FCC SAR Test Report

APPLICANT	:	Wistron Corporation
EQUIPMENT	:	Notebook Computer
BRAND NAME	:	Lenovo
MODEL NAME	:	TP00076C
FCC ID	:	PU5-TP00076CUC
STANDARD	:	FCC 47 CFR Part 2 (2.1093) ANSI/IEEE C95.1-1992 IEEE 1528-2013

Equipment: Sierra Wireless EM7455 and Intel 8265NGW tested inside of Lenovo Notebook Computer

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and had been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Eric Huang / Deputy Manager

Approved by: Jones Tsai / Manager

Testing Laboratory
1190

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Table of Contents

1. Statement of Compliance 4
2. Administration Data 5
3. Guidance Applied 5
4. Equipment Under Test (EUT) Information 6
4.1 General Information 6
4.2 General LTE SAR Test and Reporting Considerations 7
5. Proximity Sensor Triggering Test 9
6. RF Exposure Limits 13
6.1 Uncontrolled Environment 13
6.2 Controlled Environment 13
7. Specific Absorption Rate (SAR) 14
7.1 Introduction 14
7.2 SAR Definition 14
8. System Description and Setup 15
8.1 E-Field Probe 16
8.2 Data Acquisition Electronics (DAE) 16
8.3 Phantom 17
8.4 Device Holder 18
9. Measurement Procedures 19
9.1 Spatial Peak SAR Evaluation 19
9.2 Power Reference Measurement 20
9.3 Area Scan 20
9.4 Zoom Scan 21
9.5 Volume Scan Procedures 21
9.6 Power Drift Monitoring 21
10. Test Equipment List 22
11. System Verification 23
11.1 Tissue Simulating Liquids 23
11.2 Tissue Verification 24
11.3 System Performance Check Results 25
12. RF Exposure Positions 25
12.1 SAR Testing for Tablet 25
13. Conducted RF Output Power (Unit: dBm) 26
14. SAR test exclusion table 70
15. SAR Test Results 71
15.1 Body SAR 72
15.2 Repeated SAR Measurement 76
16. Simultaneous Transmission Analysis 77
16.1 Body Exposure Conditions for WNC Black 78
16.2 SPLSR Evaluation and Analysis for WNC Black 82
16.3 Body Exposure Conditions for WNC Silver 88
16.4 SPLSR Evaluation and Analysis for WNC Silver 92
16.5 Body Exposure Conditions for Jiengtai_Silver 99
16.6 SPLSR Evaluation and Analysis for iengtai_Silver 103
16.7 Body Exposure Conditions for jiengtai Black 109
16.8 SPLSR Evaluation and Analysis for Jiengtai_Black 113
17. Uncertainty Assessment 119
18. References 121
Appendix A. Plots of System Performance Check
Appendix B. Plots of High SAR Measurement
Appendix C. DASY Calibration Certificate
Appendix D. Test Setup Photos

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA6N0303-01	Rev. 01	Initial issue of report	Dec. 22, 2016

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Wistron Corporation, Notebook Computer, TP00076C**, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary Body (Separation 0mm) 1g SAR (W/kg)	Highest Simultaneous Transmission 1g SAR (W/kg)
Licensed	WCDMA II	1.13	1.59
	WCDMA IV	1.39	
	WCDMA V	1.15	
	LTE Band 4	1.37	
	LTE Band 7	1.09	
	LTE Band 12	1.28	
	LTE Band 13	1.11	
	LTE Band 25	1.17	
	LTE Band 26	1.04	
	LTE Band 41	1.14	
DTS	2.4GHz WLAN	0.62	1.59
NII	5GHz WLAN	1.53	1.59
DSS	Bluetooth	0.10	1.59
Date of Testing:		2016/11/7 ~ 2016/11/9	

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications

2. Administration Data

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	Wistron Corporation
Address	21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist, New Taipei City 221,Taiwan R.O.C.

Manufacturer	
Company Name	Wistron Corporation
Address	21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist, New Taipei City 221,Taiwan R.O.C.

3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Notebook Computer
Brand Name	Lenovo
Model Name	TP00076C
FCC ID	PU5-TP00076CUC
Integrated WWAN Module	Brand Name: Sierra Model Name: EM7455
Integrated WLAN Module	Brand Name: Intel Model Name: 8265NGW
Wireless Technology and Frequency Range	WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 41: 2496 MHz ~ 2690 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Mode	· RMC 12.2Kbps · HSDPA · HSUPA · DC-HSDPA · LTE: QPSK, 16QAM · 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 · Bluetooth BR/EDR/LE/HS · NFC:ASK
EUT Stage	Production Unit

Remark:

1. The WLAN module intel 8265NGW is also integrated into this host and have two kind antenna vendors within two kind color material hosts for WLAN tested, for WLAN tests results within difference vendors and hosts are evaluated as following reports and the results are used perform simultaneous transmission analysis.
2. For WWAN operation will be integrated into two kind color material hosts too, and spot check worst case between two colors material and found the worst color material is silver, so in this report is used it perform all RF exposure evaluation.

WLAN Report Information			
FCC ID	**Report No.**	**WLAN Antenna Vendor**	**Color Material**
PD98265NG	161024-01.TR02	WNC	Black
PD98265NG	161024-01.TR04	WNC	Silver
PD98265NG	161024-01.TR03	Jiengtai	Silver
PD98265NG	161024-01.TR01	Jiengtai	Black

