size=1, RB Offset=0	1	1	22.74	22.33	22.45
		RB Size=1, RB Offset=38	1	1	22.76	22.30	22.51
		RB Size=1, RB Offset=74	1	1	22.57	22.17	22.40
		RB Size=36, RB Offset=0	2	2	21.43	21.28	21.21
		RB Size=36, RB Offset=39	2	2	21.30	21.31	21.35
		RB Size=75, RB Offset=0	2	2	21.34	21.18	21.27
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1860MHz	1880MHz	1900MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	23.27	23.17	23.02
		RB Size=1, RB Offset=50	0	0	23.39	23.30	23.28
		RB Size=1, RB Offset=99	0	0	23.14	23.09	23.09
		RB Size=50, RB Offset=0	1	1	22.19	22.04	22.23
		RB Size=50, RB Offset=50	1	1	22.08	22.09	22.21
		RB Size=100, RB Offset=0	1	1	22.23	22.12	22.30
	16QAM	RB Size=1, RB Offset=0	1	1	22.50	22.32	22.52
		RB Size=1, RB Offset=50	1	1	22.69	22.47	22.86
		RB Size=1, RB Offset=99	1	1	22.38	22.30	22.58
		RB Size=50, RB Offset=0	2	2	21.30	21.09	21.31
		RB Size=50, RB Offset=50	2	2	21.17	21.19	21.20
		RB Size=100, RB Offset=0	2	2	21.23	21.21	21.27

LTE Band 4:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1710.7MHz	1732.5MHz	1754.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	24.02	23.98	23.97
		RB Size=1, RB Offset=3	0	0	24.25	24.16	24.05
		RB Size=1, RB Offset=5	0	0	24.01	24.05	24.01
		RB Size=3, RB Offset=0	1	1	24.10	24.04	23.97
		RB Size=3, RB Offset=3	1	1	24.11	24.05	23.99
		RB Size=6, RB Offset=0	1	1	23.23	23.13	23.14
	16QAM	RB Size=1, RB Offset=0	1	1	23.11	23.18	22.84
		RB Size=1, RB Offset=3	1	1	23.33	23.34	23.06
		RB Size=1, RB Offset=5	1	1	23.12	23.11	23.01
		RB Size=3, RB Offset=0	2	2	23.27	22.97	23.04
		RB Size=3, RB Offset=3	2	2	23.18	23.00	22.94
		RB Size=6, RB Offset=0	2	2	22.10	22.05	21.92
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1711.5MHz	1732.5MHz	1753.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	24.12	24.05	23.95
		RB Size=1, RB Offset=8	0	0	24.07	24.01	24.09
		RB Size=1, RB Offset=14	0	0	24.02	23.97	23.94
		RB Size=6, RB Offset=0	1	1	23.10	23.01	23.04
		RB Size=6, RB Offset=9	1	1	23.09	23.05	22.89
		RB Size=15, RB Offset=0	1	1	23.06	23.13	22.98
	16QAM	RB Size=1, RB Offset=0	1	1	23.50	23.23	22.88
		RB Size=1, RB Offset=8	1	1	23.49	23.15	22.88
		RB Size=1, RB Offset=14	1	1	23.52	23.28	22.94
		RB Size=6, RB Offset=0	2	2	22.16	22.00	21.88
		RB Size=6, RB Offset=9	2	2	22.04	22.00	21.87
		RB Size=15, RB Offset=0	2	2	22.04	22.07	22.03

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1712.5MHz	1732.5MHz	1752.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	24.04	23.96	23.89
		RB Size=1, RB Offset=13	0	0	24.10	23.97	23.91
		RB Size=1, RB Offset=24	0	0	23.92	23.96	23.87
		RB Size=15, RB Offset=0	1	1	23.09	23.14	23.00
		RB Size=15, RB Offset=10	1	1	23.09	23.11	22.98
		RB Size=25, RB Offset=0	1	1	23.03	22.98	22.87
	16QAM	RB Size=1, RB Offset=0	1	1	22.98	23.30	22.82
		RB Size=1, RB Offset=13	1	1	22.97	23.38	23.05
		RB Size=1, RB Offset=24	1	1	22.80	23.16	23.01
		RB Size=15, RB Offset=0	2	2	22.10	21.95	22.06
		RB Size=15, RB Offset=10	2	2	22.10	22.00	22.00
		RB Size=25, RB Offset=0	2	2	22.04	22.06	22.01
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1715MHz	1732.5MHz	1750MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.97	24.03	24.06
		RB Size=1, RB Offset=25	0	0	24.20	24.27	24.11
		RB Size=1, RB Offset=49	0	0	24.13	23.97	23.98
		RB Size=25, RB Offset=0	1	1	23.03	23.16	22.99
		RB Size=25, RB Offset=25	1	1	23.09	23.05	22.91
		RB Size=50, RB Offset=0	1	1	23.03	22.98	22.93
	16QAM	RB Size=1, RB Offset=0	1	1	23.56	23.09	23.01
		RB Size=1, RB Offset=25	1	1	23.55	23.24	23.04
		RB Size=1, RB Offset=49	1	1	23.56	23.10	22.94
		RB Size=25, RB Offset=0	2	2	22.05	22.12	22.11
		RB Size=25, RB Offset=25	2	2	22.06	22.04	22.10
		RB Size=50, RB Offset=0	2	2	21.98	22.11	21.98

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1717.5MHz	1732.5MHz	1747.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.98	23.93	23.98
		RB Size=1, RB Offset=38	0	0	23.97	24.02	24.11
		RB Size=1, RB Offset=74	0	0	24.02	23.89	24.00
		RB Size=36, RB Offset=0	1	1	23.10	23.10	23.15
		RB Size=36, RB Offset=39	1	1	23.15	23.13	23.03
		RB Size=75, RB Offset=0	1	1	23.16	23.14	23.08
	16QAM	RB Size=1, RB Offset=0	1	1	23.48	23.12	23.35
		RB Size=1, RB Offset=38	1	1	23.56	23.24	23.34
		RB Size=1, RB Offset=74	1	1	23.40	23.04	23.18
		RB Size=36, RB Offset=0	2	2	22.01	22.13	22.03
		RB Size=36, RB Offset=39	2	2	22.12	22.12	21.97
		RB Size=75, RB Offset=0	2	2	22.10	22.22	22.01
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1720MHz	1732.5MHz	1745MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	24.01	24.04	23.90
		RB Size=1, RB Offset=50	0	0	24.27	24.29	24.20
		RB Size=1, RB Offset=99	0	0	23.97	23.88	23.76
		RB Size=50, RB Offset=0	1	1	22.89	23.09	23.06
		RB Size=50, RB Offset=50	1	1	23.02	23.02	22.98
		RB Size=100, RB Offset=0	1	1	23.07	22.99	22.93
	16QAM	RB Size=1, RB Offset=0	1	1	23.16	23.05	23.40
		RB Size=1, RB Offset=50	1	1	23.39	23.46	23.59
		RB Size=1, RB Offset=99	1	1	23.29	23.20	23.28
		RB Size=50, RB Offset=0	2	2	21.88	22.06	21.96
		RB Size=50, RB Offset=50	2	2	22.07	22.13	21.98
		RB Size=100, RB Offset=0	2	2	22.09	22.20	21.89

LTE Band 5:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					824.7MHz	836.5MHz	848.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.68	23.65	23.58
		RB Size=1, RB Offset=3	0	0	23.87	23.81	24.02
		RB Size=1, RB Offset=5	0	0	23.73	23.74	23.56
		RB Size=3, RB Offset=0	1	1	23.69	23.61	23.69
		RB Size=3, RB Offset=3	1	1	23.73	23.79	23.62
		RB Size=6, RB Offset=0	1	1	22.71	22.80	22.75
	16QAM	RB Size=1, RB Offset=0	1	1	22.65	22.84	22.59
		RB Size=1, RB Offset=3	1	1	22.90	22.99	22.80
		RB Size=1, RB Offset=5	1	1	22.72	22.81	22.61
		RB Size=3, RB Offset=0	2	2	22.87	22.69	22.64
		RB Size=3, RB Offset=3	2	2	22.99	22.79	22.65
		RB Size=6, RB Offset=0	2	2	21.83	21.89	21.63
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					825.5MHz	836.5MHz	847.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.70	23.82	23.76
		RB Size=1, RB Offset=8	0	0	23.72	23.75	23.73
		RB Size=1, RB Offset=14	0	0	23.71	23.79	23.70
		RB Size=6, RB Offset=0	1	1	22.74	22.64	22.71
		RB Size=6, RB Offset=9	1	1	22.81	22.65	22.65
		RB Size=15, RB Offset=0	1	1	22.77	22.70	22.63
	16QAM	RB Size=1, RB Offset=0	1	1	23.35	22.91	22.69
		RB Size=1, RB Offset=8	1	1	23.35	22.82	22.58
		RB Size=1, RB Offset=14	1	1	23.40	22.84	22.71
		RB Size=6, RB Offset=0	2	2	21.89	21.82	21.59
		RB Size=6, RB Offset=9	2	2	21.83	21.76	21.66
		RB Size=15, RB Offset=0	2	2	21.86	21.74	21.66

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					826.5MHz	836.5MHz	846.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.77	23.68	23.57
		RB Size=1, RB Offset=13	0	0	23.95	23.84	23.68
		RB Size=1, RB Offset=24	0	0	23.72	23.66	23.66
		RB Size=15, RB Offset=0	1	1	22.80	22.63	22.85
		RB Size=15, RB Offset=10	1	1	22.79	22.77	22.69
		RB Size=25, RB Offset=0	1	1	22.85	22.69	22.71
	16QAM	RB Size=1, RB Offset=0	1	1	22.53	22.98	22.66
		RB Size=1, RB Offset=13	1	1	22.84	22.97	22.74
		RB Size=1, RB Offset=24	1	1	22.65	22.91	22.61
		RB Size=15, RB Offset=0	2	2	21.99	21.75	21.83
		RB Size=15, RB Offset=10	2	2	21.91	21.84	21.63
		RB Size=25, RB Offset=0	2	2	21.93	21.71	21.65
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					829MHz	836.5MHz	844MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.75	23.77	23.72
		RB Size=1, RB Offset=25	0	0	23.97	23.89	23.89
		RB Size=1, RB Offset=49	0	0	23.76	23.74	23.78
		RB Size=25, RB Offset=0	1	1	22.96	22.71	22.84
		RB Size=25, RB Offset=25	1	1	22.95	22.74	22.60
		RB Size=50, RB Offset=0	1	1	22.86	22.76	22.71
	16QAM	RB Size=1, RB Offset=0	1	1	23.25	22.94	22.63
		RB Size=1, RB Offset=25	1	1	23.58	23.10	22.76
		RB Size=1, RB Offset=49	1	1	23.33	22.90	22.75
		RB Size=25, RB Offset=0	2	2	22.04	21.83	21.91
		RB Size=25, RB Offset=25	2	2	22.04	21.77	21.83
		RB Size=50, RB Offset=0	2	2	21.99	21.80	21.79

LTE Band 7:

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2502.5MHz	2535MHz	2567.5MHz
5M	QPSK	RB Size=1, RB Offset=0	0	0	22.53	22.57	22.84
		RB Size=1, RB Offset=25	0	0	22.59	22.66	22.93
		RB Size=1, RB Offset=49	0	0	22.38	22.64	22.50
		RB Size=25, RB Offset=0	1	1	21.42	21.62	22.11
		RB Size=25, RB Offset=25	1	1	21.54	21.62	22.00
		RB Size=50, RB Offset=0	1	1	21.42	21.52	22.00
	16QAM	RB Size=1, RB Offset=0	1	1	21.34	21.86	21.87
		RB Size=1, RB Offset=25	1	1	21.43	21.86	21.95
		RB Size=1, RB Offset=49	1	1	21.33	21.77	21.99
		RB Size=25, RB Offset=0	2	2	20.49	20.60	21.00
		RB Size=25, RB Offset=25	2	2	20.50	20.51	20.89
		RB Size=50, RB Offset=0	2	2	20.41	20.53	20.97
BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2505MHz	2535MHz	2565MHz
10M	QPSK	RB Size=1, RB Offset=0	0	0	22.50	22.63	22.92
		RB Size=1, RB Offset=38	0	0	22.72	22.77	23.24
		RB Size=1, RB Offset=74	0	0	22.58	22.70	22.58
		RB Size=36, RB Offset=0	1	1	21.46	21.76	22.08
		RB Size=36, RB Offset=39	1	1	21.64	21.63	21.93
		RB Size=75, RB Offset=0	1	1	21.55	21.65	22.06
	16QAM	RB Size=1, RB Offset=0	1	1	22.03	21.70	21.74
		RB Size=1, RB Offset=38	1	1	22.12	21.93	22.02
		RB Size=1, RB Offset=74	1	1	21.93	21.77	21.93
		RB Size=36, RB Offset=0	2	2	20.44	20.68	21.04
		RB Size=36, RB Offset=39	2	2	20.62	20.57	20.91
		RB Size=75, RB Offset=0	2	2	20.45	20.62	20.91

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2507.5MHz	2535MHz	2562.5MHz
15M	QPSK	RB Size=1, RB Offset=0	0	0	22.40	22.58	22.77
		RB Size=1, RB Offset=38	0	0	22.50	22.62	23.01
		RB Size=1, RB Offset=74	0	0	22.51	22.64	22.77
		RB Size=36, RB Offset=0	1	1	21.63	21.81	22.06
		RB Size=36, RB Offset=39	1	1	21.58	21.73	22.04
		RB Size=75, RB Offset=0	1	1	21.64	21.74	22.04
	16QAM	RB Size=1, RB Offset=0	1	1	21.94	21.59	21.96
		RB Size=1, RB Offset=38	1	1	22.08	21.87	22.16
		RB Size=1, RB Offset=74	1	1	22.00	21.63	22.16
		RB Size=36, RB Offset=0	2	2	20.50	20.62	20.95
		RB Size=36, RB Offset=39	2	2	20.55	20.60	20.76
		RB Size=75, RB Offset=0	2	2	20.45	20.68	20.84
BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2510MHz	2535MHz	2560MHz
20M	QPSK	RB Size=1, RB Offset=0	0	0	22.45	22.39	22.57
		RB Size=1, RB Offset=50	0	0	22.59	22.78	23.13
		RB Size=1, RB Offset=99	0	0	22.50	22.67	22.62
		RB Size=50, RB Offset=0	1	1	21.31	21.61	21.77
		RB Size=50, RB Offset=50	1	1	21.52	21.60	21.70
		RB Size=100, RB Offset=0	1	1	21.44	21.69	21.79
	16QAM	RB Size=1, RB Offset=0	1	1	21.66	21.64	22.16
		RB Size=1, RB Offset=50	1	1	21.90	22.02	22.49
		RB Size=1, RB Offset=99	1	1	21.59	21.69	22.23
		RB Size=50, RB Offset=0	2	2	20.40	20.72	20.81
		RB Size=50, RB Offset=50	2	2	20.60	20.60	20.66
		RB Size=100, RB Offset=0	2	2	20.47	20.58	20.63

LTE Band 12:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					699.7MHz	707.5MHz	715.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.85	23.82	23.77
		RB Size=1, RB Offset=3	0	0	23.93	24.06	23.85
		RB Size=1, RB Offset=5	0	0	23.85	23.82	23.62
		RB Size=3, RB Offset=0	1	1	24.03	23.97	23.96
		RB Size=3, RB Offset=3	1	1	23.94	23.84	24.11
		RB Size=6, RB Offset=0	1	1	22.93	22.95	22.82
	16QAM	RB Size=1, RB Offset=0	1	1	22.83	22.99	22.91
		RB Size=1, RB Offset=3	1	1	23.04	23.13	22.99
		RB Size=1, RB Offset=5	1	1	22.82	23.03	22.85
		RB Size=3, RB Offset=0	2	2	23.14	22.86	23.04
		RB Size=3, RB Offset=3	2	2	23.21	22.92	23.04
		RB Size=6, RB Offset=0	2	2	21.92	21.99	21.88
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					700.5MHz	707.5MHz	714.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.82	23.82	23.89
		RB Size=1, RB Offset=8	0	0	23.87	23.75	23.78
		RB Size=1, RB Offset=14	0	0	23.79	23.82	23.76
		RB Size=6, RB Offset=0	1	1	22.85	22.71	22.72
		RB Size=6, RB Offset=9	1	1	22.73	22.83	22.66
		RB Size=15, RB Offset=0	1	1	22.96	22.87	22.82
	16QAM	RB Size=1, RB Offset=0	1	1	23.38	23.00	22.89
		RB Size=1, RB Offset=8	1	1	23.34	22.95	22.90
		RB Size=1, RB Offset=14	1	1	23.45	23.03	22.89
		RB Size=6, RB Offset=0	2	2	21.89	21.83	21.79
		RB Size=6, RB Offset=9	2	2	21.92	21.77	21.82
		RB Size=15, RB Offset=0	2	2	21.91	21.89	21.91

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					701.5MHz	707.5MHz	713.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.70	23.81	23.71
		RB Size=1, RB Offset=13	0	0	23.90	23.81	23.80
		RB Size=1, RB Offset=24	0	0	23.83	23.72	23.69
		RB Size=15, RB Offset=0	1	1	22.79	22.86	22.98
		RB Size=15, RB Offset=10	1	1	22.89	22.84	22.84
		RB Size=25, RB Offset=0	1	1	22.82	22.79	22.79
	16QAM	RB Size=1, RB Offset=0	1	1	22.62	23.12	22.74
		RB Size=1, RB Offset=13	1	1	22.74	23.06	22.95
		RB Size=1, RB Offset=24	1	1	22.69	23.08	22.83
		RB Size=15, RB Offset=0	2	2	21.95	21.88	21.90
		RB Size=15, RB Offset=10	2	2	21.95	21.89	21.88
		RB Size=25, RB Offset=0	2	2	21.96	21.84	21.86
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					704MHz	707.5MHz	711MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.83	23.88	23.88
		RB Size=1, RB Offset=25	0	0	23.96	23.91	24.05
		RB Size=1, RB Offset=49	0	0	23.89	23.89	23.73
		RB Size=25, RB Offset=0	1	1	22.89	22.81	23.05
		RB Size=25, RB Offset=25	1	1	23.02	22.78	22.87
		RB Size=50, RB Offset=0	1	1	22.88	22.90	22.99
	16QAM	RB Size=1, RB Offset=0	1	1	23.44	23.07	22.87
		RB Size=1, RB Offset=25	1	1	23.52	23.13	22.95
		RB Size=1, RB Offset=49	1	1	23.34	23.02	22.98
		RB Size=25, RB Offset=0	2	2	21.82	21.80	22.12
		RB Size=25, RB Offset=25	2	2	21.97	21.86	21.92
		RB Size=50, RB Offset=0	2	2	22.00	21.91	21.98

LTE Band 13:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					779.5MHz	782MHz	784.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.86	24.03	23.90
		RB Size=1, RB Offset=13	0	0	24.03	24.01	23.96
		RB Size=1, RB Offset=24	0	0	24.02	23.92	23.87
		RB Size=15, RB Offset=0	1	1	22.96	22.96	22.97
		RB Size=15, RB Offset=10	1	1	23.09	22.97	22.94
		RB Size=25, RB Offset=0	1	1	22.97	22.98	23.04
	16QAM	RB Size=1, RB Offset=0	1	1	22.85	23.13	23.06
		RB Size=1, RB Offset=13	1	1	22.90	23.42	23.08
		RB Size=1, RB Offset=24	1	1	22.87	23.20	22.86
		RB Size=15, RB Offset=0	2	2	22.04	21.98	21.97
		RB Size=15, RB Offset=10	2	2	22.28	22.08	22.13
		RB Size=25, RB Offset=0	2	2	22.15	21.99	22.02
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	782MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	23.93	/
		RB Size=1, RB Offset=25	0	0	/	24.08	/
		RB Size=1, RB Offset=49	0	0	/	24.05	/
		RB Size=25, RB Offset=0	1	1	/	22.94	/
		RB Size=25, RB Offset=25	1	1	/	23.06	/
		RB Size=50, RB Offset=0	1	1	/	23.03	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	23.43	/
		RB Size=1, RB Offset=25	1	1	/	23.65	/
		RB Size=1, RB Offset=49	1	1	/	23.43	/
		RB Size=25, RB Offset=0	2	2	/	22.05	/
		RB Size=25, RB Offset=25	2	2	/	22.09	/
		RB Size=50, RB Offset=0	2	2	/	22.19	/