4.2 General LTE SAR Test and Reporting Considerations

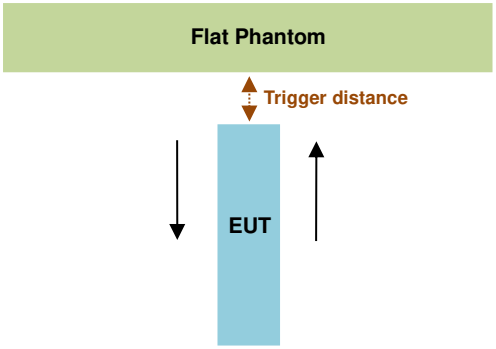
<table>
<tr><th colspan="2">Summarized necessary items addressed in KDB 941225 D05 v02r05</th></tr>
<tr><td>FCC ID</td><td>PU5-TP00076CUC</td></tr>
<tr><td>Equipment Name</td><td>Notebook Computer</td></tr>
<tr><td>Operating Frequency Range of each LTE transmission band</td><td>LTE Band 02: 1850 MHz ~ 1910 MHz
LTE Band 04: 1710 MHz ~ 1755 MHz
LTE Band 05: 824 MHz ~ 849 MHz
LTE Band 07: 2500 MHz ~ 2570 MHz
LTE Band 12: 699 MHz ~ 716 MHz
LTE Band 13: 777 MHz ~ 787 MHz
LTE Band 25: 1850 MHz ~ 1915 MHz
LTE Band 26: 814 MHz ~ 849 MHz
LTE Band 41: 2496 MHz ~ 2690 MHz</td></tr>
<tr><td>Channel Bandwidth</td><td>LTE Band 02:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 04:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 05:1.4MHz, 3MHz, 5MHz, 10MHz
LTE Band 07: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz
LTE Band 13: 5MHz, 10MHz
LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz
LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz</td></tr>
<tr><td>uplink modulations used</td><td>QPSK, and 16QAM</td></tr>
<tr><td>LTE Voice / Data requirements</td><td>Data only</td></tr>
<tr><td>LTE MPR permanently built-in by design</td><td>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3
<table>
<tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (RB)</th><th rowspan="2">MPR (dB)</th></tr>
<tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr>
<tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr>
</table></td></tr>
<tr><td>LTE A-MPR</td><td>In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)</td></tr>
<tr><td>Spectrum plots for RB configuration</td><td>A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.</td></tr>
<tr><td>Power reduction applied to satisfy SAR compliance</td><td>Yes, Proximity Sensor.</td></tr>
<tr><td>LTE Carrier Aggregation Combinations</td><td>Inter-Band and Intra-Band possible combinations and detail power verification please referred to page 70.</td></tr>
<tr><td>LTE Carrier Aggregation Additional Information</td><td>This device does not support full CA features on 3GPP Release 10. It supports a maximum of 2 carriers in the downlink only. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. Due to carrier capability, only the combinations listed above are supported. The following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.</td></tr>
</table>

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	23205		779.5		23230		782					
M	23230		782									
H	23255		784.5									
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
L M	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H M	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				

5. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance (KDB 616217 D04 section 6.2)>:

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. The details are illustrated in the exhibit “P-Sensor operational description”, and the shortest triggering distances were reported and used for SAR assessment.
In the preliminary triggering distance testing, the tissue-equivalent medium for different frequency bands were used for verification; no other frequency bands tissue-equivalent medium was found to result in shortest triggering distance than that for 1900MHz, and the tissue-equivalent medium for 1900MHz was used for formal proximity sensor triggering testing.



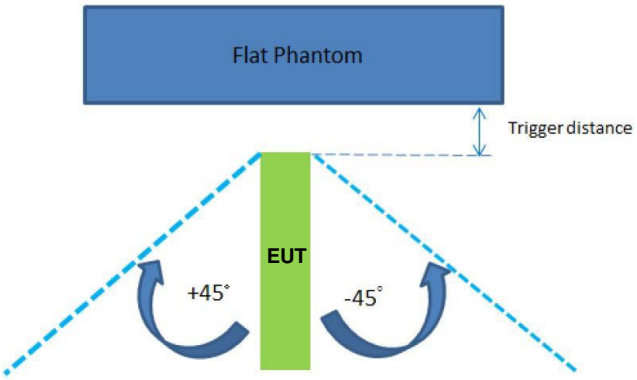
Proximity Sensor Trigger Distance (mm)		
Position	Bottom Face	Edge 1
Minimum	23	27

<Proximity Sensor Triggering Coverage (KDB 616217 D04 section 6.3)>:

If a sensor is spatially offset from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. For p-sensor coverage testing, the device is moved and “along the direction of maximum antenna and sensor offset”.
Illustrated in the internal photo exhibit, although the senor is spatially offset, there is no trigger condition where the antenna is next to the user but the sensor is laterally further away, therefore proximity sensor coverage testing is not required.
This procedure is not required because antenna and sensor are collocated and the peak SAR location is overlapping with the sensor.

<Tablet Tilt angle influences to proximity sensor triggering (KDB 616217 D04 section 6.4)>:

The influence of table tilt angles to proximity sensor triggering was determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at 13 mm separation.
Rotating the tablet around the edge next to the phantom in ≤ 10° increments until the tablet is ± 45° from the vertical position at 0°, and the maximum output power remains in the reduced mode.



The Sensor Trigger Distance (mm)	
Position	Edge 1
Minimum	27

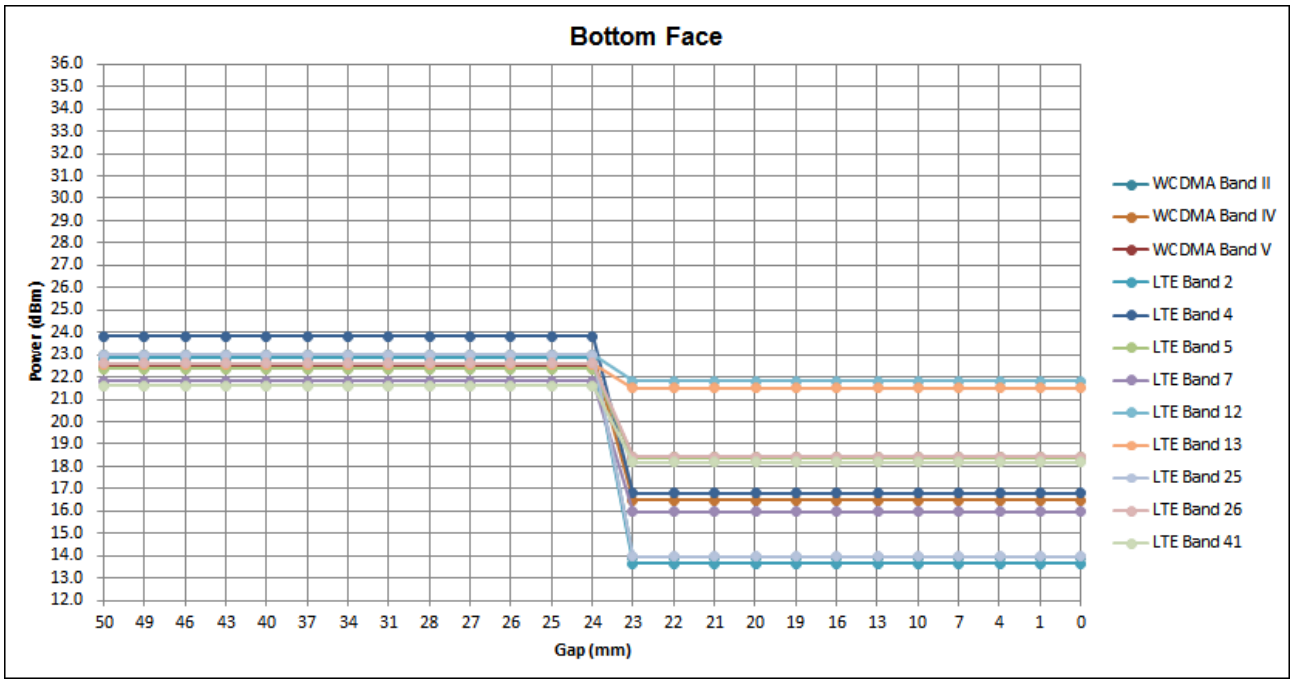
<Proximity sensor power reduction level>

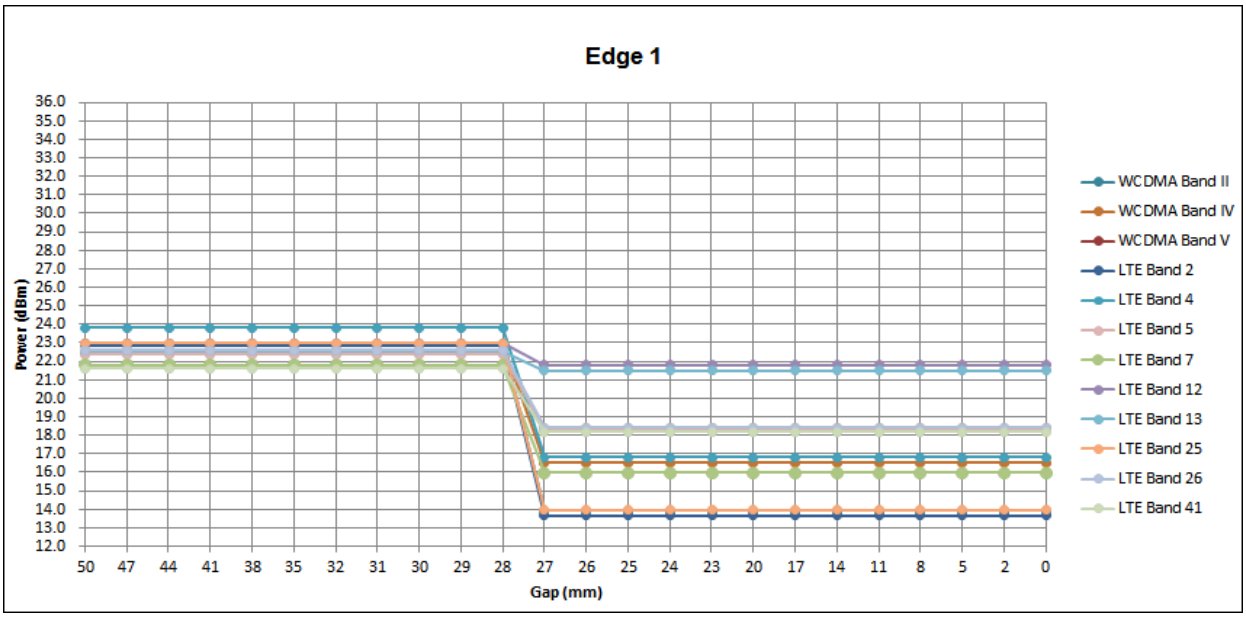
Exposure Position / wireless mode	Bottom Face(1)	Edge 1(1)	Edge 2	Edge 3	Edge 4
WCDMA Band II	9.5 dB	9.5 dB	0 dB	0 dB	0 dB
WCDMA Band IV	7 dB	7 dB			
WCDMA Band V	4.5 dB	4.5 dB			
LTE Band 2	9 dB	9 dB			
LTE Band 4	6.5 dB	6.5 dB			
LTE Band 5	4 dB	4 dB			
LTE Band 7	7 dB	7 dB			
LTE Band 12	1.5 dB	1.5 dB			
LTE Band 13	2.5 dB	2.5 dB			
LTE Band 25	9 dB	9 dB			
LTE Band 26	4 dB	4 dB			
LTE Band 41	4.5 dB	4.5 dB			

Remark:

1. (1): Reduced maximum limit applied by activation of proximity sensor.=>P-Sensor
2. Power reduction is not applicable for WLAN and Bluetooth.
3. Tests were performed in accordance with KDB 616217 D04 section 6.1, 6.2, 6.3, 6.4 and 6.5 and compliant results are shown and described in exhibit "P-Sensor operational description
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance was performed:
   - Bottom Face: 10 mm
   - Edge1: 15 mm

<Sensor trigger distance V.S Maximum measure power>




Edge 1
Power (dBm)
36.0
35.0
34.0
33.0
32.0
31.0
30.0
29.0
28.0
27.0
26.0
25.0
24.0
23.0
22.0
21.0
20.0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
50 47 44 41 38 35 32 31 30 29 28 27 26 25 24 23 20 17 14 11 8 5 2 0
Gap (mm)
WCDMA Band II
WCDMA Band IV
WCDMA Band V
LTE Band 2
LTE Band 4
LTE Band 5
LTE Band 7
LTE Band 12
LTE Band 13
LTE Band 25
LTE Band 26
LTE Band 41

6. RF Exposure Limits

6.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

6.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

7. Specific Absorption Rate (SAR)

7.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

7.2 SAR Definition

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

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

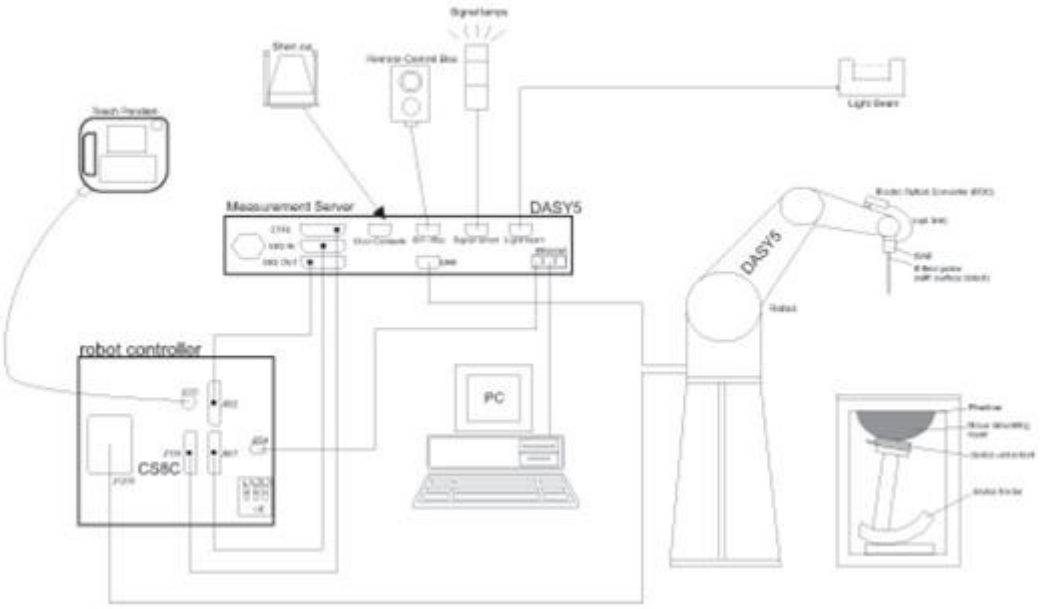
SAR is expressed in units of Watts per kilogram (W/kg)

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

8. System Description and Setup

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



- A standard high precision 6-axis robot 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 amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- 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 WinXP or Win7 and the DASY5 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.