LTE Band 14:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					790.5MHz	793MHz	795.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.71	23.67	23.73
		RB Size=1, RB Offset=13	0	0	23.75	23.86	23.76
		RB Size=1, RB Offset=24	0	0	23.53	23.62	23.66
		RB Size=15, RB Offset=0	1	1	22.82	22.80	22.73
		RB Size=15, RB Offset=10	1	1	22.77	22.67	22.66
		RB Size=25, RB Offset=0	1	1	22.76	22.75	22.66
	16QAM	RB Size=1, RB Offset=0	1	1	22.52	23.04	22.72
		RB Size=1, RB Offset=13	1	1	22.66	23.02	22.85
		RB Size=1, RB Offset=24	1	1	22.59	22.90	22.71
		RB Size=15, RB Offset=0	2	2	21.95	21.80	21.81
		RB Size=15, RB Offset=10	2	2	21.99	21.80	21.75
		RB Size=25, RB Offset=0	2	2	21.96	21.72	21.87
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	793MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	23.74	/
		RB Size=1, RB Offset=25	0	0	/	23.79	/
		RB Size=1, RB Offset=49	0	0	/	23.80	/
		RB Size=25, RB Offset=0	1	1	/	22.64	/
		RB Size=25, RB Offset=25	1	1	/	22.68	/
		RB Size=50, RB Offset=0	1	1	/	22.65	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	23.31	/
		RB Size=1, RB Offset=25	1	1	/	23.41	/
		RB Size=1, RB Offset=49	1	1	/	23.19	/
		RB Size=25, RB Offset=0	2	2	/	21.77	/
		RB Size=25, RB Offset=25	2	2	/	21.74	/
		RB Size=50, RB Offset=0	2	2	/	21.87	/

LTE Band 25:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1850.7MHz	1882.5MHz	1914.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.48	23.39	23.40
		RB Size=1, RB Offset=3	0	0	23.65	23.56	23.62
		RB Size=1, RB Offset=5	0	0	23.49	23.38	23.52
		RB Size=3, RB Offset=0	1	1	23.55	23.51	23.51
		RB Size=3, RB Offset=3	1	1	23.49	23.50	23.48
		RB Size=6, RB Offset=0	1	1	22.56	22.47	22.45
	16QAM	RB Size=1, RB Offset=0	1	1	22.51	22.44	22.41
		RB Size=1, RB Offset=3	1	1	22.62	22.66	22.52
		RB Size=1, RB Offset=5	1	1	22.51	22.59	22.37
		RB Size=3, RB Offset=0	2	2	22.77	22.44	22.36
		RB Size=3, RB Offset=3	2	2	22.67	22.33	22.36
		RB Size=6, RB Offset=0	2	2	21.59	21.49	21.49
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1851.5MHz	1882.5MHz	1913.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.53	23.49	23.52
		RB Size=1, RB Offset=8	0	0	23.44	23.55	23.57
		RB Size=1, RB Offset=14	0	0	23.45	23.49	23.44
		RB Size=6, RB Offset=0	1	1	22.45	22.46	22.44
		RB Size=6, RB Offset=9	1	1	22.61	22.40	22.47
		RB Size=15, RB Offset=0	1	1	22.49	22.35	22.37
	16QAM	RB Size=1, RB Offset=0	1	1	22.99	22.54	22.51
		RB Size=1, RB Offset=8	1	1	23.04	22.48	22.41
		RB Size=1, RB Offset=14	1	1	22.88	22.47	22.46
		RB Size=6, RB Offset=0	2	2	21.61	21.50	21.48
		RB Size=6, RB Offset=9	2	2	21.52	21.46	21.34
		RB Size=15, RB Offset=0	2	2	21.59	21.44	21.43

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1852.5MHz	1882.5MHz	1912.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.44	23.31	23.31
		RB Size=1, RB Offset=13	0	0	23.54	23.41	23.44
		RB Size=1, RB Offset=24	0	0	23.33	23.39	23.41
		RB Size=15, RB Offset=0	1	1	22.49	22.40	22.64
		RB Size=15, RB Offset=10	1	1	22.54	22.34	22.36
		RB Size=25, RB Offset=0	1	1	22.49	22.47	22.35
	16QAM	RB Size=1, RB Offset=0	1	1	22.24	22.52	22.38
		RB Size=1, RB Offset=13	1	1	22.37	22.83	22.57
		RB Size=1, RB Offset=24	1	1	22.30	22.62	22.34
		RB Size=15, RB Offset=0	2	2	21.57	21.45	21.57
		RB Size=15, RB Offset=10	2	2	21.61	21.35	21.30
		RB Size=25, RB Offset=0	2	2	21.62	21.43	21.53
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1855MHz	1882.5MHz	1910MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.55	23.49	23.49
		RB Size=1, RB Offset=25	0	0	23.71	23.55	23.69
		RB Size=1, RB Offset=49	0	0	23.54	23.42	23.41
		RB Size=25, RB Offset=0	1	1	22.51	22.46	22.36
		RB Size=25, RB Offset=25	1	1	22.47	22.35	22.23
		RB Size=50, RB Offset=0	1	1	22.56	22.47	22.30
	16QAM	RB Size=1, RB Offset=0	1	1	23.01	22.48	22.46
		RB Size=1, RB Offset=25	1	1	23.17	22.64	22.55
		RB Size=1, RB Offset=49	1	1	23.02	22.45	22.35
		RB Size=25, RB Offset=0	2	2	21.56	21.47	21.50
		RB Size=25, RB Offset=25	2	2	21.55	21.57	21.40
		RB Size=50, RB Offset=0	2	2	21.55	21.43	21.37

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1857.5MHz	1882.5MHz	1907.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.36	23.40	23.49
		RB Size=1, RB Offset=38	0	0	23.44	23.43	23.55
		RB Size=1, RB Offset=74	0	0	23.42	23.32	23.41
		RB Size=36, RB Offset=0	1	1	22.47	22.53	22.44
		RB Size=36, RB Offset=39	1	1	22.62	22.50	22.39
		RB Size=75, RB Offset=0	1	1	22.46	22.52	22.51
	16QAM	RB Size=1, RB Offset=0	1	1	22.87	22.47	22.80
		RB Size=1, RB Offset=38	1	1	23.09	22.52	22.75
		RB Size=1, RB Offset=74	1	1	22.84	22.41	22.55
		RB Size=36, RB Offset=0	2	2	21.65	21.54	21.40
		RB Size=36, RB Offset=39	2	2	21.56	21.45	21.45
		RB Size=75, RB Offset=0	2	2	21.60	21.45	21.44
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1860MHz	1882.5MHz	1905MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	23.41	23.34	23.41
		RB Size=1, RB Offset=50	0	0	23.56	23.55	23.66
		RB Size=1, RB Offset=99	0	0	23.45	23.42	23.35
		RB Size=50, RB Offset=0	1	1	22.42	22.28	22.55
		RB Size=50, RB Offset=50	1	1	22.42	22.27	22.33
		RB Size=100, RB Offset=0	1	1	22.45	22.35	22.36
	16QAM	RB Size=1, RB Offset=0	1	1	22.64	22.49	22.77
		RB Size=1, RB Offset=50	1	1	22.98	22.80	23.10
		RB Size=1, RB Offset=99	1	1	22.62	22.56	22.75
		RB Size=50, RB Offset=0	2	2	21.53	21.35	21.55
		RB Size=50, RB Offset=50	2	2	21.38	21.35	21.39
		RB Size=100, RB Offset=0	2	2	21.45	21.33	21.52

LTE Band 26:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					814.7MHz	819MHz	823.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.91	23.96	23.91
		RB Size=1, RB Offset=3	0	0	24.20	23.96	24.22
		RB Size=1, RB Offset=5	0	0	24.04	24.06	23.95
		RB Size=3, RB Offset=0	1	1	24.12	24.10	24.02
		RB Size=3, RB Offset=3	1	1	24.18	23.96	23.98
		RB Size=6, RB Offset=0	1	1	23.12	23.10	22.99
	16QAM	RB Size=1, RB Offset=0	1	1	23.04	23.18	22.91
		RB Size=1, RB Offset=3	1	1	23.13	23.34	23.01
		RB Size=1, RB Offset=5	1	1	23.02	23.16	22.90
		RB Size=3, RB Offset=0	2	2	23.17	22.97	22.89
		RB Size=3, RB Offset=3	2	2	23.24	23.07	22.97
		RB Size=6, RB Offset=0	2	2	22.20	22.22	21.93
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					815.5MHz	819MHz	822.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	24.14	24.14	24.08
		RB Size=1, RB Offset=8	0	0	24.16	24.06	24.10
		RB Size=1, RB Offset=14	0	0	24.00	24.09	24.10
		RB Size=6, RB Offset=0	1	1	23.14	22.97	23.03
		RB Size=6, RB Offset=9	1	1	22.99	23.00	22.97
		RB Size=15, RB Offset=0	1	1	23.19	23.17	23.06
	16QAM	RB Size=1, RB Offset=0	1	1	23.70	23.27	23.06
		RB Size=1, RB Offset=8	1	1	23.62	23.24	23.02
		RB Size=1, RB Offset=14	1	1	23.61	23.24	23.00
		RB Size=6, RB Offset=0	2	2	22.19	22.04	21.89
		RB Size=6, RB Offset=9	2	2	22.26	22.25	21.87
		RB Size=15, RB Offset=0	2	2	22.30	22.09	21.98

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					816.5MHz	819MHz	821.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	24.22	24.22	24.04
		RB Size=1, RB Offset=13	0	0	24.31	24.26	24.16
		RB Size=1, RB Offset=24	0	0	24.24	24.19	24.17
		RB Size=15, RB Offset=0	1	1	23.31	23.23	23.31
		RB Size=15, RB Offset=10	1	1	23.24	23.24	23.03
		RB Size=25, RB Offset=0	1	1	23.28	23.20	23.23
	16QAM	RB Size=1, RB Offset=0	1	1	23.14	23.48	23.02
		RB Size=1, RB Offset=13	1	1	23.15	23.56	23.21
		RB Size=1, RB Offset=24	1	1	23.03	23.54	23.15
		RB Size=15, RB Offset=0	2	2	22.28	22.30	22.29
		RB Size=15, RB Offset=10	2	2	22.33	22.32	22.10
		RB Size=25, RB Offset=0	2	2	22.43	22.41	22.19
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	819MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	24.28	/
		RB Size=1, RB Offset=25	0	0	/	24.31	/
		RB Size=1, RB Offset=49	0	0	/	24.21	/
		RB Size=25, RB Offset=0	1	1	/	23.36	/
		RB Size=25, RB Offset=25	1	1	/	23.40	/
		RB Size=50, RB Offset=0	1	1	/	23.39	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	23.51	/
		RB Size=1, RB Offset=25	1	1	/	23.63	/
		RB Size=1, RB Offset=49	1	1	/	23.27	/
		RB Size=25, RB Offset=0	2	2	/	22.40	/
		RB Size=25, RB Offset=25	2	2	/	22.46	/
		RB Size=50, RB Offset=0	2	2	/	22.45	/

BW (MHz)	Modulation	Resource Block Size & Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					831.5MHz	836.5MHz	841.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	24.21	24.24	24.10
		RB Size=1, RB Offset=38	0	0	24.23	24.16	24.35
		RB Size=1, RB Offset=74	0	0	24.14	24.25	24.12
		RB Size=36, RB Offset=0	1	1	23.27	23.22	23.23
		RB Size=36, RB Offset=39	1	1	23.30	23.34	23.25
		RB Size=75, RB Offset=0	1	1	23.27	23.32	23.20
	16QAM	RB Size=1, RB Offset=0	1	1	23.72	23.42	23.53
		RB Size=1, RB Offset=38	1	1	23.80	23.37	23.58
		RB Size=1, RB Offset=74	1	1	23.77	23.34	23.44
		RB Size=36, RB Offset=0	2	2	22.35	22.37	22.29
		RB Size=36, RB Offset=39	2	2	22.26	22.26	22.10
		RB Size=75, RB Offset=0	2	2	22.29	22.37	22.20

LTE Band 30:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2307.5MHz	2310MHz	2312.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	22.93	22.97	22.92
		RB Size=1, RB Offset=13	0	0	23.24	23.08	23.13
		RB Size=1, RB Offset=24	0	0	22.95	22.95	22.85
		RB Size=15, RB Offset=0	1	1	21.93	21.89	22.03
		RB Size=15, RB Offset=10	1	1	21.97	21.93	22.02
		RB Size=25, RB Offset=0	1	1	21.98	21.98	21.98
	16QAM	RB Size=1, RB Offset=0	1	1	22.32	22.36	22.35
		RB Size=1, RB Offset=13	1	1	22.63	22.60	22.62
		RB Size=1, RB Offset=24	1	1	22.45	22.34	22.35
		RB Size=15, RB Offset=0	2	2	20.98	21.04	20.97
		RB Size=15, RB Offset=10	2	2	20.93	21.06	21.09
		RB Size=25, RB Offset=0	2	2	21.04	21.08	21.04
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	2310MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	22.98	/
		RB Size=1, RB Offset=25	0	0	/	23.08	/
		RB Size=1, RB Offset=49	0	0	/	22.81	/
		RB Size=25, RB Offset=0	1	1	/	22.08	/
		RB Size=25, RB Offset=25	1	1	/	21.97	/
		RB Size=50, RB Offset=0	1	1	/	21.93	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	22.43	/
		RB Size=1, RB Offset=25	1	1	/	22.63	/
		RB Size=1, RB Offset=49	1	1	/	22.25	/
		RB Size=25, RB Offset=0	2	2	/	21.00	/
		RB Size=25, RB Offset=25	2	2	/	20.99	/
		RB Size=50, RB Offset=0	2	2	/	20.97	/

LTE Band 41:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2498.5MHz	2593MHz	2687.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.37	23.44	23.30
		RB Size=1, RB Offset=13	0	0	23.49	23.54	23.43
		RB Size=1, RB Offset=24	0	0	23.39	23.37	23.34
		RB Size=15, RB Offset=0	1	1	22.45	22.36	22.61
		RB Size=15, RB Offset=10	1	1	22.48	22.34	22.43
		RB Size=25, RB Offset=0	1	1	22.54	22.36	22.32
	16QAM	RB Size=1, RB Offset=0	1	1	22.35	22.59	22.40
		RB Size=1, RB Offset=13	1	1	22.47	22.68	22.59
		RB Size=1, RB Offset=24	1	1	22.33	22.55	22.30
		RB Size=15, RB Offset=0	2	2	21.55	21.36	21.62
		RB Size=15, RB Offset=10	2	2	21.50	21.36	21.42
		RB Size=25, RB Offset=0	2	2	21.54	21.35	21.41
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2501MHz	2593MHz	2685MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.53	23.52	23.45
		RB Size=1, RB Offset=25	0	0	23.58	23.51	23.59
		RB Size=1, RB Offset=49	0	0	23.55	23.32	23.42
		RB Size=25, RB Offset=0	1	1	22.54	22.41	22.48
		RB Size=25, RB Offset=25	1	1	22.57	22.42	22.24
		RB Size=50, RB Offset=0	1	1	22.52	22.49	22.25
	16QAM	RB Size=1, RB Offset=0	1	1	23.02	22.54	22.48
		RB Size=1, RB Offset=25	1	1	23.12	22.73	22.60
		RB Size=1, RB Offset=49	1	1	23.03	22.58	22.45
		RB Size=25, RB Offset=0	2	2	21.57	21.56	21.46
		RB Size=25, RB Offset=25	2	2	21.56	21.54	21.41
		RB Size=50, RB Offset=0	2	2	21.48	21.47	21.43

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2503.5MHz	2593MHz	2682.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.44	23.35	23.40
		RB Size=1, RB Offset=38	0	0	23.45	23.43	23.40
		RB Size=1, RB Offset=74	0	0	23.35	23.29	23.47
		RB Size=36, RB Offset=0	1	1	22.63	22.50	22.45
		RB Size=36, RB Offset=39	1	1	22.63	22.51	22.41
		RB Size=75, RB Offset=0	1	1	22.54	22.56	22.42
	16QAM	RB Size=1, RB Offset=0	1	1	22.89	22.50	22.76
		RB Size=1, RB Offset=38	1	1	23.02	22.45	22.79
		RB Size=1, RB Offset=74	1	1	22.83	22.48	22.67
		RB Size=36, RB Offset=0	2	2	21.51	21.46	21.42
		RB Size=36, RB Offset=39	2	2	21.47	21.52	21.43
		RB Size=75, RB Offset=0	2	2	21.53	21.44	21.44
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2506MHz	2593MHz	2680MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	23.44	23.38	23.26
		RB Size=1, RB Offset=50	0	0	23.66	23.69	23.59
		RB Size=1, RB Offset=99	0	0	23.35	23.29	23.30
		RB Size=50, RB Offset=0	1	1	22.45	22.26	22.54
		RB Size=50, RB Offset=50	1	1	22.41	22.43	22.32
		RB Size=100, RB Offset=0	1	1	22.38	22.42	22.42
	16QAM	RB Size=1, RB Offset=0	1	1	22.72	22.60	22.73
		RB Size=1, RB Offset=50	1	1	23.05	22.77	23.00
		RB Size=1, RB Offset=99	1	1	22.64	22.55	22.74
		RB Size=50, RB Offset=0	2	2	21.52	21.28	21.50
		RB Size=50, RB Offset=50	2	2	21.50	21.33	21.49
		RB Size=100, RB Offset=0	2	2	21.46	21.43	21.43

LTE Band 66:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1710.7MHz	1745MHz	1779.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	23.56	23.58	23.70
		RB Size=1, RB Offset=3	0	0	23.83	23.80	23.95
		RB Size=1, RB Offset=5	0	0	23.60	23.59	23.84
		RB Size=3, RB Offset=0	1	1	23.61	23.69	23.79
		RB Size=3, RB Offset=3	1	1	23.73	23.73	23.55
		RB Size=6, RB Offset=0	1	1	22.75	22.65	22.89
	16QAM	RB Size=1, RB Offset=0	1	1	22.64	22.53	22.81
		RB Size=1, RB Offset=3	1	1	22.73	22.72	22.90
		RB Size=1, RB Offset=5	1	1	22.66	22.69	22.80
		RB Size=3, RB Offset=0	2	2	22.63	22.83	22.59
		RB Size=3, RB Offset=3	2	2	22.63	22.77	22.66
		RB Size=6, RB Offset=0	2	2	21.63	21.84	21.84
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1711.5MHz	1745MHz	1778.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.67	23.78	23.83
		RB Size=1, RB Offset=8	0	0	23.63	23.69	23.91
		RB Size=1, RB Offset=14	0	0	23.57	23.80	23.90
		RB Size=6, RB Offset=0	1	1	22.67	22.71	22.80
		RB Size=6, RB Offset=9	1	1	22.70	22.68	22.77
		RB Size=15, RB Offset=0	1	1	22.52	22.62	22.78
	16QAM	RB Size=1, RB Offset=0	1	1	23.14	22.81	22.75
		RB Size=1, RB Offset=8	1	1	23.12	22.84	22.66
		RB Size=1, RB Offset=14	1	1	23.03	22.76	22.64
		RB Size=6, RB Offset=0	2	2	21.72	21.78	21.78
		RB Size=6, RB Offset=9	2	2	21.63	21.72	21.70
		RB Size=15, RB Offset=0	2	2	21.77	21.64	21.78

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1712.5MHz	1745MHz	1777.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.66	23.67	23.69
		RB Size=1, RB Offset=13	0	0	23.62	23.78	23.81
		RB Size=1, RB Offset=24	0	0	23.48	23.63	23.68
		RB Size=15, RB Offset=0	1	1	22.51	22.74	22.88
		RB Size=15, RB Offset=10	1	1	22.76	22.81	22.80
		RB Size=25, RB Offset=0	1	1	22.56	22.59	22.84
	16QAM	RB Size=1, RB Offset=0	1	1	22.57	22.81	22.79
		RB Size=1, RB Offset=13	1	1	22.58	23.01	22.76
		RB Size=1, RB Offset=24	1	1	22.35	22.90	22.72
		RB Size=15, RB Offset=0	2	2	21.62	21.69	21.85
		RB Size=15, RB Offset=10	2	2	21.77	21.82	21.91
		RB Size=25, RB Offset=0	2	2	21.65	21.70	21.74
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1715MHz	1745MHz	1775MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.69	23.75	23.92
		RB Size=1, RB Offset=25	0	0	23.85	23.96	24.17
		RB Size=1, RB Offset=49	0	0	23.62	23.81	24.01
		RB Size=25, RB Offset=0	1	1	22.59	22.75	22.89
		RB Size=25, RB Offset=25	1	1	22.65	22.80	22.93
		RB Size=50, RB Offset=0	1	1	22.66	22.73	22.95
	16QAM	RB Size=1, RB Offset=0	1	1	23.11	22.90	22.88
		RB Size=1, RB Offset=25	1	1	23.25	23.12	23.10
		RB Size=1, RB Offset=49	1	1	23.04	22.80	22.79
		RB Size=25, RB Offset=0	2	2	21.72	21.78	21.91
		RB Size=25, RB Offset=25	2	2	21.78	21.93	22.02
		RB Size=50, RB Offset=0	2	2	21.65	21.81	21.87

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1717.5MHz	1745MHz	1772.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.80	23.71	23.98
		RB Size=1, RB Offset=38	0	0	23.81	23.82	24.06
		RB Size=1, RB Offset=74	0	0	23.64	23.89	24.01
		RB Size=36, RB Offset=0	1	1	22.73	22.87	22.93
		RB Size=36, RB Offset=39	1	1	22.83	23.04	23.06
		RB Size=75, RB Offset=0	1	1	22.81	22.88	23.05
	16QAM	RB Size=1, RB Offset=0	1	1	23.20	22.90	22.99
		RB Size=1, RB Offset=38	1	1	23.10	22.95	23.18
		RB Size=1, RB Offset=74	1	1	23.17	22.86	23.08
		RB Size=36, RB Offset=0	2	2	21.77	21.88	22.00
		RB Size=36, RB Offset=39	2	2	21.80	21.89	22.04
		RB Size=75, RB Offset=0	2	2	21.85	21.95	21.99
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1720MHz	1745MHz	1770MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	23.75	23.66	23.83
		RB Size=1, RB Offset=50	0	0	24.02	24.12	23.96
		RB Size=1, RB Offset=99	0	0	23.78	23.82	23.84
		RB Size=50, RB Offset=0	1	1	22.66	22.79	23.01
		RB Size=50, RB Offset=50	1	1	22.68	22.78	22.91
		RB Size=100, RB Offset=0	1	1	22.65	22.76	23.02
	16QAM	RB Size=1, RB Offset=0	1	1	22.87	22.94	23.02
		RB Size=1, RB Offset=50	1	1	23.06	23.23	23.50
		RB Size=1, RB Offset=99	1	1	22.92	22.86	23.12
		RB Size=50, RB Offset=0	2	2	21.63	21.85	21.97
		RB Size=50, RB Offset=50	2	2	21.64	21.77	22.03
		RB Size=100, RB Offset=0	2	2	21.65	21.85	22.03

LTE Band 71:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					665.5MHz	680.5MHz	695.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.23	23.12	22.80
		RB Size=1, RB Offset=13	0	0	23.25	23.03	22.61
		RB Size=1, RB Offset=24	0	0	23.24	23.05	22.69
		RB Size=15, RB Offset=0	1	1	22.30	21.98	21.90
		RB Size=15, RB Offset=10	1	1	22.18	21.95	21.86
		RB Size=25, RB Offset=0	1	1	22.32	22.12	21.79
	16QAM	RB Size=1, RB Offset=0	1	1	21.50	22.08	21.66
		RB Size=1, RB Offset=13	1	1	21.58	22.07	21.49
		RB Size=1, RB Offset=24	1	1	21.68	22.20	21.46
		RB Size=15, RB Offset=0	2	2	21.36	21.10	20.98
		RB Size=15, RB Offset=10	2	2	21.37	21.18	21.10
		RB Size=25, RB Offset=0	2	2	21.40	21.14	21.00
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					668MHz	680.5MHz	693MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	23.01	23.01	23.06
		RB Size=1, RB Offset=25	0	0	23.01	22.94	23.12
		RB Size=1, RB Offset=49	0	0	23.02	23.01	22.88
		RB Size=25, RB Offset=0	1	1	22.10	22.03	21.97
		RB Size=25, RB Offset=25	1	1	22.23	22.09	21.83
		RB Size=50, RB Offset=0	1	1	22.20	21.98	22.08
	16QAM	RB Size=1, RB Offset=0	1	1	22.38	22.47	21.56
		RB Size=1, RB Offset=25	1	1	22.39	22.33	21.56
		RB Size=1, RB Offset=49	1	1	22.47	22.34	21.47
		RB Size=25, RB Offset=0	2	2	21.34	21.19	21.16
		RB Size=25, RB Offset=25	2	2	21.36	21.23	21.11
		RB Size=50, RB Offset=0	2	2	21.27	21.39	21.06

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					670.5MHz	680.5MHz	690.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.05	23.11	23.05
		RB Size=1, RB Offset=38	0	0	22.92	22.97	22.97
		RB Size=1, RB Offset=74	0	0	23.07	23.01	22.86
		RB Size=36, RB Offset=0	1	1	22.18	22.04	22.00
		RB Size=36, RB Offset=39	1	1	22.14	22.09	21.81
		RB Size=75, RB Offset=0	1	1	22.07	22.20	21.85
	16QAM	RB Size=1, RB Offset=0	1	1	22.50	22.61	22.38
		RB Size=1, RB Offset=38	1	1	22.40	22.59	22.28
		RB Size=1, RB Offset=74	1	1	22.44	22.45	22.32
		RB Size=36, RB Offset=0	2	2	21.41	21.39	21.04
		RB Size=36, RB Offset=39	2	2	21.38	21.32	20.95
		RB Size=75, RB Offset=0	2	2	21.37	21.31	20.94
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					675MHz	683MHz	688MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	23.19	23.12	23.23
		RB Size=1, RB Offset=50	0	0	23.23	23.14	23.14
		RB Size=1, RB Offset=99	0	0	23.38	23.06	23.09
		RB Size=50, RB Offset=0	1	1	22.30	22.13	22.04
		RB Size=50, RB Offset=50	1	1	22.05	22.01	21.83
		RB Size=100, RB Offset=0	1	1	22.17	22.08	22.05
	16QAM	RB Size=1, RB Offset=0	1	1	22.07	22.81	22.66
		RB Size=1, RB Offset=50	1	1	22.03	22.78	22.56
		RB Size=1, RB Offset=99	1	1	22.02	22.47	22.47
		RB Size=50, RB Offset=0	2	2	21.40	21.45	21.16
		RB Size=50, RB Offset=50	2	2	21.29	21.24	21.06
		RB Size=100, RB Offset=0	2	2	21.25	21.12	21.14

Note:

1. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
2. The CMW500 Wideband Radio Communication tester is used for LTE output power measurements and SAR testing. Closed loop power control is used to keep the radio transmitters the max output power during the test.

Bluetooth:

Mode	Channel frequency (MHz)	RF Output Power (dBm)
BDR(GFSK)	2402	3.29
	2441	3.83
	2480	3.84
EDR($\pi/4$ -DQPSK)	2402	2.56
	2441	2.93
	2480	3.59
EDR(8-DPSK)	2402	2.60
	2441	3.12
	2480	3.77
Bluetooth LE_1M	2402	-3.60
	2440	-2.16
	2480	-3.10
Bluetooth LE_2M	2402	-3.69
	2440	-2.16
	2480	-3.28

WLAN 2.4G:

Mode	Channel frequency (MHz)	Data Rate	RF Output Power (dBm)
802.11b	2412	1Mbps	17.45
	2437		17.31
	2462		17.45
802.11g	2412	6Mbps	15.26
	2437		15.49
	2462		15.06
802.11n HT20	2412	MCS0	14.87
	2437		15.40
	2462		15.24
802.11n HT40	2422	MCS0	12.84
	2437		12.76
	2452		12.97

WLAN (5.2G):

Mode	Channel frequency(MHz)	Data Rate	RF Output Power(dBm)
802.11a	5180	6Mbps	11.45
	5200		11.33
	5240		11.14
802.11n HT20	5180	MCS0	11.34
	5200		11.16
	5240		11.12
802.11n HT40	5190	MCS0	10.94
	5230		11.30
802.11 ac20	5180	MCS0	11.25
	5200		10.95
	5240		11.04
802.11 ac40	5190	MCS0	11.19
	5230		11.42
802.11 ac80	5210	MCS0	11.09

WLAN (5.8G):

Mode	Channel frequency(MHz)	Data Rate	RF Output Power (dBm)
802.11a	5745	6Mbps	9.48
	5785		7.10
	5825		7.66
802.11n HT20	5745	MCS0	9.43
	5785		8.37
	5825		8.36
802.11n HT40	5755	MCS0	9.02
	5795		8.20
802.11 ac20	5745	MCS0	9.42
	5785		8.38
	5825		8.42
802.11 ac40	5755	MCS0	9.22
	5795		8.27
802.11 ac80	5775	MCS0	8.63

WWAN Antenna Reduction Power**GPRS:**

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	30.37	29.54	27.58	26.41
	190	836.6	30.29	29.54	27.57	26.49
	251	848.8	30.32	29.46	27.60	26.52
PCS 1900	512	1850.2	22.52	21.79	20.19	18.69
	661	1880	22.21	21.59	19.88	18.91
	810	1909.8	22.03	21.29	20.09	18.70

EGPRS:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	23.57	22.44	20.21	18.88
	190	836.6	23.74	22.48	20.29	19.06
	251	848.8	23.89	22.73	20.25	19.75
PCS 1900	512	1850.2	18.68	17.51	15.47	13.90
	661	1880	18.12	17.14	14.92	13.57
	810	1909.8	17.67	16.18	14.91	13.12

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

The time based average power for GPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	21.37	23.54	23.33	23.41
	190	836.6	21.29	23.54	23.32	23.49
	251	848.8	21.32	23.46	23.35	23.52
PCS 1900	512	1850.2	13.52	15.79	15.94	15.69
	661	1880	13.21	15.59	15.63	15.91
	810	1909.8	13.03	15.29	15.38	15.70

The time based average power for EGPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	14.57	16.44	15.96	15.88
	190	836.6	14.74	16.48	16.04	16.06
	251	848.8	14.89	16.73	16.00	16.75
PCS 1900	512	1850.2	9.68	11.51	11.22	10.90
	661	1880	9.12	11.14	10.67	10.57
	810	1909.8	8.67	10.18	10.66	10.12

Note:

1. Rohde & Schwarz Radio Communication Tester (CMU200) was used for the measurement of GSM peak and average output power for active timeslots.
2. For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3. For GPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 3(850 MHz band) and 3(1900 MHz band).

WCDMA Band 2:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		12.84	12.92	12.92
	HSDPA	1	11.80	11.83	11.94
		2	11.48	11.53	11.53
		3	11.55	11.41	11.56
		4	11.61	11.49	11.57
	HSUPA	1	11.89	12.14	12.09
		2	11.44	12.24	12.04
		3	11.54	12.38	12.44
		4	11.76	12.39	11.98
		5	11.73	12.12	12.42
	HSPA+	1	11.53	11.37	11.51

WCDMA Band 4:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		15.12	15.04	15.15
	HSDPA	1	14.10	14.03	14.07
		2	14.12	14.67	13.41
		3	14.14	14.32	14.20
		4	14.18	14.54	14.50
	HSUPA	1	13.70	13.62	13.79
		2	13.38	13.20	13.87
		3	13.08	13.77	13.35
		4	14.02	13.73	13.65
		5	15.06	15.28	13.65
	HSPA+	1	14.34	13.44	13.14

WCDMA Band 5:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		22.87	22.94	22.90
	HSDPA	1	21.90	21.86	22.00
		2	21.66	21.54	21.63
		3	21.76	21.48	21.53
		4	21.93	21.74	21.95
	HSUPA	1	21.92	22.45	22.27
		2	22.53	22.12	22.35
		3	22.42	22.50	22.61
		4	22.79	22.49	22.06
		5	21.95	22.15	22.49
	HSPA+	1	22.41	23.64	23.78

Note:

1. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

LTE Band 2:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1850.7MHz	1880MHz	1909.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	13.2	13.14	13.12
		RB Size=1, RB Offset=3	0	0	13.35	13.26	13.23
		RB Size=1, RB Offset=5	0	0	13.19	13.16	13.08
		RB Size=3, RB Offset=0	1	1	13.25	13.22	13.16
		RB Size=3, RB Offset=3	1	1	13.22	13.18	13.11
		RB Size=6, RB Offset=0	1	1	12.22	12.19	12.19
	16QAM	RB Size=1, RB Offset=0	1	1	12.21	12.23	12.09
		RB Size=1, RB Offset=3	1	1	12.31	12.35	12.22
		RB Size=1, RB Offset=5	1	1	12.17	12.23	12.08
		RB Size=3, RB Offset=0	2	2	12.34	12.1	12.14
		RB Size=3, RB Offset=3	2	2	12.28	12.15	12.13
		RB Size=6, RB Offset=0	2	2	11.3	11.25	11.13
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1851.5MHz	1880MHz	1908.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	13.31	13.27	13.26
		RB Size=1, RB Offset=8	0	0	13.26	13.24	13.2
		RB Size=1, RB Offset=14	0	0	13.27	13.24	13.24
		RB Size=6, RB Offset=0	1	1	12.29	12.22	12.19
		RB Size=6, RB Offset=9	1	1	12.28	12.21	12.2
		RB Size=15, RB Offset=0	1	1	12.25	12.2	12.16
	16QAM	RB Size=1, RB Offset=0	1	1	12.77	12.36	12.23
		RB Size=1, RB Offset=8	1	1	12.72	12.33	12.13
		RB Size=1, RB Offset=14	1	1	12.74	12.31	12.17
		RB Size=6, RB Offset=0	2	2	11.37	11.25	11.14
		RB Size=6, RB Offset=9	2	2	11.3	11.26	11.17
		RB Size=15, RB Offset=0	2	2	11.31	11.2	11.23

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1852.5MHz	1880MHz	1907.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	13.26	13.2	13.14
		RB Size=1, RB Offset=13	0	0	13.29	13.28	13.21
		RB Size=1, RB Offset=24	0	0	13.23	13.2	13.13
		RB Size=15, RB Offset=0	1	1	12.29	12.2	12.14
		RB Size=15, RB Offset=10	1	1	12.28	12.23	12.21
		RB Size=25, RB Offset=0	1	1	12.24	12.19	12.15
	16QAM	RB Size=1, RB Offset=0	1	1	12.11	12.45	12.2
		RB Size=1, RB Offset=13	1	1	12.17	12.5	12.27
		RB Size=1, RB Offset=24	1	1	12.1	12.44	12.15
		RB Size=15, RB Offset=0	2	2	11.31	11.18	11.16
		RB Size=15, RB Offset=10	2	2	11.33	11.25	11.26
		RB Size=25, RB Offset=0	2	2	11.31	11.21	11.18
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1855MHz	1880MHz	1905MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	13.27	13.21	13.21
		RB Size=1, RB Offset=25	0	0	13.46	13.4	13.44
		RB Size=1, RB Offset=49	0	0	13.23	13.18	13.18
		RB Size=25, RB Offset=0	1	1	12.32	12.23	12.17
		RB Size=25, RB Offset=25	1	1	12.3	12.25	12.33
		RB Size=50, RB Offset=0	1	1	12.29	12.26	12.22
	16QAM	RB Size=1, RB Offset=0	1	1	12.77	12.32	12.16
		RB Size=1, RB Offset=25	1	1	12.95	12.54	12.41
		RB Size=1, RB Offset=49	1	1	12.77	12.3	12.15
		RB Size=25, RB Offset=0	2	2	11.39	11.31	11.32
		RB Size=25, RB Offset=25	2	2	11.36	11.31	11.44
		RB Size=50, RB Offset=0	2	2	11.31	11.24	11.31

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1857.5MHz	1880MHz	1902.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	13.22	13.16	13.16
		RB Size=1, RB Offset=38	0	0	13.24	13.21	13.23
		RB Size=1, RB Offset=74	0	0	13.09	13.08	13.08
		RB Size=36, RB Offset=0	1	1	12.31	12.21	12.26
		RB Size=36, RB Offset=39	1	1	12.28	12.24	12.34
		RB Size=75, RB Offset=0	1	1	12.28	12.23	12.35
	16QAM	RB Size=1, RB Offset=0	1	1	12.73	12.29	12.45
		RB Size=1, RB Offset=38	1	1	12.80	12.32	12.54
		RB Size=1, RB Offset=74	1	1	12.65	12.19	12.42
		RB Size=36, RB Offset=0	2	2	11.36	11.22	11.25
		RB Size=36, RB Offset=39	2	2	11.30	11.26	11.28
		RB Size=75, RB Offset=0	2	2	11.27	11.27	11.30
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1860MHz	1880MHz	1900MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	13.20	13.19	13.00
		RB Size=1, RB Offset=50	0	0	13.40	13.38	13.30
		RB Size=1, RB Offset=99	0	0	13.15	13.07	13.03
		RB Size=50, RB Offset=0	1	1	12.23	12.12	12.22
		RB Size=50, RB Offset=50	1	1	12.14	12.17	12.24
		RB Size=100, RB Offset=0	1	1	12.19	12.15	12.27
	16QAM	RB Size=1, RB Offset=0	1	1	12.44	12.31	12.52
		RB Size=1, RB Offset=50	1	1	12.66	12.53	12.81
		RB Size=1, RB Offset=99	1	1	12.41	12.25	12.50
		RB Size=50, RB Offset=0	2	2	11.23	11.16	11.24
		RB Size=50, RB Offset=50	2	2	11.16	11.14	11.23
		RB Size=100, RB Offset=0	2	2	11.25	11.17	11.28

LTE Band 4:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1710.7MHz	1732.5MHz	1754.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	15.06	15.03	14.96
		RB Size=1, RB Offset=3	0	0	15.23	15.18	15.08
		RB Size=1, RB Offset=5	0	0	15.05	14.99	14.94
		RB Size=3, RB Offset=0	1	1	15.11	15.07	14.96
		RB Size=3, RB Offset=3	1	1	15.12	15.07	15.01
		RB Size=6, RB Offset=0	1	1	14.24	14.14	14.07
	16QAM	RB Size=1, RB Offset=0	1	1	14.07	14.12	13.92
		RB Size=1, RB Offset=3	1	1	14.26	14.32	14.09
		RB Size=1, RB Offset=5	1	1	14.07	14.15	13.94
		RB Size=3, RB Offset=0	2	2	14.28	14.05	14.01
		RB Size=3, RB Offset=3	2	2	14.22	14.07	14.02
		RB Size=6, RB Offset=0	2	2	13.16	13.08	12.96
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1711.5MHz	1732.5MHz	1753.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	15.10	15.03	15.00
		RB Size=1, RB Offset=8	0	0	15.03	15.01	15.01
		RB Size=1, RB Offset=14	0	0	15.01	14.99	14.96
		RB Size=6, RB Offset=0	1	1	14.09	14.03	13.98
		RB Size=6, RB Offset=9	1	1	14.11	14.03	13.94
		RB Size=15, RB Offset=0	1	1	14.05	14.05	13.97
	16QAM	RB Size=1, RB Offset=0	1	1	14.58	14.21	13.96
		RB Size=1, RB Offset=8	1	1	14.50	14.15	13.96
		RB Size=1, RB Offset=14	1	1	14.50	14.19	13.93
		RB Size=6, RB Offset=0	2	2	13.14	13.02	12.88
		RB Size=6, RB Offset=9	2	2	13.12	13.05	12.86
		RB Size=15, RB Offset=0	2	2	13.07	13.00	13.00