8.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG).The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ±0.2 dB (30 MHz – 4 GHz)	
Directivity	±0.2 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g – >100 mW/g; Linearity: ±0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 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 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/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	

8.2 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists 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 and 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.

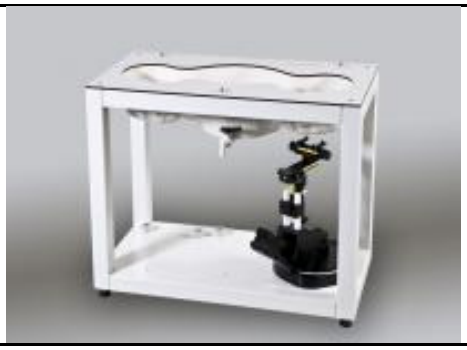
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Fig 5.1 Photo of DAE

8.3 Phantom

<SAM Twin Phantom>

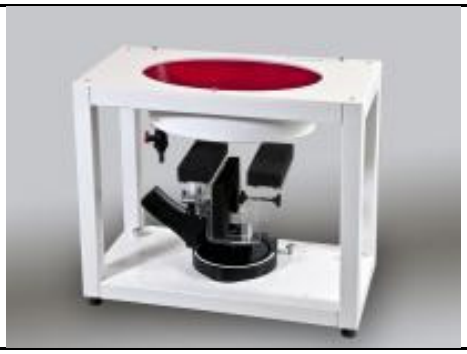
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI Phantom>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)
Filling Volume	Approx. 30 liters
Dimensions	Major ellipse axis: 600 mm Minor axis: 400 mm



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

8.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.

Mounting Device for Hand-Held Transmitters

Mounting Device Adaptor for Wide-Phones

<Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.

Mounting Device for Laptops

9. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

(a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
(b) Read the WWAN RF power level from the base station simulator.
(c) For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band
(d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/BT output power

<SAR measurement>

(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
(b) Place the EUT in the positions as Appendix D demonstrates.
(c) Set scan area, grid size and other setting on the DASY software.
(d) Measure SAR results for the highest power channel on each testing position.
(e) Find out the largest SAR result on these testing positions of each band
(f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

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

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

9.1 Spatial Peak SAR Evaluation

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

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

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

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

9.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

9.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

9.4 Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

9.5 Volume Scan Procedures

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

9.6 Power Drift Monitoring

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

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1012	May. 18, 2016	May. 17, 2017
SPEAG	835MHz System Validation Kit	D835V2	499	Mar. 21, 2016	Mar. 20, 2017
SPEAG	1750MHz System Validation Kit	D1750V2	1023	Jun. 23, 2016	Jun. 22, 2017
SPEAG	1900MHz System Validation Kit	D1900V2	5d041	Sep. 30, 2016	Sep. 29, 2017
SPEAG	2600MHz System Validation Kit	D2600V2	1008	Aug. 30, 2016	Aug. 29, 2017
SPEAG	Data Acquisition Electronics	DAE4	1388	Oct. 10, 2016	Oct. 09, 2017
SPEAG	Data Acquisition Electronics	DAE4	778	May. 12, 2016	May. 11, 2017
SPEAG	Dosimetric E-Field Probe	EX3DV4	3697	Oct. 25, 2016	Oct. 24, 2017
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Aug. 26, 2016	Aug. 25, 2017
Wisewind	Thermometer	HTC-1	TM560	Oct. 12, 2016	Oct. 11, 2017
Wisewind	Thermometer	HTC-1	TM225	Oct. 12, 2016	Oct. 11, 2017
Anritsu	Radio Communication Analyzer	MT8820C	6201381760	May. 10, 2016	May. 09, 2017
Agilent	Wireless Communication Test Set	E5515C	MY50266977	May. 17, 2016	May. 16, 2017
SPEAG	Device Holder	N/A	N/A	N/A	N/A
R&S	Signal Generator	MG3710A	6201502524	Dec. 18, 2015	Dec. 17, 2016
Agilent	ENA Network Analyzer	E5071C	MY46316648	Jan. 12, 2016	Jan. 11, 2017
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Jul. 19, 2016	Jul. 18, 2017
LINE SEIKI	Digital Thermometer	LKMelectronic	DTM3000SPEZIAL	Sep. 05, 2016	Sep. 04, 2017
Anritsu	Power Meter	ML2495A	1419002	May. 10, 2016	May. 09, 2017
Anritsu	Power Sensor	MA2411B	1339124	May. 10, 2016	May. 09, 2017
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jun. 21, 2016	Jun. 20, 2017
Mini-Circuits	Power Amplifier	ZVE-8G+	D120604	Mar. 16, 2016	Mar. 15, 2017
Mini-Circuits	Power Amplifier	ZHL-42W+	QA1344002	Mar. 16, 2016	Mar. 15, 2017
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.

11. System Verification

11.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 10.1. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 10.2.

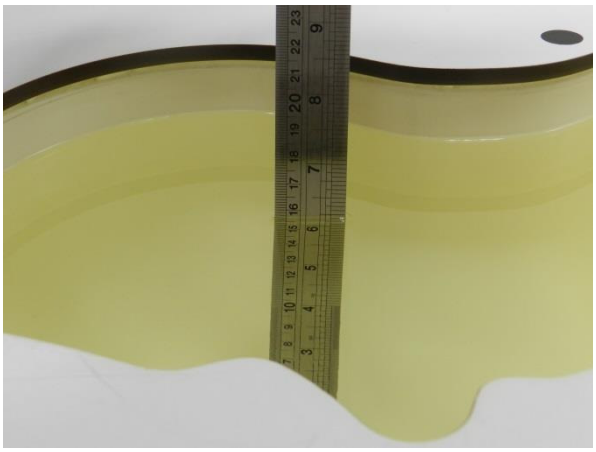


Fig 10.1Photo of Liquid Height for Head SAR

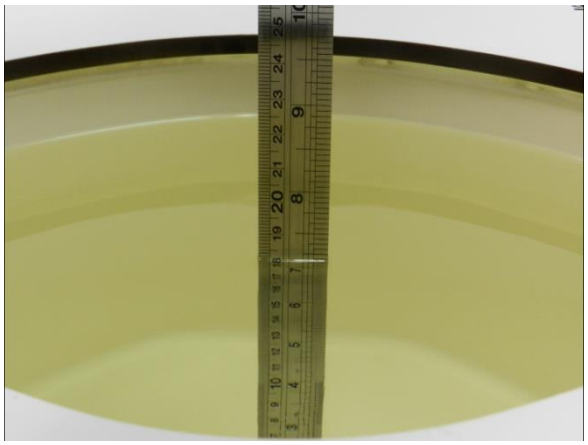


Fig 10.2 Photo of Liquid Height for Body SAR

11.2 Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (εr)
For Head								
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0
For Body								
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0	0	31.4	1.95	52.7
2600	68.1	0	0	0.1	0	31.8	2.16	52.5

Simulating Liquid for 5GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	64~78%
Mineral oil	11~18%
Emulsifiers	9~15%
Additives and Salt	2~3%

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	MSL	22.2	0.957	54.024	0.96	55.50	-0.31	-2.66	±5	2016/11/8
835	MSL	22.2	0.984	56.382	0.97	55.20	1.44	2.14	±5	2016/11/8
1750	MSL	22.2	1.495	55.730	1.49	53.40	0.34	4.36	±5	2016/11/9
1750	MSL	22.2	1.495	55.730	1.49	53.40	0.34	4.36	±5	2016/11/9
1900	MSL	22.2	1.508	51.525	1.52	53.30	-0.79	-3.33	±5	2016/11/9
1900	MSL	22.2	1.508	51.525	1.52	53.30	-0.79	-3.33	±5	2016/11/9
2600	MSL	22.5	2.161	51.058	2.16	52.50	0.05	-2.75	±5	2016/11/7

11.3 System Performance Check Results

Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2016/11/8	750	MSL	250	D750V3-1012	ES3DV3 - SN3270	DAE4 Sn778	2.29	8.72	9.16	5.05
2016/11/8	835	MSL	250	D835V2-499	ES3DV3 - SN3270	DAE4 Sn778	2.49	9.52	9.96	4.62
2016/11/9	1750	MSL	250	D1750V2-1023	ES3DV3 - SN3270	DAE4 Sn778	9.08	36.40	36.32	-0.22
2016/11/9	1750	MSL	250	D1750V2-1023	EX3DV4 - SN3697	DAE4 Sn1388	9.43	36.40	37.72	3.63
2016/11/9	1900	MSL	250	D1900V2-5d041	ES3DV3 - SN3270	DAE4 Sn778	9.82	38.80	39.28	1.24
2016/11/9	1900	MSL	250	D1900V2-5d041	EX3DV4 - SN3697	DAE4 Sn1388	9.60	38.80	38.40	-1.03
2016/11/7	2600	MSL	250	D2600V2-1008	ES3DV3 - SN3270	DAE4 Sn778	14.30	55.20	57.20	3.62

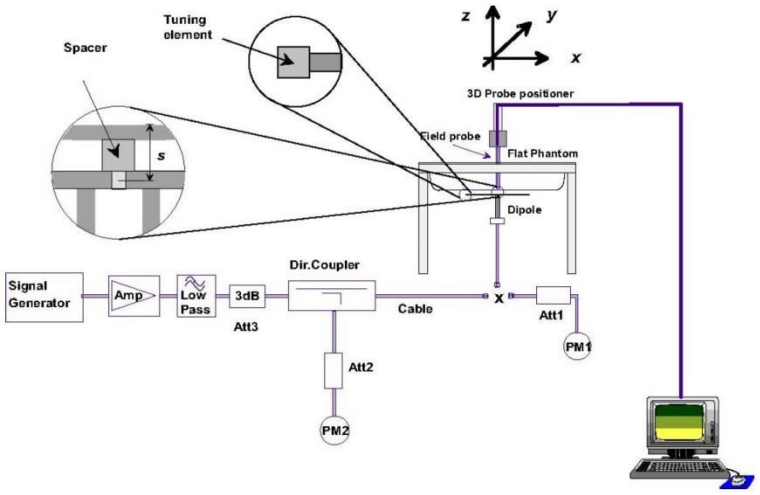


Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

12. RF Exposure Positions

12.1 SAR Testing for Tablet

This device can be used also in full sized tablet exposure conditions, due to its size. Per FCC KDB 616217, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. The SAR exclusion threshold in KDB 447498 D01v06 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

13. Conducted RF Output Power (Unit: dBm)

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set Gain Factors (β_c and β_d) and parameters were set according to each
   ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
   iii. Set RMC 12.2Kbps + HSDPA mode.
   iv. Set Cell Power = -86 dBm
   v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
   vi. Select HSDPA Uplink Parameters
   vii. Set Delta ACK, Delta NACK and Delta CQI = 8
   viii. Set Ack-Nack Repetition Factor to 3
   ix. Set CQI Feedback Cycle (k) to 4 ms
   x. Set CQI Repetition Factor to 2
   xi. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Setup Configuration

HSUPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting * :
   i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
   ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
   iii. Set Cell Power = -86 dBm
   iv. Set Channel Type = 12.2k + HSPA
   v. Set UE Target Power
   vi. Power Ctrl Mode= Alternating bits
   vii. Set and observe the E-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
d. The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 5) (Note 6)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 6)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed}1: 47/15 β_{ed}2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.
Note 6: β_{ed} can not be set directly, it is set by Absolute Grant Value.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set RMC 12.2Kbps + HSDPA mode.
   ii. Set Cell Power = -25 dBm
   iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
   iv. Select HSDPA Uplink Parameters
   v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
      a). Subtest 1: β_c/β_d=2/15
      b). Subtest 2: β_c/β_d=12/15
      c). Subtest 3: β_c/β_d=15/8
      d). Subtest 4: β_c/β_d=15/4
   vi. Set Delta ACK, Delta NACK and Delta CQI = 8
   vii. Set Ack-Nack Repetition Factor to 3
   viii. Set CQI Feedback Cycle (k) to 4 ms
   ix. Set CQI Repetition Factor to 2
   x. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