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1712.5MHz	1732.5MHz	1752.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	15.00	14.98	14.84
		RB Size=1, RB Offset=13	0	0	15.06	15.05	14.97
		RB Size=1, RB Offset=24	0	0	14.94	14.96	14.86
		RB Size=15, RB Offset=0	1	1	14.04	14.06	14.02
		RB Size=15, RB Offset=10	1	1	14.14	14.10	13.99
		RB Size=25, RB Offset=0	1	1	14.04	14.05	13.94
	16QAM	RB Size=1, RB Offset=0	1	1	13.94	14.27	13.89
		RB Size=1, RB Offset=13	1	1	13.98	14.33	13.98
		RB Size=1, RB Offset=24	1	1	13.84	14.24	13.93
		RB Size=15, RB Offset=0	2	2	13.02	13.02	13.01
		RB Size=15, RB Offset=10	2	2	13.14	13.04	12.96
		RB Size=25, RB Offset=0	2	2	13.05	13.01	12.96
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1715MHz	1732.5MHz	1750MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	15.05	15.03	14.98
		RB Size=1, RB Offset=25	0	0	15.18	15.19	15.13
		RB Size=1, RB Offset=49	0	0	15.07	15.02	15.01
		RB Size=25, RB Offset=0	1	1	14.01	14.10	14.03
		RB Size=25, RB Offset=25	1	1	14.10	14.11	13.97
		RB Size=50, RB Offset=0	1	1	14.09	14.07	13.98
	16QAM	RB Size=1, RB Offset=0	1	1	14.55	14.17	13.96
		RB Size=1, RB Offset=25	1	1	14.61	14.31	14.07
		RB Size=1, RB Offset=49	1	1	14.51	14.18	13.93
		RB Size=25, RB Offset=0	2	2	13.04	13.08	13.09
		RB Size=25, RB Offset=25	2	2	13.13	13.10	13.04
		RB Size=50, RB Offset=0	2	2	13.05	13.09	13.00

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1717.5MHz	1732.5MHz	1747.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	14.99	14.97	14.93
		RB Size=1, RB Offset=38	0	0	15.06	15.07	15.04
		RB Size=1, RB Offset=74	0	0	14.97	14.91	14.92
		RB Size=36, RB Offset=0	1	1	14.15	14.15	14.17
		RB Size=36, RB Offset=39	1	1	14.22	14.17	14.12
		RB Size=75, RB Offset=0	1	1	14.17	14.19	14.12
	16QAM	RB Size=1, RB Offset=0	1	1	14.52	14.11	14.30
		RB Size=1, RB Offset=38	1	1	14.52	14.21	14.33
		RB Size=1, RB Offset=74	1	1	14.46	14.08	14.21
		RB Size=36, RB Offset=0	2	2	13.04	13.06	13.04
		RB Size=36, RB Offset=39	2	2	13.12	13.14	12.98
		RB Size=75, RB Offset=0	2	2	13.10	13.13	13.03
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1720MHz	1732.5MHz	1745MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	14.94	14.97	14.84
		RB Size=1, RB Offset=50	0	0	15.22	15.22	15.12
		RB Size=1, RB Offset=99	0	0	14.94	14.93	14.84
		RB Size=50, RB Offset=0	1	1	13.94	14.03	14.03
		RB Size=50, RB Offset=50	1	1	14.03	14.05	13.90
		RB Size=100, RB Offset=0	1	1	14.04	14.06	13.98
	16QAM	RB Size=1, RB Offset=0	1	1	14.24	14.10	14.39
		RB Size=1, RB Offset=50	1	1	14.47	14.42	14.63
		RB Size=1, RB Offset=99	1	1	14.25	14.12	14.33
		RB Size=50, RB Offset=0	2	2	12.91	13.07	12.98
		RB Size=50, RB Offset=50	2	2	13.02	13.06	12.92
		RB Size=100, RB Offset=0	2	2	13.05	13.11	12.96

LTE Band 5:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					824.7MHz	836.5MHz	848.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	22.68	22.65	22.58
		RB Size=1, RB Offset=3	0	0	22.87	22.81	23.02
		RB Size=1, RB Offset=5	0	0	22.73	22.74	22.56
		RB Size=3, RB Offset=0	1	1	22.69	22.61	22.69
		RB Size=3, RB Offset=3	1	1	22.73	22.79	22.62
		RB Size=6, RB Offset=0	1	1	21.71	21.80	21.75
	16QAM	RB Size=1, RB Offset=0	1	1	21.65	21.84	21.59
		RB Size=1, RB Offset=3	1	1	21.90	21.99	21.80
		RB Size=1, RB Offset=5	1	1	21.72	21.81	21.61
		RB Size=3, RB Offset=0	2	2	21.87	21.69	21.64
		RB Size=3, RB Offset=3	2	2	21.99	21.79	21.65
		RB Size=6, RB Offset=0	2	2	20.83	20.89	20.63
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					825.5MHz	836.5MHz	847.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	22.70	22.82	22.76
		RB Size=1, RB Offset=8	0	0	22.72	22.75	22.73
		RB Size=1, RB Offset=14	0	0	22.71	22.79	22.70
		RB Size=6, RB Offset=0	1	1	21.74	21.64	21.71
		RB Size=6, RB Offset=9	1	1	21.81	21.65	21.65
		RB Size=15, RB Offset=0	1	1	21.77	21.70	21.63
	16QAM	RB Size=1, RB Offset=0	1	1	22.35	21.91	21.69
		RB Size=1, RB Offset=8	1	1	22.35	21.82	21.58
		RB Size=1, RB Offset=14	1	1	22.40	21.84	21.71
		RB Size=6, RB Offset=0	2	2	20.89	20.82	20.59
		RB Size=6, RB Offset=9	2	2	20.83	20.76	20.66
		RB Size=15, RB Offset=0	2	2	20.86	20.74	20.66

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					826.5MHz	836.5MHz	846.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	22.77	22.68	22.57
		RB Size=1, RB Offset=13	0	0	22.95	22.84	22.68
		RB Size=1, RB Offset=24	0	0	22.72	22.66	22.66
		RB Size=15, RB Offset=0	1	1	21.80	21.63	21.85
		RB Size=15, RB Offset=10	1	1	21.79	21.77	21.69
		RB Size=25, RB Offset=0	1	1	21.85	21.69	21.71
	16QAM	RB Size=1, RB Offset=0	1	1	21.53	21.98	21.66
		RB Size=1, RB Offset=13	1	1	21.84	21.97	21.74
		RB Size=1, RB Offset=24	1	1	21.65	21.91	21.61
		RB Size=15, RB Offset=0	2	2	20.99	20.75	20.83
		RB Size=15, RB Offset=10	2	2	20.91	20.84	20.63
		RB Size=25, RB Offset=0	2	2	20.93	20.71	20.65
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					829MHz	836.5MHz	844MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	22.75	22.77	22.72
		RB Size=1, RB Offset=25	0	0	22.97	22.89	22.89
		RB Size=1, RB Offset=49	0	0	22.76	22.74	22.78
		RB Size=25, RB Offset=0	1	1	21.96	21.71	21.84
		RB Size=25, RB Offset=25	1	1	21.95	21.74	21.60
		RB Size=50, RB Offset=0	1	1	21.86	21.76	21.71
	16QAM	RB Size=1, RB Offset=0	1	1	22.25	21.94	21.63
		RB Size=1, RB Offset=25	1	1	22.58	22.10	21.76
		RB Size=1, RB Offset=49	1	1	22.33	21.90	21.75
		RB Size=25, RB Offset=0	2	2	21.04	20.83	20.91
		RB Size=25, RB Offset=25	2	2	21.04	20.77	20.83
		RB Size=50, RB Offset=0	2	2	20.99	20.80	20.79

LTE Band 7:

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2502.5MHz	2535MHz	2567.5MHz
5M	QPSK	RB Size=1, RB Offset=0	0	0	12.45	12.55	12.88
		RB Size=1, RB Offset=25	0	0	12.53	12.66	13.00
		RB Size=1, RB Offset=49	0	0	12.40	12.58	12.56
		RB Size=25, RB Offset=0	1	1	11.50	11.63	12.08
		RB Size=25, RB Offset=25	1	1	11.51	11.58	11.93
		RB Size=50, RB Offset=0	1	1	11.47	11.58	11.95
	16QAM	RB Size=1, RB Offset=0	1	1	11.32	11.81	11.89
		RB Size=1, RB Offset=25	1	1	11.40	11.90	12.01
		RB Size=1, RB Offset=49	1	1	11.27	11.80	11.98
		RB Size=25, RB Offset=0	2	2	10.50	10.62	11.03
		RB Size=25, RB Offset=25	2	2	10.52	10.56	10.87
		RB Size=50, RB Offset=0	2	2	10.49	10.57	10.92
BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2505MHz	2535MHz	2565MHz
10M	QPSK	RB Size=1, RB Offset=0	0	0	12.52	12.60	12.95
		RB Size=1, RB Offset=38	0	0	12.67	12.83	13.17
		RB Size=1, RB Offset=74	0	0	12.51	12.67	12.66
		RB Size=36, RB Offset=0	1	1	11.46	11.68	12.09
		RB Size=36, RB Offset=39	1	1	11.56	11.65	11.89
		RB Size=75, RB Offset=0	1	1	11.53	11.65	11.99
	16QAM	RB Size=1, RB Offset=0	1	1	11.99	11.70	11.78
		RB Size=1, RB Offset=38	1	1	12.13	11.91	12.05
		RB Size=1, RB Offset=74	1	1	11.97	11.73	11.95
		RB Size=36, RB Offset=0	2	2	10.51	10.73	11.10
		RB Size=36, RB Offset=39	2	2	10.57	10.64	10.86
		RB Size=75, RB Offset=0	2	2	10.52	10.68	10.93

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2507.5MHz	2535MHz	2562.5MHz
15M	QPSK	RB Size=1, RB Offset=0	0	0	12.44	12.54	12.82
		RB Size=1, RB Offset=50	0	0	12.53	12.64	13.04
		RB Size=1, RB Offset=99	0	0	12.46	12.56	12.76
		RB Size=50, RB Offset=0	1	1	11.55	11.75	12.04
		RB Size=50, RB Offset=50	1	1	11.63	11.71	11.99
		RB Size=100, RB Offset=0	1	1	11.60	11.71	12.03
	16QAM	RB Size=1, RB Offset=0	1	1	11.96	11.62	12.03
		RB Size=1, RB Offset=50	1	1	12.01	11.79	12.16
		RB Size=1, RB Offset=99	1	1	11.94	11.70	12.13
		RB Size=50, RB Offset=0	2	2	10.49	10.67	10.94
		RB Size=50, RB Offset=50	2	2	10.60	10.66	10.85
		RB Size=100, RB Offset=0	2	2	10.54	10.70	10.92
BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2510MHz	2535MHz	2560MHz
20M	QPSK	RB Size=1, RB Offset=0	0	0	12.42	12.46	12.65
		RB Size=1, RB Offset=50	0	0	12.96	12.96	13.04
		RB Size=1, RB Offset=99	0	0	12.42	12.63	12.67
		RB Size=50, RB Offset=0	1	1	11.34	11.68	11.81
		RB Size=50, RB Offset=50	1	1	11.52	11.53	11.64
		RB Size=100, RB Offset=0	1	1	11.43	11.65	11.76
	16QAM	RB Size=1, RB Offset=0	1	1	11.68	11.62	12.13
		RB Size=1, RB Offset=50	1	1	11.91	11.98	12.46
		RB Size=1, RB Offset=99	1	1	11.65	11.72	12.25
		RB Size=50, RB Offset=0	2	2	10.37	10.72	10.74
		RB Size=50, RB Offset=50	2	2	10.53	10.53	10.62
		RB Size=100, RB Offset=0	2	2	10.48	10.62	10.69

LTE Band 12:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					699.7MHz	707.5MHz	715.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	20.84	20.83	20.75
		RB Size=1, RB Offset=3	0	0	20.99	20.99	20.90
		RB Size=1, RB Offset=5	0	0	20.83	20.83	20.71
		RB Size=3, RB Offset=0	1	1	20.96	20.91	21.01
		RB Size=3, RB Offset=3	1	1	20.98	20.91	21.03
		RB Size=6, RB Offset=0	1	1	19.89	19.90	19.82
	16QAM	RB Size=1, RB Offset=0	1	1	19.81	19.94	19.86
		RB Size=1, RB Offset=3	1	1	20.05	20.12	20.06
		RB Size=1, RB Offset=5	1	1	19.88	19.98	19.91
		RB Size=3, RB Offset=0	2	2	20.12	19.88	20.07
		RB Size=3, RB Offset=3	2	2	20.13	19.87	20.08
		RB Size=6, RB Offset=0	2	2	18.94	18.94	18.87
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					700.5MHz	707.5MHz	714.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	20.82	20.84	20.88
		RB Size=1, RB Offset=8	0	0	20.81	20.81	20.77
		RB Size=1, RB Offset=14	0	0	20.78	20.86	20.76
		RB Size=6, RB Offset=0	1	1	19.78	19.77	19.79
		RB Size=6, RB Offset=9	1	1	19.76	19.81	19.74
		RB Size=15, RB Offset=0	1	1	19.88	19.85	19.85
	16QAM	RB Size=1, RB Offset=0	1	1	20.38	20.01	19.88
		RB Size=1, RB Offset=8	1	1	20.40	19.93	19.88
		RB Size=1, RB Offset=14	1	1	20.39	19.97	19.91
		RB Size=6, RB Offset=0	2	2	18.90	18.80	18.81
		RB Size=6, RB Offset=9	2	2	18.92	18.82	18.80
		RB Size=15, RB Offset=0	2	2	18.95	18.82	18.94

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					701.5MHz	707.5MHz	713.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	20.77	20.81	20.78
		RB Size=1, RB Offset=13	0	0	20.91	20.85	20.84
		RB Size=1, RB Offset=24	0	0	20.80	20.80	20.70
		RB Size=15, RB Offset=0	1	1	19.85	19.82	19.92
		RB Size=15, RB Offset=10	1	1	19.95	19.81	19.80
		RB Size=25, RB Offset=0	1	1	19.89	19.79	19.85
	16QAM	RB Size=1, RB Offset=0	1	1	19.68	20.11	19.79
		RB Size=1, RB Offset=13	1	1	19.79	20.13	19.95
		RB Size=1, RB Offset=24	1	1	19.74	20.05	19.88
		RB Size=15, RB Offset=0	2	2	18.95	18.81	18.95
		RB Size=15, RB Offset=10	2	2	18.99	18.81	18.86
		RB Size=25, RB Offset=0	2	2	18.98	18.83	18.93
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					704MHz	707.5MHz	711MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	20.79	20.83	20.89
		RB Size=1, RB Offset=25	0	0	20.91	21.29	21.02
		RB Size=1, RB Offset=49	0	0	20.86	20.86	20.79
		RB Size=25, RB Offset=0	1	1	19.83	19.82	19.97
		RB Size=25, RB Offset=25	1	1	19.95	19.96	19.78
		RB Size=50, RB Offset=0	1	1	19.94	19.83	19.94
	16QAM	RB Size=1, RB Offset=0	1	1	20.39	20.02	19.84
		RB Size=1, RB Offset=25	1	1	20.56	20.11	20.00
		RB Size=1, RB Offset=49	1	1	20.34	20.00	19.92
		RB Size=25, RB Offset=0	2	2	18.90	18.87	19.05
		RB Size=25, RB Offset=25	2	2	19.04	18.83	18.98
		RB Size=50, RB Offset=0	2	2	18.94	18.86	18.96

LTE Band 13:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					779.5MHz	782MHz	784.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	21.92	21.94	21.89
		RB Size=1, RB Offset=13	0	0	22.02	22.06	22.04
		RB Size=1, RB Offset=24	0	0	21.94	21.91	21.84
		RB Size=15, RB Offset=0	1	1	20.98	20.89	20.99
		RB Size=15, RB Offset=10	1	1	21.09	21.04	20.98
		RB Size=25, RB Offset=0	1	1	21.04	20.95	20.96
	16QAM	RB Size=1, RB Offset=0	1	1	20.82	21.19	21.03
		RB Size=1, RB Offset=13	1	1	20.91	21.34	21.06
		RB Size=1, RB Offset=24	1	1	20.81	21.15	20.90
		RB Size=15, RB Offset=0	2	2	20.11	19.97	20.02
		RB Size=15, RB Offset=10	2	2	20.26	20.08	20.06
		RB Size=25, RB Offset=0	2	2	20.13	20.00	20.00
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	782MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	22.01	/
		RB Size=1, RB Offset=25	0	0	/	22.11	/
		RB Size=1, RB Offset=49	0	0	/	21.98	/
		RB Size=25, RB Offset=0	1	1	/	20.94	/
		RB Size=25, RB Offset=25	1	1	/	21.05	/
		RB Size=50, RB Offset=0	1	1	/	21.08	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	21.51	/
		RB Size=1, RB Offset=25	1	1	/	21.68	/
		RB Size=1, RB Offset=49	1	1	/	21.44	/
		RB Size=25, RB Offset=0	2	2	/	20.10	/
		RB Size=25, RB Offset=25	2	2	/	20.15	/
		RB Size=50, RB Offset=0	2	2	/	20.10	/

LTE Band 14:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					790.5MHz	793MHz	795.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	22.69	22.70	22.66
		RB Size=1, RB Offset=13	0	0	22.81	22.79	22.75
		RB Size=1, RB Offset=24	0	0	22.62	22.65	22.68
		RB Size=15, RB Offset=0	1	1	21.74	21.76	21.80
		RB Size=15, RB Offset=10	1	1	21.79	21.73	21.74
		RB Size=25, RB Offset=0	1	1	21.77	21.74	21.71
	16QAM	RB Size=1, RB Offset=0	1	1	21.58	21.97	21.73
		RB Size=1, RB Offset=13	1	1	21.74	22.06	21.81
		RB Size=1, RB Offset=24	1	1	21.53	21.86	21.74
		RB Size=15, RB Offset=0	2	2	20.89	20.78	20.90
		RB Size=15, RB Offset=10	2	2	20.92	20.76	20.76
		RB Size=25, RB Offset=0	2	2	20.91	20.80	20.78
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	793MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	22.73	/
		RB Size=1, RB Offset=25	0	0	/	22.86	/
		RB Size=1, RB Offset=49	0	0	/	22.74	/
		RB Size=25, RB Offset=0	1	1	/	21.70	/
		RB Size=25, RB Offset=25	1	1	/	21.67	/
		RB Size=50, RB Offset=0	1	1	/	21.72	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	22.32	/
		RB Size=1, RB Offset=25	1	1	/	22.36	/
		RB Size=1, RB Offset=49	1	1	/	22.22	/
		RB Size=25, RB Offset=0	2	2	/	20.83	/
		RB Size=25, RB Offset=25	2	2	/	20.79	/
		RB Size=50, RB Offset=0	2	2	/	20.82	/

LTE Band 25:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1850.7MHz	1882.5MHz	1914.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	13.51	13.40	13.48
		RB Size=1, RB Offset=3	0	0	13.64	13.61	13.63
		RB Size=1, RB Offset=5	0	0	13.48	13.41	13.47
		RB Size=3, RB Offset=0	1	1	13.60	13.46	13.44
		RB Size=3, RB Offset=3	1	1	13.51	13.43	13.47
		RB Size=6, RB Offset=0	1	1	12.61	12.51	12.50
	16QAM	RB Size=1, RB Offset=0	1	1	12.46	12.49	12.38
		RB Size=1, RB Offset=3	1	1	12.56	12.70	12.53
		RB Size=1, RB Offset=5	1	1	12.50	12.52	12.42
		RB Size=3, RB Offset=0	2	2	12.70	12.38	12.42
		RB Size=3, RB Offset=3	2	2	12.68	12.38	12.42
		RB Size=6, RB Offset=0	2	2	11.59	11.53	11.46
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1851.5MHz	1882.5MHz	1913.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	13.53	13.42	13.49
		RB Size=1, RB Offset=8	0	0	13.51	13.47	13.53
		RB Size=1, RB Offset=14	0	0	13.44	13.42	13.51
		RB Size=6, RB Offset=0	1	1	12.48	12.42	12.48
		RB Size=6, RB Offset=9	1	1	12.53	12.42	12.48
		RB Size=15, RB Offset=0	1	1	12.50	12.40	12.45
	16QAM	RB Size=1, RB Offset=0	1	1	12.99	12.56	12.44
		RB Size=1, RB Offset=8	1	1	12.99	12.56	12.43
		RB Size=1, RB Offset=14	1	1	12.94	12.55	12.39
		RB Size=6, RB Offset=0	2	2	11.61	11.45	11.42
		RB Size=6, RB Offset=9	2	2	11.58	11.48	11.41
		RB Size=15, RB Offset=0	2	2	11.58	11.39	11.48

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1852.5MHz	1882.5MHz	1912.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	13.42	13.37	13.33
		RB Size=1, RB Offset=13	0	0	13.52	13.49	13.50
		RB Size=1, RB Offset=24	0	0	13.38	13.35	13.37
		RB Size=15, RB Offset=0	1	1	12.50	12.44	12.57
		RB Size=15, RB Offset=10	1	1	12.54	12.42	12.35
		RB Size=25, RB Offset=0	1	1	12.45	12.41	12.38
	16QAM	RB Size=1, RB Offset=0	1	1	12.29	12.59	12.36
		RB Size=1, RB Offset=13	1	1	12.42	12.75	12.54
		RB Size=1, RB Offset=24	1	1	12.26	12.60	12.37
		RB Size=15, RB Offset=0	2	2	11.60	11.42	11.59
		RB Size=15, RB Offset=10	2	2	11.55	11.42	11.36
		RB Size=25, RB Offset=0	2	2	11.56	11.40	11.46
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1855MHz	1882.5MHz	1910MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	13.50	13.44	13.48
		RB Size=1, RB Offset=25	0	0	13.63	13.57	13.62
		RB Size=1, RB Offset=49	0	0	13.50	13.40	13.49
		RB Size=25, RB Offset=0	1	1	12.51	12.45	12.42
		RB Size=25, RB Offset=25	1	1	12.53	12.43	12.23
		RB Size=50, RB Offset=0	1	1	12.50	12.43	12.30
	16QAM	RB Size=1, RB Offset=0	1	1	12.98	12.55	12.44
		RB Size=1, RB Offset=25	1	1	13.15	12.67	12.56
		RB Size=1, RB Offset=49	1	1	12.96	12.51	12.39
		RB Size=25, RB Offset=0	2	2	11.59	11.49	11.46
		RB Size=25, RB Offset=25	2	2	11.58	11.49	11.38
		RB Size=50, RB Offset=0	2	2	11.54	11.47	11.37

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1857.5MHz	1882.5MHz	1907.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	13.40	13.42	13.41
		RB Size=1, RB Offset=38	0	0	13.48	13.42	13.48
		RB Size=1, RB Offset=74	0	0	13.39	13.30	13.39
		RB Size=36, RB Offset=0	1	1	12.56	12.50	12.45
		RB Size=36, RB Offset=39	1	1	12.56	12.46	12.44
		RB Size=75, RB Offset=0	1	1	12.54	12.52	12.43
	16QAM	RB Size=1, RB Offset=0	1	1	12.91	12.50	12.76
		RB Size=1, RB Offset=38	1	1	13.02	12.53	12.83
		RB Size=1, RB Offset=74	1	1	12.91	12.41	12.60
		RB Size=36, RB Offset=0	2	2	11.58	11.50	11.42
		RB Size=36, RB Offset=39	2	2	11.55	11.49	11.39
		RB Size=75, RB Offset=0	2	2	11.55	11.52	11.39
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1860MHz	1882.5MHz	1905MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	13.41	13.36	13.33
		RB Size=1, RB Offset=50	0	0	13.64	13.61	13.58
		RB Size=1, RB Offset=99	0	0	13.37	13.35	13.30
		RB Size=50, RB Offset=0	1	1	12.49	12.35	12.47
		RB Size=50, RB Offset=50	1	1	12.43	12.35	12.36
		RB Size=100, RB Offset=0	1	1	12.45	12.34	12.41
	16QAM	RB Size=1, RB Offset=0	1	1	12.65	12.53	12.82
		RB Size=1, RB Offset=50	1	1	12.97	12.74	13.08
		RB Size=1, RB Offset=99	1	1	12.60	12.48	12.74
		RB Size=50, RB Offset=0	2	2	11.47	11.36	11.50
		RB Size=50, RB Offset=50	2	2	11.44	11.38	11.41
		RB Size=100, RB Offset=0	2	2	11.53	11.38	11.45

LTE Band 26:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					814.7MHz	819MHz	823.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	22.99	22.99	22.97
		RB Size=1, RB Offset=3	0	0	23.17	23.01	23.17
		RB Size=1, RB Offset=5	0	0	22.97	22.98	22.94
		RB Size=3, RB Offset=0	1	1	23.10	23.04	22.98
		RB Size=3, RB Offset=3	1	1	23.10	23.03	23.00
		RB Size=6, RB Offset=0	1	1	22.05	22.02	22.03
	16QAM	RB Size=1, RB Offset=0	1	1	22.06	22.13	21.89
		RB Size=1, RB Offset=3	1	1	22.22	22.35	22.09
		RB Size=1, RB Offset=5	1	1	22.07	22.16	21.93
		RB Size=3, RB Offset=0	2	2	22.23	22.05	21.96
		RB Size=3, RB Offset=3	2	2	22.22	22.06	21.98
		RB Size=6, RB Offset=0	2	2	21.18	21.16	20.92
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					815.5MHz	819MHz	822.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	23.13	23.07	23.07
		RB Size=1, RB Offset=8	0	0	23.08	23.05	23.09
		RB Size=1, RB Offset=14	0	0	23.06	23.09	23.03
		RB Size=6, RB Offset=0	1	1	22.06	22.01	21.99
		RB Size=6, RB Offset=9	1	1	22.06	22.04	22.00
		RB Size=15, RB Offset=0	1	1	22.12	22.11	22.02
	16QAM	RB Size=1, RB Offset=0	1	1	22.70	22.25	22.05
		RB Size=1, RB Offset=8	1	1	22.67	22.26	21.99
		RB Size=1, RB Offset=14	1	1	22.66	22.28	22.01
		RB Size=6, RB Offset=0	2	2	21.20	21.11	20.95
		RB Size=6, RB Offset=9	2	2	21.19	21.18	20.89
		RB Size=15, RB Offset=0	2	2	21.24	21.12	21.03

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					816.5MHz	819MHz	821.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	23.18	23.21	23.08
		RB Size=1, RB Offset=13	0	0	23.30	23.23	23.22
		RB Size=1, RB Offset=24	0	0	23.19	23.16	23.10
		RB Size=15, RB Offset=0	1	1	22.25	22.25	22.25
		RB Size=15, RB Offset=10	1	1	22.27	22.27	22.11
		RB Size=25, RB Offset=0	1	1	22.29	22.27	22.17
	16QAM	RB Size=1, RB Offset=0	1	1	22.11	22.52	22.10
		RB Size=1, RB Offset=13	1	1	22.13	22.60	22.24
		RB Size=1, RB Offset=24	1	1	22.08	22.48	22.16
		RB Size=15, RB Offset=0	2	2	21.35	21.27	21.22
		RB Size=15, RB Offset=10	2	2	21.37	21.29	21.10
		RB Size=25, RB Offset=0	2	2	21.36	21.33	21.17
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	819MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	23.23	/
		RB Size=1, RB Offset=25	0	0	/	23.43	/
		RB Size=1, RB Offset=49	0	0	/	23.21	/
		RB Size=25, RB Offset=0	1	1	/	22.36	/
		RB Size=25, RB Offset=25	1	1	/	22.36	/
		RB Size=50, RB Offset=0	1	1	/	22.38	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	22.44	/
		RB Size=1, RB Offset=25	1	1	/	22.58	/
		RB Size=1, RB Offset=49	1	1	/	22.34	/
		RB Size=25, RB Offset=0	2	2	/	21.42	/
		RB Size=25, RB Offset=25	2	2	/	21.42	/
		RB Size=50, RB Offset=0	2	2	/	21.40	/

BW (MHz)	Modulation	Resource Block Size & Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					831.5MHz	836.5MHz	841.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	23.21	23.24	23.18
		RB Size=1, RB Offset=38	0	0	23.28	23.24	23.25
		RB Size=1, RB Offset=74	0	0	23.19	23.18	23.13
		RB Size=36, RB Offset=0	1	1	22.29	22.29	22.25
		RB Size=36, RB Offset=39	1	1	22.27	22.27	22.18
		RB Size=75, RB Offset=0	1	1	22.29	22.28	22.25
	16QAM	RB Size=1, RB Offset=0	1	1	22.80	22.35	22.58
		RB Size=1, RB Offset=38	1	1	22.86	22.40	22.53
		RB Size=1, RB Offset=74	1	1	22.83	22.30	22.40
		RB Size=36, RB Offset=0	2	2	21.37	21.36	21.20
		RB Size=36, RB Offset=39	2	2	21.30	21.28	21.09
		RB Size=75, RB Offset=0	2	2	21.32	21.35	21.16

LTE Band 30:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2307.5MHz	2310MHz	2312.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	11.86	11.89	11.88
		RB Size=1, RB Offset=13	0	0	12.16	12.09	12.06
		RB Size=1, RB Offset=24	0	0	11.87	11.89	11.85
		RB Size=15, RB Offset=0	1	1	11.01	10.97	11.00
		RB Size=15, RB Offset=10	1	1	10.97	10.98	10.97
		RB Size=25, RB Offset=0	1	1	11.06	11.04	11.03
	16QAM	RB Size=1, RB Offset=0	1	1	11.33	11.30	11.35
		RB Size=1, RB Offset=13	1	1	11.55	11.60	11.56
		RB Size=1, RB Offset=24	1	1	11.40	11.32	11.34
		RB Size=15, RB Offset=0	2	2	10.06	10.05	10.05
		RB Size=15, RB Offset=10	2	2	10.01	10.02	10.01
		RB Size=25, RB Offset=0	2	2	10.10	10.08	10.10
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					/	2310MHz	/
10	QPSK	RB Size=1, RB Offset=0	0	0	/	11.90	/
		RB Size=1, RB Offset=25	0	0	/	12.19	/
		RB Size=1, RB Offset=49	0	0	/	11.88	/
		RB Size=25, RB Offset=0	1	1	/	11.15	/
		RB Size=25, RB Offset=25	1	1	/	10.99	/
		RB Size=50, RB Offset=0	1	1	/	10.97	/
	16QAM	RB Size=1, RB Offset=0	1	1	/	11.37	/
		RB Size=1, RB Offset=25	1	1	/	11.57	/
		RB Size=1, RB Offset=49	1	1	/	11.33	/
		RB Size=25, RB Offset=0	2	2	/	10.08	/
		RB Size=25, RB Offset=25	2	2	/	10.00	/
		RB Size=50, RB Offset=0	2	2	/	10.00	/

LTE Band 41:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2498.5MHz	2593MHz	2687.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	13.42	13.37	13.33
		RB Size=1, RB Offset=13	0	0	13.52	13.49	13.50
		RB Size=1, RB Offset=24	0	0	13.38	13.35	13.37
		RB Size=15, RB Offset=0	1	1	12.50	12.44	12.57
		RB Size=15, RB Offset=10	1	1	12.54	12.42	12.35
		RB Size=25, RB Offset=0	1	1	12.45	12.41	12.38
	16QAM	RB Size=1, RB Offset=0	1	1	12.29	12.59	12.36
		RB Size=1, RB Offset=13	1	1	12.42	12.75	12.54
		RB Size=1, RB Offset=24	1	1	12.26	12.60	12.37
		RB Size=15, RB Offset=0	2	2	11.60	11.42	11.59
		RB Size=15, RB Offset=10	2	2	11.55	11.42	11.36
		RB Size=25, RB Offset=0	2	2	11.56	11.40	11.46
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2501MHz	2593MHz	2685MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	13.50	13.44	13.48
		RB Size=1, RB Offset=25	0	0	13.63	13.57	13.62
		RB Size=1, RB Offset=49	0	0	13.50	13.40	13.49
		RB Size=25, RB Offset=0	1	1	12.51	12.45	12.42
		RB Size=25, RB Offset=25	1	1	12.53	12.43	12.23
		RB Size=50, RB Offset=0	1	1	12.50	12.43	12.30
	16QAM	RB Size=1, RB Offset=0	1	1	12.98	12.55	12.44
		RB Size=1, RB Offset=25	1	1	13.15	12.67	12.56
		RB Size=1, RB Offset=49	1	1	12.96	12.51	12.39
		RB Size=25, RB Offset=0	2	2	11.59	11.49	11.46
		RB Size=25, RB Offset=25	2	2	11.58	11.49	11.38
		RB Size=50, RB Offset=0	2	2	11.54	11.47	11.37

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2503.5MHz	2593MHz	2682.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	13.40	13.42	13.41
		RB Size=1, RB Offset=38	0	0	13.48	13.42	13.48
		RB Size=1, RB Offset=74	0	0	13.39	13.30	13.39
		RB Size=36, RB Offset=0	1	1	12.56	12.50	12.45
		RB Size=36, RB Offset=39	1	1	12.56	12.46	12.44
		RB Size=75, RB Offset=0	1	1	12.54	12.52	12.43
	16QAM	RB Size=1, RB Offset=0	1	1	12.91	12.50	12.76
		RB Size=1, RB Offset=38	1	1	13.02	12.53	12.83
		RB Size=1, RB Offset=74	1	1	12.91	12.41	12.60
		RB Size=36, RB Offset=0	2	2	11.58	11.50	11.42
		RB Size=36, RB Offset=39	2	2	11.55	11.49	11.39
		RB Size=75, RB Offset=0	2	2	11.55	11.52	11.39
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2506MHz	2593MHz	2680MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	13.41	13.36	13.33
		RB Size=1, RB Offset=50	0	0	13.64	13.61	13.58
		RB Size=1, RB Offset=99	0	0	13.37	13.35	13.30
		RB Size=50, RB Offset=0	1	1	12.49	12.35	12.47
		RB Size=50, RB Offset=50	1	1	12.43	12.35	12.36
		RB Size=100, RB Offset=0	1	1	12.45	12.34	12.41
	16QAM	RB Size=1, RB Offset=0	1	1	12.65	12.53	12.82
		RB Size=1, RB Offset=50	1	1	12.97	12.74	13.08
		RB Size=1, RB Offset=99	1	1	12.60	12.48	12.74
		RB Size=50, RB Offset=0	2	2	11.47	11.36	11.50
		RB Size=50, RB Offset=50	2	2	11.44	11.38	11.41
		RB Size=100, RB Offset=0	2	2	11.53	11.38	11.45

LTE Band 66:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1710.7MHz	1745MHz	1779.3MHz
1.4	QPSK	RB Size=1, RB Offset=0	0	0	14.59	14.64	14.75
		RB Size=1, RB Offset=3	0	0	14.76	14.85	14.95
		RB Size=1, RB Offset=5	0	0	14.61	14.63	14.80
		RB Size=3, RB Offset=0	1	1	14.62	14.72	14.70
		RB Size=3, RB Offset=3	1	1	14.66	14.67	14.56
		RB Size=6, RB Offset=0	1	1	13.72	13.72	13.86
	16QAM	RB Size=1, RB Offset=0	1	1	13.57	13.59	13.76
		RB Size=1, RB Offset=3	1	1	13.75	13.76	13.93
		RB Size=1, RB Offset=5	1	1	13.63	13.62	13.74
		RB Size=3, RB Offset=0	2	2	13.67	13.81	13.59
		RB Size=3, RB Offset=3	2	2	13.68	13.82	13.59
		RB Size=6, RB Offset=0	2	2	12.70	12.76	12.85
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1711.5MHz	1745MHz	1778.5MHz
3	QPSK	RB Size=1, RB Offset=0	0	0	14.68	14.74	14.89
		RB Size=1, RB Offset=8	0	0	14.66	14.75	14.89
		RB Size=1, RB Offset=14	0	0	14.62	14.74	14.93
		RB Size=6, RB Offset=0	1	1	13.67	13.66	13.82
		RB Size=6, RB Offset=9	1	1	13.67	13.70	13.79
		RB Size=15, RB Offset=0	1	1	13.59	13.67	13.77
	16QAM	RB Size=1, RB Offset=0	1	1	14.12	13.82	13.80
		RB Size=1, RB Offset=8	1	1	14.09	13.81	13.74
		RB Size=1, RB Offset=14	1	1	14.03	13.81	13.71
		RB Size=6, RB Offset=0	2	2	12.78	12.73	12.75
		RB Size=6, RB Offset=9	2	2	12.68	12.75	12.69
		RB Size=15, RB Offset=0	2	2	12.69	12.65	12.81

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1712.5MHz	1745MHz	1777.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	14.59	14.65	14.73
		RB Size=1, RB Offset=13	0	0	14.66	14.75	14.83
		RB Size=1, RB Offset=24	0	0	14.55	14.67	14.75
		RB Size=15, RB Offset=0	1	1	13.58	13.70	13.81
		RB Size=15, RB Offset=10	1	1	13.68	13.76	13.79
		RB Size=25, RB Offset=0	1	1	13.61	13.65	13.76
	16QAM	RB Size=1, RB Offset=0	1	1	13.50	13.85	13.74
		RB Size=1, RB Offset=13	1	1	13.54	13.97	13.80
		RB Size=1, RB Offset=24	1	1	13.40	13.86	13.68
		RB Size=15, RB Offset=0	2	2	12.66	12.71	12.82
		RB Size=15, RB Offset=10	2	2	12.74	12.77	12.82
		RB Size=25, RB Offset=0	2	2	12.67	12.70	12.79
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1715MHz	1745MHz	1775MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	14.69	14.77	14.90
		RB Size=1, RB Offset=25	0	0	14.81	14.93	15.11
		RB Size=1, RB Offset=49	0	0	14.68	14.77	15.00
		RB Size=25, RB Offset=0	1	1	13.63	13.77	13.87
		RB Size=25, RB Offset=25	1	1	13.71	13.79	13.90
		RB Size=50, RB Offset=0	1	1	13.64	13.79	13.92
	16QAM	RB Size=1, RB Offset=0	1	1	14.18	13.84	13.84
		RB Size=1, RB Offset=25	1	1	14.24	14.03	14.03
		RB Size=1, RB Offset=49	1	1	14.07	13.89	13.77
		RB Size=25, RB Offset=0	2	2	12.66	12.86	12.99
		RB Size=25, RB Offset=25	2	2	12.80	12.88	13.01
		RB Size=50, RB Offset=0	2	2	12.70	12.83	12.95

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1717.5MHz	1745MHz	1772.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	14.72	14.77	14.90
		RB Size=1, RB Offset=38	0	0	14.79	14.82	14.99
		RB Size=1, RB Offset=74	0	0	14.72	14.81	14.95
		RB Size=36, RB Offset=0	1	1	13.78	13.92	13.86
		RB Size=36, RB Offset=39	1	1	13.89	13.96	14.07
		RB Size=75, RB Offset=0	1	1	13.83	13.95	14.07
	16QAM	RB Size=1, RB Offset=0	1	1	14.19	13.87	14.07
		RB Size=1, RB Offset=38	1	1	14.16	13.95	14.24
		RB Size=1, RB Offset=74	1	1	14.09	13.84	14.01
		RB Size=36, RB Offset=0	2	2	12.78	12.90	12.96
		RB Size=36, RB Offset=39	2	2	12.82	12.91	13.02
		RB Size=75, RB Offset=0	2	2	12.82	12.96	13.04
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1720MHz	1745MHz	1770MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	14.70	14.71	14.75
		RB Size=1, RB Offset=50	0	0	14.94	15.05	15.24
		RB Size=1, RB Offset=99	0	0	14.72	14.83	14.82
		RB Size=50, RB Offset=0	1	1	13.63	13.75	13.98
		RB Size=50, RB Offset=50	1	1	13.65	13.85	13.96
		RB Size=100, RB Offset=0	1	1	13.67	13.88	13.97
	16QAM	RB Size=1, RB Offset=0	1	1	13.93	13.85	14.09
		RB Size=1, RB Offset=50	1	1	14.10	14.15	14.43
		RB Size=1, RB Offset=99	1	1	13.93	13.88	14.16
		RB Size=50, RB Offset=0	2	2	12.60	12.81	13.03
		RB Size=50, RB Offset=50	2	2	12.70	12.82	13.03
		RB Size=100, RB Offset=0	2	2	12.73	12.82	12.98

LTE Band 71:

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					665.5MHz	680.5MHz	695.5MHz
5	QPSK	RB Size=1, RB Offset=0	0	0	13.19	13.09	12.83
		RB Size=1, RB Offset=13	0	0	13.28	13.10	12.69
		RB Size=1, RB Offset=24	0	0	13.21	13.12	12.73
		RB Size=15, RB Offset=0	1	1	12.24	12.06	11.82
		RB Size=15, RB Offset=10	1	1	12.21	12.01	11.90
		RB Size=25, RB Offset=0	1	1	12.27	12.08	11.80
	16QAM	RB Size=1, RB Offset=0	1	1	11.57	12.16	11.66
		RB Size=1, RB Offset=13	1	1	11.60	12.15	11.51
		RB Size=1, RB Offset=24	1	1	11.61	12.24	11.54
		RB Size=15, RB Offset=0	2	2	11.41	11.11	10.98
		RB Size=15, RB Offset=10	2	2	11.37	11.15	11.03
		RB Size=25, RB Offset=0	2	2	11.40	11.20	10.97
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					668MHz	680.5MHz	693MHz
10	QPSK	RB Size=1, RB Offset=0	0	0	13.04	13.08	13.10
		RB Size=1, RB Offset=25	0	0	13.05	13.01	13.06
		RB Size=1, RB Offset=49	0	0	13.06	12.97	12.91
		RB Size=25, RB Offset=0	1	1	12.10	12.10	11.92
		RB Size=25, RB Offset=25	1	1	12.15	12.09	11.86
		RB Size=50, RB Offset=0	1	1	12.26	11.99	12.02
	16QAM	RB Size=1, RB Offset=0	1	1	12.43	12.45	11.54
		RB Size=1, RB Offset=25	1	1	12.42	12.38	11.61
		RB Size=1, RB Offset=49	1	1	12.40	12.35	11.39
		RB Size=25, RB Offset=0	2	2	11.34	11.27	11.16
		RB Size=25, RB Offset=25	2	2	11.29	11.27	11.12
		RB Size=50, RB Offset=0	2	2	11.30	11.33	11.15

BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					670.5MHz	680.5MHz	690.5MHz
15	QPSK	RB Size=1, RB Offset=0	0	0	13.10	13.08	13.11
		RB Size=1, RB Offset=38	0	0	12.99	13.04	13.02
		RB Size=1, RB Offset=74	0	0	13.02	12.97	12.92
		RB Size=36, RB Offset=0	1	1	12.13	12.13	12.01
		RB Size=36, RB Offset=39	1	1	12.11	12.01	11.82
		RB Size=75, RB Offset=0	1	1	12.07	12.12	11.91
	16QAM	RB Size=1, RB Offset=0	1	1	12.50	12.55	12.45
		RB Size=1, RB Offset=38	1	1	12.40	12.53	12.35
		RB Size=1, RB Offset=74	1	1	12.41	12.43	12.29
		RB Size=36, RB Offset=0	2	2	11.43	11.32	11.10
		RB Size=36, RB Offset=39	2	2	11.35	11.31	11.03
		RB Size=75, RB Offset=0	2	2	11.34	11.25	11.03
BW (MHz)	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					675MHz	683MHz	688MHz
20	QPSK	RB Size=1, RB Offset=0	0	0	13.26	13.17	13.17
		RB Size=1, RB Offset=50	0	0	13.18	13.14	13.19
		RB Size=1, RB Offset=99	0	0	13.31	13.06	13.01
		RB Size=50, RB Offset=0	1	1	12.23	12.17	12.12
		RB Size=50, RB Offset=50	1	1	12.06	12.06	11.90
		RB Size=100, RB Offset=0	1	1	12.25	12.02	12.02
	16QAM	RB Size=1, RB Offset=0	1	1	12.07	12.76	12.67
		RB Size=1, RB Offset=50	1	1	12.02	12.72	12.61
		RB Size=1, RB Offset=99	1	1	12.05	12.53	12.49
		RB Size=50, RB Offset=0	2	2	11.32	11.45	11.18
		RB Size=50, RB Offset=50	2	2	11.33	11.30	11.09
		RB Size=100, RB Offset=0	2	2	11.27	11.15	11.21

Note:

1. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
2. The CMW500 Wideband Radio Communication tester is used for LTE output power measurements and SAR testing. Closed loop power control is used to keep the radio transmitters the max output power during the test.

Bluetooth:

Mode	Channel frequency (MHz)	RF Output Power (dBm)
BDR(GFSK)	2402	3.29
	2441	3.83
	2480	3.84
EDR($\pi/4$ -DQPSK)	2402	2.56
	2441	2.93
	2480	3.59
EDR(8-DPSK)	2402	2.60
	2441	3.12
	2480	3.77
Bluetooth LE_1M	2402	-3.60
	2440	-2.16
	2480	-3.10
Bluetooth LE_2M	2402	-3.69
	2440	-2.16
	2480	-3.28

WLAN 2.4G:

Mode	Channel frequency (MHz)	Data Rate	RF Output Power (dBm)
802.11b	2412	1Mbps	12.85
	2437		12.25
	2462		12.4
802.11g	2412	6Mbps	10.23
	2437		10.57
	2462		9.97
802.11n HT20	2412	MCS0	9.93
	2437		10.45
	2462		10.16
802.11n HT40	2422	MCS0	7.82
	2437		7.68
	2452		7.94

WLAN (5.2G):

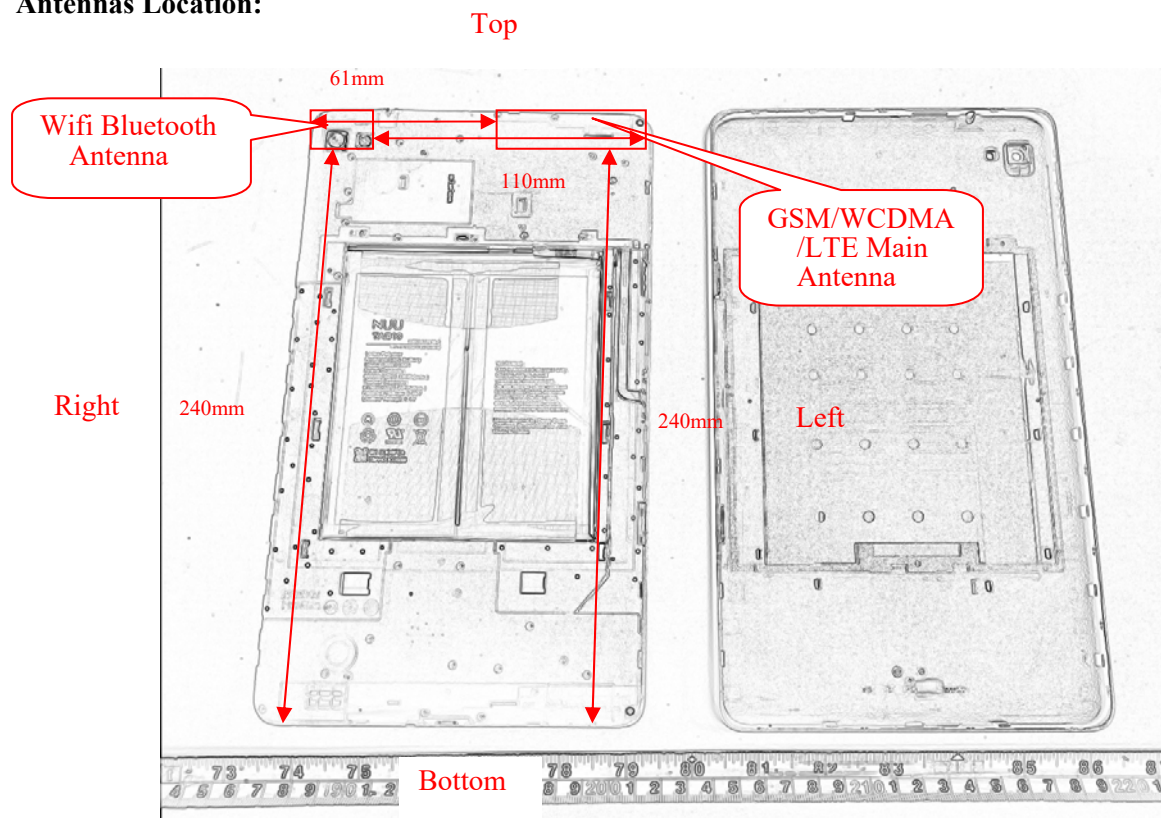
Mode	Channel frequency(MHz)	Data Rate	RF Output Power(dBm)
802.11a	5180	6Mbps	5.51
	5200		5.33
	5240		5.20
802.11n HT20	5180	MCS0	5.36
	5200		5.09
	5240		5.21
802.11n HT40	5190	MCS0	5.02
	5230		5.32
802.11 ac20	5180	MCS0	5.24
	5200		5.01
	5240		5.12
802.11 ac40	5190	MCS0	5.27
	5230		5.35
802.11 ac80	5210	MCS0	5.17

WLAN (5.8G):

Mode	Channel frequency(MHz)	Data Rate	RF Output Power (dBm)
802.11a	5745	6Mbps	3.53
	5785		1.09
	5825		1.60
802.11n HT20	5745	MCS0	3.40
	5785		2.33
	5825		2.40
802.11n HT40	5755	MCS0	3.09
	5795		2.21
802.11 ac20	5745	MCS0	3.44
	5785		2.30
	5825		2.42
802.11 ac40	5755	MCS0	3.20
	5795		2.22
802.11 ac80	5775	MCS0	2.69

Standalone SAR test exclusion considerations

Antennas Location:



Antenna Distance To Edge

Antenna Distance To Edge(mm)					
Antenna	Back	Left	Right	Top	Bottom
WLAN/Bluetooth Antenna	< 5	110	< 5	< 5	240
WWAN(GSM/WCDMA/LTE)	< 5	< 5	61	< 5	240

Standalone SAR test exclusion considerations

- a) For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{GHz}}}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

- f_{GHz} is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

- b) For 100 MHz to 6 GHz and *test separation distances* > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

- 1) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f_{\text{MHz}}/150)]\}$ mW, for 100 MHz to 1500 MHz
- 2) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}$ mW, for > 1500 MHz and ≤ 6 GHz

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	mW
150	387	397	407	417	427	437	447	457	467	477	487	497	507	517	527	
300	274	294	314	334	354	374	394	414	434	454	474	494	514	534	554	
450	224	254	284	314	344	374	404	434	464	494	524	554	584	614	644	
835	164	220	275	331	387	442	498	554	609	665	721	776	832	888	943	
900	158	218	278	338	398	458	518	578	638	698	758	818	878	938	998	
1500	122	222	322	422	522	622	722	822	922	1022	1122	1222	1322	1422	1522	
1900	109	209	309	409	509	609	709	809	909	1009	1109	1209	1309	1409	1509	
2450	96	196	296	396	496	596	696	796	896	996	1096	1196	1296	1396	1496	
3600	79	179	279	379	479	579	679	779	879	979	1079	1179	1279	1379	1479	
5200	66	166	266	366	466	566	666	766	866	966	1066	1166	1266	1366	1466	
5400	65	165	265	365	465	565	665	765	865	965	1065	1165	1265	1365	1465	
5800	62	162	262	362	462	562	662	762	862	962	1062	1162	1262	1362	1462	

Position	Distance (mm)	Mode	Frequency (MHz)	Max Pavg (dBm)	Max Pavg (mW)	Test exclusion Threshold (mW)	SAR test Exclusion
Top/Back/Left	<5	GSM 850	836.6	33.0	1995	16	No
		PCS 1900	1880	27.5	562	11	No
		WCDMA Band 2	1880	23.0	200	11	No
		WCDMA Band 4	1732.6	24.5	282	11	No
		WCDMA Band 5	836.6	24.0	251	16	No
		LTE Band 7	2560	23.5	224	10	No
		LTE Band 12	707.5	24.5	282	16	No
		LTE Band 13	782	24.5	282	16	No
		LTE Band 14	793	24.0	251	16	No
		LTE Band 25	1882.5	24.0	251	11	No
		LTE Band 26	836.5	24.5	282	16	No
		LTE Band 30	2310	23.5	224	10	No
		LTE Band 41	2593	24.0	251	10	No
		LTE Band 66	1745	24.5	282	11	No
		LTE Band 71	683	23.5	224	16	No

Position	Distance (mm)	Mode	Frequency (MHz)	Max Pavg (dBm)	Max Pavg (mW)	Test exclusion Threshold (mW)	SAR test Exclusion
Right	>60	GSM 850	836.6	33.0	1995	220	No
		PCS 1900	1880	27.5	562	209	No
		WCDMA Band 2	1880	23.0	200	209	Yes
		WCDMA Band 4	1732.6	24.5	282	209	No
		WCDMA Band 5	836.6	24.0	251	220	No
		LTE Band 7	2560	23.5	224	196	No
		LTE Band 12	707.5	24.5	282	220	No
		LTE Band 13	782	24.5	282	220	No
		LTE Band 14	793	24.0	251	220	No
		LTE Band 25	1882.5	24.0	251	209	No
		LTE Band 26	836.5	24.5	282	220	No
		LTE Band 30	2310	23.5	224	196	No
		LTE Band 41	2593	24.0	251	196	No
		LTE Band 66	1745	24.5	282	209	No
		LTE Band 71	683	23.5	224	220	No

Position	Distance (mm)	Mode	Frequency (MHz)	Max Pavg (dBm)	Max Pavg (mW)	Test exclusion Threshold (mW)	SAR test Exclusion
Bottom	>240	GSM 850	836.6	33.0	1995	1222	No
		PCS 1900	1880	27.5	562	2009	Yes
		WCDMA Band 2	1880	23.0	200	2009	Yes
		WCDMA Band 4	1732.6	24.5	282	2009	Yes
		WCDMA Band 5	836.6	24.0	251	1222	Yes
		LTE Band 7	2560	23.5	224	1996	Yes
		LTE Band 12	707.5	24.5	282	1222	Yes
		LTE Band 13	782	24.5	282	1222	Yes
		LTE Band 14	793	24.0	251	1222	Yes
		LTE Band 25	1882.5	24.0	251	2009	Yes
		LTE Band 26	836.5	24.5	282	1222	Yes
		LTE Band 30	2310	23.5	224	1996	Yes
		LTE Band 41	2593	24.0	251	1996	Yes
		LTE Band 66	1745	24.5	282	2009	Yes
		LTE Band 71	683	23.5	224	1222	Yes

Position	Distance (mm)	Mode	Frequency (MHz)	Max Pavg (dBm)	Max Pavg (mW)	Test exclusion Threshold (mW)	SAR test Exclusion
Top/Back/Right	<5	WLAN 2.4G	2412	18.0	63	10	No
		WLAN 5.2G	5180	12.0	16	7	No
		WLAN 5.8G	5745	10.0	10	6	No
		Bluetooth BDR/EDR	2402	4.0	3	10	Yes
Left	>110	WLAN 2.4G	2412	18.0	63	696	Yes
		WLAN 5.2G	5180	12.0	16	666	Yes
		WLAN 5.8G	5745	10.0	10	662	Yes
		Bluetooth BDR/EDR	2402	4.0	3	696	Yes
Bottom	>240	WLAN 2.4G	2412	18.0	63	1996	Yes
		WLAN 5.2G	5180	12.0	16	1966	Yes
		WLAN 5.8G	5745	10.0	10	1962	Yes
		Bluetooth BDR/EDR	2402	4.0	3	1996	Yes

NOTE:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.
5. EUT photos are secret

Standalone SAR estimation:

Mode	Frequency (MHz)	Pavg (dBm)	Pavg (mW)	Distance (mm)	Estimated 1-g (W/kg)
Bluetooth Body	2480	4	2.51	0	0.10

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot \left[\frac{f(\text{GHz})}{x} \right]$$

W/kg for test separation distances ≤ 50 mm;

where $x = 7.5$ for 1-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

SAR MEASUREMENT RESULTS

This page summarizes the results of the performed dosimetric evaluation.

SAR Test Data

Environmental Conditions

Temperature:	22.5-23.2 °C	22.1-23.8 °C	22.1-23.9 °C	22.1-23.9 °C	22.1-23.9 °C	22.1-23.9 °C
Relative Humidity:	41-55%	42-56%	41-53 %	41-53 %	41-53 %	41-53 %
ATM Pressure:	101.3 kPa	101.3 kPa	101.3 kPa	101.3 kPa	101.3 kPa	101.3 kPa
Test Date:	2021/08/27	2021/09/01	2021/09/02	2021/09/04	2021/09/05	2021/09/06

Testing was performed by Afflict Gu and Sid Luo.

GSM 850 :

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
				Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	On	29.54	30.0	1.112	0.268	0.30	1#
	848.8	GPRS	/	/	/	/	/	/	/
Body Left (0mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	On	29.54	30.0	1.112	0.164	0.18	2#
	848.8	GPRS	/	/	/	/	/	/	/
Body Right (0mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	Off	32.57	33.0	1.104	0.038	0.04	3#
	848.8	GPRS	/	/	/	/	/	/	/
Body Top (0mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	On	29.54	30.0	1.112	0.174	0.19	4#
	848.8	GPRS	/	/	/	/	/	/	/
Body Bottom (0mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	Off	32.57	33.0	1.104	0.005	0.01	5#
	848.8	GPRS	/	/	/	/	/	/	/
Body Back (19mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	Off	32.57	33.0	1.104	0.385	0.43	6#
	848.8	GPRS	/	/	/	/	/	/	/
Body Left (4mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	Off	32.57	33.0	1.104	0.143	0.16	7#
	848.8	GPRS	/	/	/	/	/	/	/
Body Top (19mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	Off	32.57	33.0	1.104	0.030	0.03	8#
	848.8	GPRS	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is $> 0.5\text{ dB}$, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 3DL+2UL is the worst case.

PCS 1900 :

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
				Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	1850.2	GPRS	On	20.19	20.5	1.074	1.080	1.16	9#
	1880	GPRS	On	19.88	20.5	1.153	0.829	0.96	10#
	1909.8	GPRS	On	20.09	20.5	1.099	1.140	1.25	11#
Body Left (0mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	On	19.88	20.5	1.153	0.362	0.42	12#
	1909.8	GPRS	/	/	/	/	/	/	/
Body Right (0mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	Off	27.17	27.5	1.079	0.005	0.01	13#
	1909.8	GPRS	/	/	/	/	/	/	/
Body Top (0mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	On	19.88	20.5	1.153	0.336	0.39	14#
	1909.8	GPRS	/	/	/	/	/	/	/
Body Back (19mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	Off	27.17	27.5	1.079	0.255	0.28	15#
	1909.8	GPRS	/	/	/	/	/	/	/
Body Left (4mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	Off	27.17	27.5	1.079	0.455	0.49	16#
	1909.8	GPRS	/	/	/	/	/	/	/
Body Top (19mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880	GPRS	Off	27.17	27.5	1.079	0.096	0.10	17#
	1909.8	GPRS	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is $> 0.5\text{ dB}$, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 3DL+2UL is the worst case.

WCDMA Band 2 :

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
				Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	On	12.92	13.0	1.019	0.704	0.72	18#
	1907.6	RMC	/	/	/	/	/	/	/
Body Left (0mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	On	12.92	13.0	1.019	0.265	0.27	19#
	1907.6	RMC	/	/	/	/	/	/	/
Body Top (0mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	On	12.92	13.0	1.019	0.311	0.32	20#
	1907.6	RMC	/	/	/	/	/	/	/
Body Back (19mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	Off	22.93	23.0	1.016	0.101	0.10	21#
	1907.6	RMC	/	/	/	/	/	/	/
Body Left (4mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	Off	22.93	23.0	1.016	0.106	0.11	22#
	1907.6	RMC	/	/	/	/	/	/	/
Body Top (19mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880	RMC	Off	22.93	23.0	1.016	0.013	0.01	23#
	1907.6	RMC	/	/	/	/	/	/	/

WCDMA Band 4 :

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
				Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	1712.4	RMC	On	15.12	15.5	1.091	1.030	1.12	24#
	1732.6	RMC	On	15.04	15.5	1.112	1.050	1.17	25#
	1752.6	RMC	On	15.15	15.5	1.084	1.030	1.12	26#
Body Left (0mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	On	15.04	15.5	1.112	0.328	0.36	27#
	1752.6	RMC	/	/	/	/	/	/	/
Body Right (0mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	Off	24.06	24.5	1.107	0.032	0.04	28#
	1752.6	RMC	/	/	/	/	/	/	/
Body Top (0mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	On	15.04	15.5	1.112	0.023	0.03	29#
	1752.6	RMC	/	/	/	/	/	/	/
Body Back (19mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	Off	24.06	24.5	1.107	0.058	0.06	30#
	1752.6	RMC	/	/	/	/	/	/	/
Body Left (4mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	Off	24.06	24.5	1.107	0.097	0.11	31#
	1752.6	RMC	/	/	/	/	/	/	/
Body Top (19mm)	1712.4	RMC	/	/	/	/	/	/	/
	1732.6	RMC	Off	24.06	24.5	1.107	0.008	0.01	32#
	1752.6	RMC	/	/	/	/	/	/	/

WCDMA Band 5 :

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
				Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	On	22.94	23.0	1.014	0.650	0.66	33#
	846.6	RMC	/	/	/	/	/	/	/
Body Left (0mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	On	22.94	23.0	1.014	0.317	0.32	34#
	846.6	RMC	/	/	/	/	/	/	/
Body Right (0mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	Off	23.92	24.0	1.019	0.043	0.04	35#
	846.6	RMC	/	/	/	/	/	/	/
Body Top (0mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	On	22.94	23.0	1.014	0.544	0.55	36#
	846.6	RMC	/	/	/	/	/	/	/
Body Back (19mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	Off	23.92	24.0	1.019	0.116	0.12	37#
	846.6	RMC	/	/	/	/	/	/	/
Body Left (4mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	Off	23.92	24.0	1.019	0.120	0.12	38#
	846.6	RMC	/	/	/	/	/	/	/
Body Top (19mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	Off	23.92	24.0	1.019	0.084	0.09	39#
	846.6	RMC	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.
4. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than $\frac{1}{4}$ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is $< 75\%$ of SAR limit.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

LTE Band 7 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	2510	20	1RB	On	12.96	13.5	1.132	1.120	1.27	40#
	2535	20	1RB	On	12.96	13.5	1.125	1.130	1.28	41#
	2560	20	1RB	On	13.04	13.5	1.112	0.875	0.97	42#
	2510	20	50%RB	On	11.52	12.0	1.117	1.110	1.24	43#
	2535	20	50%RB	On	11.68	12.0	1.076	1.040	1.12	44#
	2560	20	50%RB	On	11.81	12.0	1.045	0.837	0.87	45#
	2510	20	100%RB	On	11.43	12.0	1.140	1.060	1.21	46#
	2535	20	100%RB	On	11.65	12.0	1.084	0.985	1.07	47#
	2560	20	100%RB	On	11.76	12.0	1.057	0.726	0.77	48#
Body Left (0mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	On	12.96	13.5	1.125	0.182	0.21	49#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	On	11.68	12.0	1.076	0.155	0.17	50#
Body Right (0mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	Off	22.78	23.5	1.180	0.002	0.00	51#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	Off	21.61	23.5	1.545	0.003	0.00	52#
Body Top (0mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	On	12.96	13.5	1.125	0.232	0.26	53#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	On	11.68	12.0	1.076	0.181	0.19	54#
Body Back (19mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	Off	22.78	23.5	1.180	0.078	0.09	55#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	Off	21.61	23.5	1.545	0.064	0.10	56#
Body Left (4mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	Off	22.78	23.5	1.180	0.084	0.10	57#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	Off	21.61	23.5	1.545	0.070	0.11	58#
Body Top (19mm)	2510	20	1RB	/	/	/	/	/	/	/
	2535	20	1RB	Off	22.78	23.5	1.180	0.008	0.01	59#
	2560	20	1RB	/	/	/	/	/	/	/
	2535	20	50%RB	Off	21.61	23.5	1.545	0.008	0.01	60#

LTE Band 12 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	On	21.29	21.5	1.050	0.758	0.80	61#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	On	19.96	21.5	1.426	0.69	0.98	62#
Body Left (0mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	On	20.99	21.5	1.125	0.057	0.06	63#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	On	19.84	21.5	1.466	0.060	0.09	64#
Body Right (0mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	Off	23.91	24.5	1.146	0.029	0.03	65#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	Off	22.81	24.5	1.476	0.024	0.04	66#
Body Top (0mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	On	20.99	21.5	1.125	0.274	0.31	67#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	On	19.84	21.5	1.466	0.260	0.38	68#
Body Back (19mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	Off	23.91	24.5	1.146	0.127	0.15	69#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	Off	22.81	24.5	1.476	0.102	0.15	70#
Body Left (4mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	Off	23.91	24.5	1.146	0.088	0.10	71#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	Off	22.81	24.5	1.476	0.071	0.10	72#
Body Top (19mm)	704	10	1RB	/	/	/	/	/	/	/
	707.5	10	1RB	Off	23.91	24.5	1.146	0.102	0.12	73#
	711	10	1RB	/	/	/	/	/	/	/
	707.5	10	50%RB	Off	22.81	24.5	1.476	0.081	0.12	74#

LTE Band 13 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	On	22.11	22.5	1.094	0.776	0.85	75#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	On	21.05	22.5	1.396	0.775	1.08	76#
	782	10	100%RB	On	21.08	22.5	1.387	0.773	1.07	77#
Body Left (0mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	On	22.11	22.5	1.094	0.253	0.28	78#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	On	21.05	22.5	1.396	0.243	0.34	79#
Body Right (0mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	Off	24.08	24.5	1.102	0.084	0.09	80#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	Off	23.06	24.5	1.393	0.073	0.10	81#
Body Top (0mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	On	22.11	22.5	1.094	0.392	0.43	82#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	On	21.05	22.5	1.396	0.378	0.53	83#
Body Back (19mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	Off	24.08	24.5	1.102	0.215	0.24	84#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	Off	23.06	24.5	1.393	0.172	0.24	85#
Body Left (4mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	Off	24.08	24.5	1.102	0.250	0.28	86#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	Off	23.06	24.5	1.393	0.197	0.27	87#
Body Top (19mm)	/	/	1RB	/	/	/	/	/	/	/
	782	10	1RB	Off	24.08	24.5	1.102	0.068	0.07	88#
	/	/	1RB	/	/	/	/	/	/	/
	782	10	50%RB	Off	23.06	24.5	1.393	0.068	0.09	89#

LTE Band 14 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	On	22.86	23.0	1.033	0.833	0.86	90#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	On	21.70	23.0	1.349	0.825	1.11	91#
	793	10	100%RB	On	21.72	23.0	1.343	0.822	1.10	92#
Body Left (0mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	On	22.86	23.0	1.033	0.589	0.61	93#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	On	21.70	23.0	1.349	0.477	0.64	94#
Body Right (0mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	Off	23.80	24.0	1.047	0.058	0.06	95#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	Off	22.68	24.0	1.355	0.077	0.10	96#
Body Top (0mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	On	22.86	23.0	1.033	0.454	0.47	97#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	On	21.70	23.0	1.349	0.411	0.55	98#
Body Back (19mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	Off	23.80	24.0	1.047	0.241	0.25	99#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	Off	22.68	24.0	1.355	0.189	0.26	100#
Body Left (4mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	Off	23.80	24.0	1.047	0.292	0.31	101#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	Off	22.68	24.0	1.355	0.232	0.31	102#
Body Top (19mm)	/	/	1RB	/	/	/	/	/	/	/
	793	10	1RB	Off	23.80	24.0	1.047	0.168	0.18	103#
	/	/	1RB	/	/	/	/	/	/	/
	793	10	50%RB	Off	22.68	24.0	1.355	0.128	0.17	104#

LTE Band 25 & LTE Band 2 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	1860	20	1RB	On	13.64	14.0	1.086	0.587	0.64	105#
	1882.5	20	1RB	On	13.61	14.0	1.094	0.849	0.93	106#
	1905	20	1RB	On	13.58	14.0	1.102	0.573	0.63	107#
	1880	20	50%RB	On	12.35	14.0	1.462	0.622	0.91	108#
	1880	20	100%RB	On	12.34	14.0	1.466	0.634	0.93	109#
Body Left (0mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	On	13.61	14.0	1.094	0.087	0.10	110#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	On	12.35	14.0	1.462	0.073	0.11	111#
Body Right (0mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	Off	23.55	24.0	1.109	0.005	0.01	112#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	Off	22.28	24.0	1.486	0.005	0.01	113#
Body Top (0mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	On	13.61	14.0	1.094	0.024	0.03	114#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	On	12.35	14.0	1.462	0.024	0.04	115#
Body Back (19mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	Off	23.55	24.0	1.109	0.085	0.09	116#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	Off	22.28	24.0	1.486	0.063	0.09	117#
Body Left (4mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	Off	23.55	24.0	1.109	0.114	0.13	118#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	Off	22.28	24.0	1.486	0.090	0.13	119#
Body Top (19mm)	1860	20	1RB	/	/	/	/	/	/	/
	1882.5	20	1RB	Off	23.55	24.0	1.109	0.115	0.13	120#
	1905	20	1RB	/	/	/	/	/	/	/
	1880	20	50%RB	Off	22.28	24.0	1.486	0.087	0.13	121#

LTE Band 26 & LTE Band 5 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	821.5	15	1RB	On	23.28	23.5	1.052	0.804	0.85	122#
	831.5	15	1RB	On	23.24	23.5	1.062	0.839	0.89	123#
	841.5	15	1RB	On	23.25	23.5	1.059	0.735	0.78	124#
	831.5	15	50%RB	On	22.29	23.5	1.321	0.749	0.99	125#
	821.5	15	50%RB	On	22.29	23.5	1.321	0.787	1.04	126#
	831.5	15	50%RB	On	22.25	23.5	1.334	0.732	0.98	127#
	841.5	15	100%RB	On	22.29	23.5	1.321	0.753	0.99	128#
	821.5	15	100%RB	On	22.28	23.5	1.324	0.791	1.05	129#
	831.5	15	100%RB	On	22.25	23.5	1.334	0.718	0.96	130#
Body Left (0mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	On	23.24	23.5	1.062	0.213	0.23	131#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	On	22.29	23.5	1.321	0.288	0.38	132#
Body Right (0mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	Off	24.25	24.5	1.059	0.072	0.08	133#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	Off	23.34	24.5	1.306	0.043	0.06	134#
Body Top (0mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	On	23.24	23.5	1.062	0.491	0.52	135#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	On	22.29	23.5	1.321	0.461	0.61	136#
Body Back (19mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	Off	24.25	24.5	1.059	0.173	0.18	137#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	Off	23.34	24.5	1.306	0.140	0.18	138#
Body Left (4mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	Off	24.25	24.5	1.059	0.192	0.20	139#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	Off	23.34	24.5	1.306	0.154	0.20	140#
Body Top (19mm)	821.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	1RB	Off	24.25	24.5	1.059	0.152	0.16	141#
	841.5	15	1RB	/	/	/	/	/	/	/
	831.5	15	50%RB	Off	23.34	24.5	1.306	0.132	0.17	142#

LTE Band 30 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	On	12.19	12.5	1.074	0.747	0.80	143#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	On	11.15	11.5	1.084	0.727	0.79	144#
Body Left (0mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	On	12.19	12.5	1.074	0.065	0.07	145#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	On	11.15	11.5	1.084	0.045	0.05	146#
Body Right (0mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	Off	12.19	12.5	1.074	0.005	0.01	147#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	Off	11.15	11.5	1.084	0.004	0.00	148#
Body Top (0mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	On	12.19	12.5	1.074	0.147	0.16	149#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	On	11.15	11.5	1.084	0.120	0.13	150#
Body Back (19mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	Off	23.08	23.5	1.102	0.028	0.03	151#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	Off	22.08	23.5	1.387	0.022	0.03	152#
Body Left (4mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	Off	23.08	23.5	1.102	0.041	0.05	153#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	Off	22.08	23.5	1.387	0.027	0.04	154#
Body Top (19mm)	/	/	1RB	/	/	/	/	/	/	/
	2310	10	1RB	Off	23.08	23.5	1.102	0.016	0.02	155#
	/	/	1RB	/	/	/	/	/	/	/
	2310	10	50%RB	Off	22.08	23.5	1.387	0.007	0.01	156#

LTE Band 41 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	On	13.61	14.0	1.094	0.473	0.52	157#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	On	12.35	14.0	1.462	0.464	0.68	158#
Body Left (0mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	On	13.61	14.0	1.094	0.006	0.01	159#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	On	12.35	14.0	1.462	0.006	0.01	160#
Body Right (0mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	Off	23.69	24.0	1.074	0.006	0.01	161#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	Off	22.43	24.0	1.435	0.002	0.00	162#
Body Top (0mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	On	13.61	14.0	1.094	0.091	0.10	163#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	On	12.35	14.0	1.462	0.090	0.13	164#
Body Back (19mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	Off	23.69	24.0	1.074	0.018	0.02	165#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	Off	22.43	24.0	1.435	0.013	0.02	166#
Body Left (4mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	Off	23.69	24.0	1.074	0.022	0.02	167#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	Off	22.43	24.0	1.435	0.017	0.02	168#
Body Top (19mm)	2506	20	1RB	/	/	/	/	/	/	/
	2593	20	1RB	Off	23.69	24.0	1.074	0.016	0.02	169#
	2680	20	1RB	/	/	/	/	/	/	/
	2593	20	50%RB	Off	22.43	24.0	1.435	0.010	0.01	170#

LTE Band 66 & LTE Band 4 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	1720	20	1RB	On	14.94	15.5	1.138	0.777	0.88	171#
	1745	20	1RB	On	15.05	15.5	1.109	1.080	1.20	172#
	1770	20	1RB	On	15.24	15.5	1.062	1.14	1.21	173#
	1745	20	50%RB	On	13.85	14.0	1.035	0.762	0.79	174#
	1745	20	100%RB	On	13.78	14.0	1.028	0.759	0.78	175#
Body Left (0mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	On	15.05	15.5	1.109	0.041	0.05	176#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	On	13.75	15.5	1.496	0.039	0.06	177#
Body Right (0mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	Off	24.12	24.5	1.091	0.006	0.01	178#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	Off	22.79	24.5	1.483	0.005	0.01	179#
Body Top (0mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	On	15.05	15.5	1.109	0.195	0.22	180#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	On	13.75	15.5	1.496	0.171	0.26	181#
Body Back (19mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	Off	24.12	24.5	1.091	0.051	0.06	182#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	Off	22.79	24.5	1.483	0.041	0.06	183#
Body Left (4mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	Off	24.12	24.5	1.091	0.140	0.15	184#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	Off	22.79	24.5	1.483	0.115	0.17	185#
Body Top (19mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	Off	24.12	24.5	1.091	0.063	0.07	186#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	Off	22.79	24.5	1.483	0.059	0.09	187#

LTE Band 71 :

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	SENSOR	Max Power (dBm)		Scaled Factor	1g SAR (W/kg)		Plot
					Meas.	Rated		Meas.	Scaled	
Body Back (0mm)	673	20	1RB	/	/	/	/	/	/	/
	680.5	20	1RB	On	13.17	13.5	1.079	0.652	0.70	188#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	On	12.17	13.5	1.358	0.585	0.79	189#
Body Left (0mm)	673	20	1RB	/	/	/	/	/	/	/
	680.5	20	1RB	On	13.17	13.5	1.079	0.185	0.20	190#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	On	12.17	13.5	1.358	0.140	0.19	191#
Body Right (0mm)	673	20	1RB		/	/	/	/	/	/
	680.5	20	1RB	Off	23.14	23.5	1.086	0.026	0.03	192#
	688	20	1RB		/	/	/	/	/	/
	680.5	20	50%RB	Off	22.13	23.5	1.371	0.022	0.03	193#
Body Top (0mm)	673	20	1RB		/	/	/	/	/	/
	680.5	20	1RB	On	13.17	13.5	1.079	0.282	0.30	194#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	On	12.17	13.5	1.358	0.271	0.37	195#
Body Back (19mm)	673	20	1RB	/	/	/	/	/	/	/
	680.5	20	1RB	Off	23.14	23.5	1.086	0.038	0.04	196#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	Off	22.13	23.5	1.371	0.035	0.05	197#
Body Left (4mm)	673	20	1RB	/	/	/	/	/	/	/
	680.5	20	1RB	Off	23.14	23.5	1.086	0.025	0.03	198#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	Off	22.13	23.5	1.371	0.018	0.02	199#
Body Top (19mm)	673	20	1RB	/	/	/	/	/	/	/
	680.5	20	1RB	Off	23.14	23.5	1.086	0.028	0.03	200#
	688	20	1RB	/	/	/	/	/	/	/
	680.5	20	50%RB	Off	22.13	23.5	1.371	0.021	0.03	201#

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05-SAR for higher order modulation is required only when the highest maximum output power for the configuration in the higher order modulation is $> 0.5\text{ dB}$ higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is $> 1.45\text{ W/kg}$
4. KDB941225D05-For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is $< 1.45\text{ W/kg}$, tests for the remaining required test channels are optional.
5. KDB941225D05- 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 $\leq 0.8\text{ W/kg}$.
6. KDB941225D05- 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 among RB offset the upper edge, middle and lower edge of each required test channel.
7. KDB941225D05- other channel bandwidths SAR test is required when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> 0.5\text{ dB}$ 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 $> 1.45\text{ W/kg}$.
8. Worst case SAR for 50% RB allocation is selected to be tested.
9. KDB 648474 D04-When the peak SAR located in regions that probe is unable to access, a flat phantom is used for SAR measurement.
10. For modes that peak SAR is too low to evaluate, a SAR value 0 W/kg is considered as their Scaled SAR.

WLAN 2.4G:

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body Back (0mm)	2412	802.11b	On	12.85	13.0	1.035	0.267	0.28	202#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (0mm)	2412	802.11b	On	12.85	13.0	1.035	0.163	0.17	203#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (0mm)	2412	802.11b	On	12.85	13.0	1.035	0.084	0.09	204#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Back (9mm)	2412	802.11b	Off	17.45	18.0	1.135	0.187	0.21	205#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (1mm)	2412	802.11b	Off	17.45	18.0	1.135	0.429	0.49	206#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (14mm)	2412	802.11b	Off	17.45	18.0	1.135	0.054	0.06	207#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. When the highest *reported* SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leq 1.2\text{ W/kg}$, OFDM SAR is not required.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

WLAN 5.2G:

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body Back (0mm)	2412	802.11b	On	5.51	6	1.119	0.218	0.24	208#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (0mm)	2412	802.11b	On	5.51	6	1.119	0.049	0.06	209#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (0mm)	2412	802.11b	On	5.51	6	1.119	0.485	0.54	210#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Back (9mm)	2412	802.11b	Off	11.45	12.0	1.135	0.210	0.24	211#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (1mm)	2412	802.11b	Off	11.45	12.0	1.135	0.096	0.11	212#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (14mm)	2412	802.11b	Off	11.45	12.0	1.135	0.162	0.18	213#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/

WLAN 5.8G:

EUT Position	Frequency (MHz)	Test Mode	SENSOR	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body Back (0mm)	2412	802.11b	On	3.53	4.0	1.114	0.218	0.24	214#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (0mm)	2412	802.11b	On	3.53	4.0	1.114	0.075	0.08	215#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (0mm)	2412	802.11b	On	3.53	4.0	1.114	0.372	0.41	216#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Back (9mm)	2412	802.11b	Off	9.48	10.0	1.127	0.177	0.20	217#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Right (1mm)	2412	802.11b	Off	9.48	10.0	1.127	0.105	0.12	218#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (14mm)	2412	802.11b	Off	9.48	10.0	1.127	0.136	0.15	219#
	2437	802.11b	/	/	/	/	/	/	/
	2462	802.11b	/	/	/	/	/	/	/

Note:

1. When the SAR value is less than half of the limit, testing for other channels are optional.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance

SAR Measurement Variability

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz v01. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Note: The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

The Highest Measured SAR Configuration in Each Frequency Band

Body

SAR probe calibration point	Frequency Band	Freq.(MHz)	EUT Position	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio
				Original	Repeated	
1900 MHz (1850-1910MHz)	PCS 1900	1909.8	Body Back	1.140	1.120	1.02
1800 MHz (1710-1755MHz)	WCDMA Band 4	1732.6	Body Back	1.05	1.03	1.02
2545 MHz (2500-2570MHz)	LTE Band 7	2535	Body Back	1.13	1.11	1.02
750 MHz (650-850MHz)	LTE Band 14	793	Body Back	0.833	0.821	1.01
1900 MHz (1850-1910MHz)	LTE Band 25	1882.5	Body Back	0.849	0.835	1.02
750 MHz (650-850MHz)	LTE Band 26	831.5	Body Back	0.839	0.821	1.02
1800 MHz (1710-1755MHz)	LTE Band 66	1770	Body Back	1.14	1.13	1.01

Note:

1. Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20 .
2. The measured SAR results **do not** have to be scaled to the maximum tune-up tolerance to determine if repeated measurements are required.
3. 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..

SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

Simultaneous Transmission:

Description of Simultaneous Transmit Capabilities		
Transmitter Combination	Simultaneous?	Hotspot?
WWAN(GSM/WCDMA) + Bluetooth	√	×
WWAN(GSM/WCDMA) + WLAN2.4G	√	√
WWAN(GSM/WCDMA) + WLAN 5G	√	√

Simultaneous and Hotspot SAR test exclusion considerations:

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
GPRS 850 +Bluetooth	Body Back	0.43	0.10	0.53
	Body Left	0.18	0.10	0.28
	Body Right	0.03	0.10	0.13
	Body Top	0.19	0.10	0.29
	Body Bottom	0.01	0.10	0.11
GPRS 1900 +Bluetooth	Body Back	1.25	0.10	1.35
	Body Left	0.49	0.10	0.59
	Body Right	0.01	0.10	0.11
	Body Top	0.39	0.10	0.49
WCDMA Band 2+ Bluetooth	Body Back	0.92	0.10	1.02
	Body Left	0.27	0.10	0.37
	Body Top	0.32	0.10	0.42
WCDMA Band 4+ Bluetooth	Body Back	1.17	0.10	1.27
	Body Left	0.36	0.10	0.46
	Body Right	0.04	0.10	0.14
	Body Top	0.03	0.10	0.13
WCDMA Band 5+ Bluetooth	Body Back	0.66	0.10	0.76
	Body Left	0.32	0.10	0.42
	Body Right	0.04	0.10	0.14
	Body Top	0.55	0.10	0.65
LTE Band 7+ Bluetooth	Body Back	1.28	0.10	1.38
	Body Left	0.21	0.10	0.31
	Body Right	0.00	0.10	0.10
	Body Top	0.26	0.10	0.36
LTE Band 12+ Bluetooth	Body Back	0.98	0.10	1.08
	Body Left	0.10	0.10	0.20
	Body Right	0.04	0.10	0.14
	Body Top	0.38	0.10	0.48
LTE Band 13+ Bluetooth	Body Back	1.08	0.10	1.18
	Body Left	0.34	0.10	0.44
	Body Right	0.10	0.10	0.20
	Body Top	0.53	0.10	0.63

LTE Band 14+ Bluetooth	Body Back	1.11	0.10	1.21
	Body Left	0.64	0.10	0.74
	Body Right	0.10	0.10	0.20
	Body Top	0.55	0.10	0.65
LTE Band 25&2+ Bluetooth	Body Back	0.93	0.10	1.03
	Body Left	0.13	0.10	0.23
	Body Right	0.01	0.10	0.11
	Body Top	0.13	0.10	0.23
LTE Band 26&5 + Bluetooth	Body Back	1.05	0.10	1.15
	Body Left	0.38	0.10	0.48
	Body Right	0.08	0.10	0.18
	Body Top	0.61	0.10	0.71
LTE Band 30+ Bluetooth	Body Back	1.02	0.10	1.12
	Body Left	0.07	0.10	0.17
	Body Right	0.01	0.10	0.11
	Body Top	0.17	0.10	0.27
LTE Band 41+ Bluetooth	Body Back	0.68	0.10	0.78
	Body Left	0.02	0.10	0.12
	Body Right	0.01	0.10	0.11
	Body Top	0.13	0.10	0.23
LTE Band 66&4 + Bluetooth	Body Back	1.21	0.10	1.31
	Body Left	0.17	0.10	0.27
	Body Right	0.01	0.10	0.11
	Body Top	0.26	0.10	0.36
LTE Band 71+ Bluetooth	Body Back	0.79	0.10	0.89
	Body Left	0.20	0.10	0.30
	Body Right	0.03	0.10	0.13
	Body Top	0.37	0.10	0.47

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
GPRS 850 +WLAN(2.4G) (Hotspot)	Body Back	0.43	0.28	0.71
	Body Left	0.18	/	0.18
	Body Right	0.03	0.49	0.52
	Body Top	0.19	0.09	0.28
	Body Bottom	0.01	/	0.01
GPRS 1900 +WLAN(2.4G) (Hotspot)	Body Back	1.25	0.28	1.53
	Body Left	0.49	/	0.49
	Body Right	0.01	0.49	0.50
	Body Top	0.39	0.09	0.48
WCDMA Band 2+ WLAN(2.4G) (Hotspot)	Body Back	0.92	0.28	1.20
	Body Left	0.27	/	0.27
	Body Right	/	0.49	0.49
	Body Top	0.32	0.09	0.41
WCDMA Band 4+ WLAN(2.4G) (Hotspot)	Body Back	1.17	0.28	1.45
	Body Left	0.36	/	0.36
	Body Right	0.04	0.49	0.53
	Body Top	0.03	0.09	0.12
WCDMA Band 5+ WLAN(2.4G) (Hotspot)	Body Back	0.66	0.28	0.94
	Body Left	0.32	/	0.32
	Body Right	0.04	0.49	0.53
	Body Top	0.55	0.09	0.64
LTE Band 7+ WLAN(2.4G) (Hotspot)	Body Back	1.28	0.28	1.56
	Body Left	0.21	/	0.21
	Body Right	0.00	0.49	0.49
	Body Top	0.26	0.09	0.35
LTE Band 12+ WLAN(2.4G) (Hotspot)	Body Back	0.98	0.28	1.26
	Body Left	0.10	/	0.10
	Body Right	0.04	0.49	0.53
	Body Top	0.38	0.09	0.47
LTE Band 13+ WLAN(2.4G) (Hotspot)	Body Back	1.08	0.28	1.36
	Body Left	0.34	/	0.34
	Body Right	0.10	0.49	0.59
	Body Top	0.53	0.09	0.62
LTE Band 14+ WLAN(2.4G) (Hotspot)	Body Back	1.11	0.28	1.39
	Body Left	0.64	/	0.64
	Body Right	0.10	0.49	0.59
	Body Top	0.55	0.09	0.64
LTE Band 25&2+ WLAN(2.4G) (Hotspot)	Body Back	0.93	0.28	1.21
	Body Left	0.13	/	0.13
	Body Right	0.01	0.49	0.50
	Body Top	0.13	0.09	0.22

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
LTE Band 26&5 + WLAN(2.4G) (Hotspot)	Body Back	1.05	0.28	1.33
	Body Left	0.38	/	0.38
	Body Right	0.08	0.49	0.57
	Body Top	0.61	0.09	0.70
LTE Band 30+ WLAN(2.4G) (Hotspot)	Body Back	1.02	0.28	1.30
	Body Left	0.07	/	0.07
	Body Right	0.01	0.49	0.50
	Body Top	0.17	0.09	0.26
LTE Band 41+ WLAN(2.4G) (Hotspot)	Body Back	0.68	0.28	0.96
	Body Left	0.02	/	0.02
	Body Right	0.01	0.49	0.50
	Body Top	0.13	0.09	0.22
LTE Band 66&4 + WLAN(2.4G) (Hotspot)	Body Back	1.21	0.28	1.49
	Body Left	0.17	/	0.17
	Body Right	0.01	0.49	0.50
	Body Top	0.26	0.09	0.35
LTE Band 71+ WLAN(2.4G) (Hotspot)	Body Back	0.79	0.28	1.07
	Body Left	0.20	/	0.20
	Body Right	0.03	0.49	0.52
	Body Top	0.37	0.09	0.46

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
GPRS 850 +WLAN(5.2G) (Hotspot)	Body Back	0.43	0.24	0.67
	Body Left	0.18	/	0.18
	Body Right	0.03	0.11	0.14
	Body Top	0.19	0.54	0.73
	Body Bottom	0.01	/	0.01
GPRS 1900 +WLAN(5.2G) (Hotspot)	Body Back	1.25	0.24	1.49
	Body Left	0.49	/	0.49
	Body Right	0.01	0.11	0.12
	Body Top	0.39	0.54	0.93
WCDMA Band 2+ WLAN(5.2G) (Hotspot)	Body Back	0.92	0.24	1.16
	Body Left	0.27	/	0.27
	Body Right	/	0.11	0.11
	Body Top	0.32	0.54	0.86
WCDMA Band 4+ WLAN(5.2G)	Body Back	1.17	0.24	1.41
	Body Left	0.36	/	0.36
	Body Right	0.04	0.11	0.15
	Body Top	0.03	0.54	0.57
WCDMA Band 5+ WLAN(5.2G)	Body Back	0.66	0.24	0.90
	Body Left	0.32	/	0.32
	Body Right	0.04	0.11	0.15
	Body Top	0.55	0.54	1.09
LTE Band 7+ WLAN(5.2G) (Hotspot)	Body Back	1.28	0.24	1.52
	Body Left	0.21	/	0.21
	Body Right	0.00	0.11	0.11
	Body Top	0.26	0.54	0.80
LTE Band 12+ WLAN(5.2G) (Hotspot)	Body Back	0.98	0.24	1.22
	Body Left	0.10	/	0.10
	Body Right	0.04	0.11	0.15
	Body Top	0.38	0.54	0.92
LTE Band 13+ WLAN(5.2G) (Hotspot)	Body Back	1.08	0.24	1.32
	Body Left	0.34	/	0.34
	Body Right	0.10	0.11	0.21
	Body Top	0.53	0.54	1.07
LTE Band 14+ WLAN(5.2G) (Hotspot)	Body Back	1.11	0.24	1.35
	Body Left	0.64	/	0.64
	Body Right	0.10	0.11	0.21
	Body Top	0.55	0.54	1.09
LTE Band 25&2+ WLAN(5.2G) (Hotspot)	Body Back	0.93	0.24	1.17
	Body Left	0.13	/	0.13
	Body Right	0.01	0.11	0.12
	Body Top	0.13	0.54	0.67

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
LTE Band 26&5 + WLAN(5.2G) (Hotspot)	Body Back	1.05	0.24	1.29
	Body Left	0.38	/	0.38
	Body Right	0.08	0.11	0.19
	Body Top	0.61	0.54	1.15
LTE Band 30+ WLAN(5.2G) (Hotspot)	Body Back	1.02	0.24	1.26
	Body Left	0.07	/	0.07
	Body Right	0.01	0.11	0.12
	Body Top	0.17	0.54	0.71
LTE Band 41+ WLAN(5.2G) (Hotspot)	Body Back	0.68	0.24	0.92
	Body Left	0.02	/	0.02
	Body Right	0.01	0.11	0.12
	Body Top	0.13	0.54	0.67
LTE Band 66&4 + WLAN(5.2G) (Hotspot)	Body Back	1.21	0.24	1.45
	Body Left	0.17	/	0.17
	Body Right	0.01	0.11	0.12
	Body Top	0.26	0.54	0.80
LTE Band 71+ WLAN(5.2G) (Hotspot)	Body Back	0.79	0.24	1.03
	Body Left	0.20	/	0.20
	Body Right	0.03	0.11	0.14
	Body Top	0.37	0.54	0.91

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
GPRS 850 +WLAN(5.8G) (Hotspot)	Body Back	0.43	0.24	0.67
	Body Left	0.18	/	0.18
	Body Right	0.03	0.12	0.15
	Body Top	0.19	0.41	0.60
	Body Bottom	0.01	/	0.01
GPRS 1900 +WLAN(5.8G) (Hotspot)	Body Back	1.25	0.24	1.49
	Body Left	0.49	/	0.49
	Body Right	0.01	0.12	0.13
	Body Top	0.39	0.41	0.80
WCDMA Band 2+ WLAN(5.8G)	Body Back	0.92	0.24	1.16
	Body Left	0.27	/	0.27
	Body Right	/	0.12	0.12
	Body Top	0.32	0.41	0.73
WCDMA Band 4+ WLAN(5.8G)	Body Back	1.17	0.24	1.41
	Body Left	0.36	/	0.36
	Body Right	0.04	0.12	0.16
	Body Top	0.03	0.41	0.44
WCDMA Band 5+ WLAN(5.8G)	Body Back	0.66	0.24	0.90
	Body Left	0.32	/	0.32
	Body Right	0.04	0.12	0.16
	Body Top	0.55	0.41	0.96
LTE Band 7+ WLAN(5.8G) (Hotspot)	Body Back	1.28	0.24	1.52
	Body Left	0.21	/	0.21
	Body Right	0.00	0.12	0.12
	Body Top	0.26	0.41	0.67
LTE Band 12+ WLAN(5.8G) (Hotspot)	Body Back	0.98	0.24	1.22
	Body Left	0.10	/	0.10
	Body Right	0.04	0.12	0.16
	Body Top	0.38	0.41	0.79
LTE Band 13+ WLAN(5.8G) (Hotspot)	Body Back	1.08	0.24	1.32
	Body Left	0.34	/	0.34
	Body Right	0.10	0.12	0.22
	Body Top	0.53	0.41	0.94
LTE Band 14+ WLAN(5.8G) (Hotspot)	Body Back	1.11	0.24	1.35
	Body Left	0.64	/	0.64
	Body Right	0.10	0.12	0.22
	Body Top	0.55	0.41	0.96
LTE Band 25&2+ WLAN(5.8G) (Hotspot)	Body Back	0.93	0.24	1.17
	Body Left	0.13	/	0.13
	Body Right	0.01	0.12	0.13
	Body Top	0.13	0.41	0.54

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		Σ SAR < 1.6W/kg
		SAR1	SAR2	
LTE Band 26&5 + WLAN(5.8G) (Hotspot)	Body Back	1.05	0.24	1.29
	Body Left	0.38	/	0.38
	Body Right	0.08	0.12	0.20
	Body Top	0.61	0.41	1.02
LTE Band 30+ WLAN(5.8G) (Hotspot)	Body Back	1.02	0.24	1.26
	Body Left	0.07	/	0.07
	Body Right	0.01	0.12	0.13
	Body Top	0.17	0.41	0.58
LTE Band 41+ WLAN(5.8G) (Hotspot)	Body Back	0.68	0.24	0.92
	Body Left	0.02	/	0.02
	Body Right	0.01	0.12	0.13
	Body Top	0.13	0.41	0.54
LTE Band 66&4 + WLAN(5.8G) (Hotspot)	Body Back	1.21	0.24	1.45
	Body Left	0.17	/	0.17
	Body Right	0.01	0.12	0.13
	Body Top	0.26	0.41	0.67
LTE Band 71+ WLAN(5.8G) (Hotspot)	Body Back	0.79	0.24	1.03
	Body Left	0.20	/	0.20
	Body Right	0.03	0.12	0.15
	Body Top	0.37	0.41	0.78

Note:

1. Hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge; for the data modes, wireless technologies and frequency bands supporting hotspot mode.
2. Hotspot Mode is not feasible during voice calls.
3. Please Refer to the SAR Report SZ1210628-25933E-SAB.

Conclusion:

Sum of SAR: Σ SAR $\leq$ 1.6 W/kg therefore simultaneous transmission SAR with Volume Scans is **not required**.

SAR Plots

Please Refer to the Attachment.

APPENDIX A MEASUREMENT UNCERTAINTY

The uncertainty budget has been determined for the measurement system and is given in the following Table.

Measurement uncertainty evaluation for IEEE1528-2013 SAR test

Source of uncertainty	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration	6.55	N	1	1	1	6.6	6.6
Axial Isotropy	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
Hemispherical Isotropy	9.6	R	$\sqrt{3}$	0	0	0.0	0.0
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Linearity	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
Detection limits	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Readout electronics	0.3	N	1	1	1	0.3	0.3
Response time	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
Integration time	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
RF ambient conditions – noise	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
RF ambient conditions–reflections	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Probe positioner mech. Restrictions	0.8	R	$\sqrt{3}$	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.7	R	$\sqrt{3}$	1	1	3.9	3.9
Post-processing	2.0	R	$\sqrt{3}$	1	1	1.2	1.2
Test sample related							
Test sample positioning	2.8	N	1	1	1	2.8	2.8
Device holder uncertainty	6.3	N	1	1	1	6.3	6.3
Drift of output power	5.0	R	$\sqrt{3}$	1	1	2.9	2.9
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.0	R	$\sqrt{3}$	1	1	2.3	2.3
Liquid conductivity target)	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2
Liquid conductivity meas.)	2.5	N	1	0.64	0.43	1.6	1.1
Liquid permittivity target)	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4
Liquid permittivity meas.)	2.5	N	1	0.6	0.49	1.5	1.2
Combined standard uncertainty		RSS				12.2	12.0
Expanded uncertainty 95 % confidence interval)						24.3	23.9

Measurement uncertainty evaluation for IEC62209-2 SAR test

Source of uncertainty	Tolerance/uncertainty $\pm \%$	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty $\pm \%$, (1 g)	Standard uncertainty $\pm \%$, (10 g)
Measurement system							
Probe calibration	6.55	N	1	1	1	6.6	6.6
Axial Isotropy	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
Hemispherical Isotropy	9.6	R	$\sqrt{3}$	0	0	0.0	0.0
Linearity	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
Modulation Response	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
Detection limits	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Readout electronics	0.3	N	1	1	1	0.3	0.3
Response time	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
Integration time	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
RF ambient conditions – noise	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
RF ambient conditions–reflections	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Probe positioner mech. Restrictions	0.8	R	$\sqrt{3}$	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.7	R	$\sqrt{3}$	1	1	3.9	3.9
Post-processing	2.0	R	$\sqrt{3}$	1	1	1.2	1.2
Test sample related							
Device holder Uncertainty	6.3	N	1	1	1	6.3	6.3
Test sample positioning	2.8	N	1	1	1	2.8	2.8
Power scaling	4.5	R	$\sqrt{3}$	1	1	2.6	2.6
Drift of output power	5.0	R	$\sqrt{3}$	1	1	2.9	2.9
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.0	R	$\sqrt{3}$	1	1	2.3	2.3
Algorithm for correcting SAR for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.1	0.9
Liquid conductivity (meas.)	2.5	N	1	0.64	0.43	1.6	1.1
Liquid permittivity (meas.)	2.5	N	1	0.6	0.49	1.5	1.2
Temp. unc. - Conductivity	1.7	R	$\sqrt{3}$	0.78	0.71	0.8	0.7
Temp. unc. - Permittivity	0.3	R	$\sqrt{3}$	0.23	0.26	0.0	0.0
Combined standard uncertainty		RSS				12.2	12.1
Expanded uncertainty 95 % confidence interval)						24.5	24.2

APPENDIX B EUT TEST POSITION PHOTOS

Please Refer to the Attachment.

APPENDIX C PROBE CALIBRATION CERTIFICATES

Please Refer to the Attachment.

APPENDIX D DIPOLE CALIBRATION CERTIFICATES

Please Refer to the Attachment.

******* END OF REPORT *******