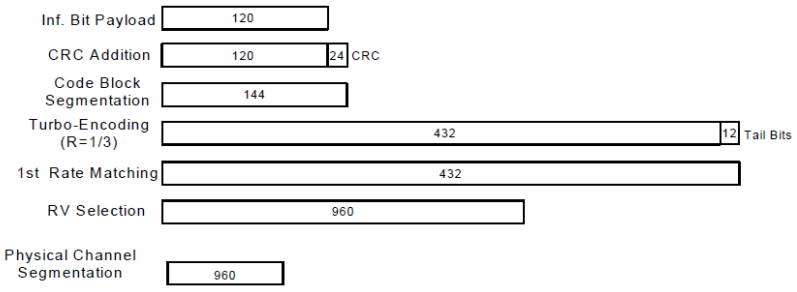


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

Default Power Mode

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.85	22.96	22.88	24.00	22.95	22.99	22.84	24.00	22.43	22.46	22.43	24.00
3GPP Rel 6	HSDPA Subtest-1	22.47	22.38	22.26	24.00	22.06	22.13	22.10	24.00	22.01	22.07	22.12	24.00
3GPP Rel 6	HSDPA Subtest-2	22.32	22.50	22.37	24.00	22.04	22.09	22.22	24.00	22.10	22.01	22.02	24.00
3GPP Rel 6	HSDPA Subtest-3	22.10	21.94	21.69	23.50	21.54	21.80	21.57	23.50	21.58	21.48	21.81	23.50
3GPP Rel 6	HSDPA Subtest-4	21.84	21.86	21.70	23.50	21.63	21.93	21.57	23.50	21.51	21.45	21.82	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.25	22.39	22.18	24.00	22.20	22.50	22.00	24.00	22.15	21.93	22.11	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.36	22.50	22.17	24.00	22.08	22.58	22.10	24.00	22.09	21.89	22.11	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.68	21.86	21.71	23.50	21.52	21.97	21.61	23.50	21.48	21.58	21.51	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.04	21.98	21.89	23.50	21.84	21.99	21.57	23.50	21.52	21.41	21.52	23.50
3GPP Rel 6	HSUPA Subtest-1	22.41	22.36	22.34	24.00	22.05	22.41	22.16	24.00	22.07	22.12	22.05	24.00
3GPP Rel 6	HSUPA Subtest-2	21.67	21.71	21.57	22.00	20.63	20.96	20.55	22.00	20.88	20.76	20.70	22.00
3GPP Rel 6	HSUPA Subtest-3	21.32	21.32	21.30	23.00	21.07	21.49	21.19	23.00	20.99	20.94	21.35	23.00
3GPP Rel 6	HSUPA Subtest-4	21.57	21.80	21.52	22.00	20.68	20.93	20.64	22.00	21.25	20.93	21.43	22.00
3GPP Rel 6	HSUPA Subtest-5	22.32	22.39	22.16	24.00	22.23	22.56	22.33	24.00	22.11	22.14	22.36	24.00

Reduced Power Mode

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	13.79	13.94	13.83	14.50	16.27	16.35	16.50	17.00	18.24	18.38	18.28	19.50
3GPP Rel 6	HSDPA Subtest-1	12.77	12.96	12.81	14.50	15.35	15.44	15.36	17.00	17.52	17.54	17.62	19.50
3GPP Rel 6	HSDPA Subtest-2	12.85	12.93	12.88	14.50	15.34	15.35	15.37	17.00	17.65	17.54	17.75	19.50
3GPP Rel 6	HSDPA Subtest-3	12.26	12.43	12.36	14.00	14.85	14.82	14.84	16.50	17.13	17.05	17.14	19.00
3GPP Rel 6	HSDPA Subtest-4	12.30	12.42	12.32	14.00	14.83	14.82	14.85	16.50	17.12	17.03	17.15	19.00
3GPP Rel 8	DC-HSDPA Subtest-1	12.70	12.86	12.87	14.50	15.34	15.37	15.36	17.00	17.54	17.50	17.60	19.50
3GPP Rel 8	DC-HSDPA Subtest-2	12.72	12.87	12.89	14.50	15.35	15.36	15.34	17.00	17.63	17.56	17.63	19.50
3GPP Rel 8	DC-HSDPA Subtest-3	12.33	12.41	12.36	14.00	14.82	14.85	14.83	16.50	17.11	17.08	17.17	19.00
3GPP Rel 8	DC-HSDPA Subtest-4	12.24	12.39	12.32	14.00	14.82	14.87	14.83	16.50	17.08	17.05	17.12	19.00
3GPP Rel 6	HSUPA Subtest-1	11.56	11.52	11.54	13.50	14.03	13.87	13.84	16.00	16.57	16.58	16.54	18.50
3GPP Rel 6	HSUPA Subtest-2	11.50	11.65	11.58	13.50	14.34	14.22	14.35	16.00	15.82	15.71	15.77	17.50
3GPP Rel 6	HSUPA Subtest-3	11.79	11.85	11.88	13.50	14.59	14.43	14.50	16.00	16.13	16.01	16.09	17.50
3GPP Rel 6	HSUPA Subtest-4	11.77	11.93	11.90	13.50	14.64	14.47	14.66	16.00	16.27	16.14	16.27	17.50
3GPP Rel 6	HSUPA Subtest-5	12.83	12.89	12.73	13.50	15.21	15.38	15.36	16.00	17.10	16.95	17.14	18.50

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B12 / B5 / B4 / B26 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band 2 / 5 SAR test was covered by Band 25 / 26; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
    a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
    b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

Default Power Mode

<LTE Band 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	22.77	22.85	22.84	24	0
20	QPSK	1	49	22.57	22.72	22.75		
20	QPSK	1	99	22.35	22.51	22.63		
20	QPSK	50	0	21.66	21.78	21.77	23	1
20	QPSK	50	24	21.74	21.73	21.77		
20	QPSK	50	50	21.61	21.74	21.67		
20	QPSK	100	0	21.60	21.75	21.73		
20	16QAM	1	0	22.02	22.06	22.06	23	1
20	16QAM	1	49	21.79	22.03	21.98		
20	16QAM	1	99	21.64	21.72	21.88		
20	16QAM	50	0	20.68	20.76	20.62	22	2
20	16QAM	50	24	20.71	20.73	20.71		
20	16QAM	50	50	20.57	20.69	20.64		
20	16QAM	100	0	20.61	20.75	20.72		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	22.73	22.78	22.82	24	0
15	QPSK	1	37	22.59	22.60	22.79		
15	QPSK	1	74	22.49	22.58	22.68		
15	QPSK	36	0	21.67	21.72	21.69	23	1
15	QPSK	36	20	21.64	21.72	21.72		
15	QPSK	36	39	21.54	21.71	21.74		
15	QPSK	75	0	21.58	21.71	21.65		
15	16QAM	1	0	21.94	22.04	21.94	23	1
15	16QAM	1	37	21.89	22.02	21.98		
15	16QAM	1	74	21.71	21.80	21.91		
15	16QAM	36	0	20.64	20.70	20.62	22	2
15	16QAM	36	20	20.63	20.70	20.71		
15	16QAM	36	39	20.50	20.72	20.66		
15	16QAM	75	0	20.61	20.71	20.76		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	22.74	22.78	22.62	24	0
10	QPSK	1	25	22.74	22.80	22.79		
10	QPSK	1	49	22.71	22.67	22.62		
10	QPSK	25	0	21.66	21.64	21.57	23	1
10	QPSK	25	12	21.62	21.72	21.59		
10	QPSK	25	25	21.60	21.64	21.62		
10	QPSK	50	0	21.63	21.66	21.60		
10	16QAM	1	0	22.01	21.98	21.91	23	1
10	16QAM	1	25	21.91	22.04	21.93		
10	16QAM	1	49	21.88	21.89	21.83		
10	16QAM	25	0	20.68	20.64	20.54	22	2
10	16QAM	25	12	20.57	20.67	20.54		
10	16QAM	25	25	20.60	20.65	20.61		
10	16QAM	50	0	20.61	20.64	20.58		

Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	22.67	22.70	22.66	24	0
5	QPSK	1	12	22.68	22.69	22.63		
5	QPSK	1	24	22.64	22.58	22.59		
5	QPSK	12	0	21.59	21.60	21.55	23	1
5	QPSK	12	7	21.66	21.68	21.55		
5	QPSK	12	13	21.54	21.55	21.51		
5	QPSK	25	0	21.62	21.67	21.52		
5	16QAM	1	0	21.93	21.96	21.96	23	1
5	16QAM	1	12	21.92	22.05	21.95		
5	16QAM	1	24	21.90	21.83	21.89		
5	16QAM	12	0	20.62	20.62	20.55	22	2
5	16QAM	12	7	20.62	20.66	20.57		
5	16QAM	12	13	20.55	20.58	20.53		
5	16QAM	25	0	20.61	20.66	20.50		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	22.51	22.56	22.51	24	0
3	QPSK	1	8	22.54	22.61	22.53		
3	QPSK	1	14	22.59	22.56	22.57		
3	QPSK	8	0	21.51	21.60	21.48	23	1
3	QPSK	8	4	21.56	21.63	21.53		
3	QPSK	8	7	21.54	21.52	21.53		
3	QPSK	15	0	21.55	21.58	21.50		
3	16QAM	1	0	21.80	21.77	21.69	23	1
3	16QAM	1	8	21.85	21.92	21.87		
3	16QAM	1	14	21.83	21.73	21.78		
3	16QAM	8	0	20.61	20.67	20.52	22	2
3	16QAM	8	4	20.65	20.67	20.58		
3	16QAM	8	7	20.61	20.59	20.58		
3	16QAM	15	0	20.45	20.58	20.53		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	22.71	22.56	22.67	24	0
1.4	QPSK	1	3	22.63	22.67	22.66		
1.4	QPSK	1	5	22.60	22.68	22.61		
1.4	QPSK	3	0	22.49	22.54	22.52		
1.4	QPSK	3	1	22.56	22.64	22.59		
1.4	QPSK	3	3	22.49	22.61	22.57		
1.4	QPSK	6	0	21.48	21.54	21.51	23	1
1.4	16QAM	1	0	21.85	21.89	21.88	23	1
1.4	16QAM	1	3	21.88	21.95	21.94		
1.4	16QAM	1	5	21.85	21.87	21.87		
1.4	16QAM	3	0	21.56	21.61	21.55		
1.4	16QAM	3	1	21.53	21.63	21.55		
1.4	16QAM	3	3	21.54	21.65	21.57		
1.4	16QAM	6	0	20.55	20.64	20.56	22	2

<LTE Band 4>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	23.63	23.83	23.71	24	0
20	QPSK	1	49	23.59	23.64	23.60		
20	QPSK	1	99	23.48	23.49	23.46		
20	QPSK	50	0	22.64	22.73	22.70	23	1
20	QPSK	50	24	22.69	22.64	22.68		
20	QPSK	50	50	22.67	22.67	22.66		
20	QPSK	100	0	22.61	22.65	22.63		
20	16QAM	1	0	22.89	22.92	22.83	23	1
20	16QAM	1	49	22.88	22.93	22.96		
20	16QAM	1	99	22.72	22.66	22.76		
20	16QAM	50	0	21.70	21.71	21.67	22	2
20	16QAM	50	24	21.78	21.61	21.70		
20	16QAM	50	50	21.69	21.53	21.59		
20	16QAM	100	0	21.72	21.63	21.74		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	23.52	23.56	23.59	24	0
15	QPSK	1	37	23.51	23.32	23.40		
15	QPSK	1	74	23.52	23.44	23.41		
15	QPSK	36	0	22.49	22.53	22.54	23	1
15	QPSK	36	20	22.57	22.52	22.44		
15	QPSK	36	39	22.52	22.50	22.57		
15	QPSK	75	0	22.57	22.61	22.60		
15	16QAM	1	0	22.98	22.86	22.91	23	1
15	16QAM	1	37	22.94	22.66	22.86		
15	16QAM	1	74	22.80	22.75	22.73		
15	16QAM	36	0	21.64	21.52	21.51	22	2
15	16QAM	36	20	21.64	21.45	21.61		
15	16QAM	36	39	21.59	21.45	21.52		
15	16QAM	75	0	21.69	21.57	21.60		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	23.48	23.53	23.44	24	0
10	QPSK	1	25	23.55	23.62	23.59		
10	QPSK	1	49	23.48	23.33	23.48		
10	QPSK	25	0	22.58	22.46	22.40	23	1
10	QPSK	25	12	22.55	22.53	22.51		
10	QPSK	25	25	22.48	22.42	22.54		
10	QPSK	50	0	22.54	22.47	22.46		
10	16QAM	1	0	22.88	22.77	22.91	23	1
10	16QAM	1	25	22.86	22.73	22.79		
10	16QAM	1	49	22.71	22.57	22.75		
10	16QAM	25	0	21.58	21.45	21.39	22	2
10	16QAM	25	12	21.51	21.46	21.53		
10	16QAM	25	25	21.49	21.37	21.55		
10	16QAM	50	0	21.53	21.44	21.45		

Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	23.54	23.51	23.58	24	0
5	QPSK	1	12	23.56	23.44	23.57		
5	QPSK	1	24	23.45	23.39	23.61		
5	QPSK	12	0	22.53	22.44	22.63	23	1
5	QPSK	12	7	22.55	22.42	22.65		
5	QPSK	12	13	22.43	22.38	22.55		
5	QPSK	25	0	22.55	22.38	22.62		
5	16QAM	1	0	22.82	22.75	22.89	23	1
5	16QAM	1	12	22.96	22.71	22.90		
5	16QAM	1	24	22.84	22.65	22.97		
5	16QAM	12	0	21.53	21.47	21.63	22	2
5	16QAM	12	7	21.54	21.38	21.63		
5	16QAM	12	13	21.44	21.35	21.53		
5	16QAM	25	0	21.56	21.32	21.59		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	23.53	23.51	23.53	24	0
3	QPSK	1	8	23.49	23.39	23.45		
3	QPSK	1	14	23.51	23.43	23.48		
3	QPSK	8	0	22.56	22.42	22.53	23	1
3	QPSK	8	4	22.54	22.44	22.50		
3	QPSK	8	7	22.47	22.47	22.53		
3	QPSK	15	0	22.50	22.39	22.49		
3	16QAM	1	0	22.74	22.72	22.75	23	1
3	16QAM	1	8	22.78	22.71	22.84		
3	16QAM	1	14	22.82	22.62	22.80		
3	16QAM	8	0	21.64	21.44	21.60	22	2
3	16QAM	8	4	21.58	21.45	21.54		
3	16QAM	8	7	21.51	21.48	21.55		
3	16QAM	15	0	21.50	21.37	21.29		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	23.47	23.45	23.56	24	0
1.4	QPSK	1	3	23.54	23.47	23.55		
1.4	QPSK	1	5	23.50	23.53	23.59		
1.4	QPSK	3	0	23.52	23.45	23.47		
1.4	QPSK	3	1	23.54	23.51	23.55		
1.4	QPSK	3	3	23.54	23.43	23.52		
1.4	QPSK	6	0	22.42	22.33	22.50	23	1
1.4	16QAM	1	0	22.85	22.76	22.85	23	1
1.4	16QAM	1	3	22.94	22.77	22.95		
1.4	16QAM	1	5	22.84	22.78	22.84		
1.4	16QAM	3	0	22.58	22.48	22.59		
1.4	16QAM	3	1	22.58	22.50	22.57		
1.4	16QAM	3	3	22.63	22.45	22.60		
1.4	16QAM	6	0	21.51	21.40	21.57	22	2

<LTE Band 5>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	22.20	22.38	22.24	24	0
10	QPSK	1	25	22.30	22.32	22.35		
10	QPSK	1	49	22.14	22.00	22.37		
10	QPSK	25	0	21.03	21.25	21.14	23	1
10	QPSK	25	12	21.19	21.15	21.23		
10	QPSK	25	25	21.16	21.02	21.24		
10	QPSK	50	0	21.15	21.20	21.11		
10	16QAM	1	0	21.54	21.63	21.58	23	1
10	16QAM	1	25	21.53	21.53	21.58		
10	16QAM	1	49	21.43	21.24	21.57		
10	16QAM	25	0	20.06	20.14	20.17	22	2
10	16QAM	25	12	20.21	20.19	20.20		
10	16QAM	25	25	20.19	20.04	20.22		
10	16QAM	50	0	20.14	20.07	20.22		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	22.36	22.12	22.13	24	0
5	QPSK	1	12	22.35	22.10	22.06		
5	QPSK	1	24	22.19	22.14	22.23		
5	QPSK	12	0	21.27	21.05	21.13	23	1
5	QPSK	12	7	21.35	21.13	21.18		
5	QPSK	12	13	21.24	21.06	21.14		
5	QPSK	25	0	21.24	21.13	21.16		
5	16QAM	1	0	21.67	21.36	21.38	23	1
5	16QAM	1	12	21.73	21.50	21.50		
5	16QAM	1	24	21.47	21.44	21.53		
5	16QAM	12	0	20.30	20.11	20.18	22	2
5	16QAM	12	7	20.32	20.20	20.24		
5	16QAM	12	13	20.20	20.19	20.21		
5	16QAM	25	0	20.25	20.19	20.12		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	22.35	22.14	22.24	24	0
3	QPSK	1	8	22.25	22.19	22.31		
3	QPSK	1	14	22.30	22.12	22.22		
3	QPSK	8	0	21.26	21.07	21.14	23	1
3	QPSK	8	4	21.36	21.15	21.29		
3	QPSK	8	7	21.24	21.07	21.27		
3	QPSK	15	0	21.34	21.07	21.23		
3	16QAM	1	0	21.57	21.34	21.36	23	1
3	16QAM	1	8	21.62	21.44	21.55		
3	16QAM	1	14	21.59	21.38	21.49		
3	16QAM	8	0	20.33	20.14	20.15	22	2
3	16QAM	8	4	20.37	20.22	20.28		
3	16QAM	8	7	20.29	20.17	20.30		
3	16QAM	15	0	20.35	20.12	20.24		

Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	22.32	22.21	22.28	24	0
1.4	QPSK	1	3	22.35	22.20	22.22		
1.4	QPSK	1	5	22.35	22.15	22.36		
1.4	QPSK	3	0	22.30	22.07	22.31		
1.4	QPSK	3	1	22.35	22.14	22.29		
1.4	QPSK	3	3	22.30	22.08	22.23		
1.4	QPSK	6	0	21.24	21.03	21.17	23	1
1.4	16QAM	1	0	21.71	21.47	21.63	23	1
1.4	16QAM	1	3	21.64	21.46	21.61		
1.4	16QAM	1	5	21.76	21.50	21.58		
1.4	16QAM	3	0	21.36	21.09	21.25		
1.4	16QAM	3	1	21.39	21.14	21.29		
1.4	16QAM	3	3	21.36	21.10	21.26		
1.4	16QAM	6	0	20.33	20.15	20.27	22	2

<LTE Band 7>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	21.68	21.80	21.53	23	0
20	QPSK	1	49	21.67	21.79	21.59		
20	QPSK	1	99	21.63	21.64	21.48		
20	QPSK	50	0	20.69	20.90	20.54	22	1
20	QPSK	50	24	20.67	20.87	20.62		
20	QPSK	50	50	20.75	20.84	20.58		
20	QPSK	100	0	20.72	20.79	20.52		
20	16QAM	1	0	20.95	21.08	20.83	22	1
20	16QAM	1	49	20.96	21.16	20.90		
20	16QAM	1	99	20.93	20.94	20.78		
20	16QAM	50	0	19.74	19.85	19.55	21	2
20	16QAM	50	24	19.72	19.89	19.61		
20	16QAM	50	50	19.76	19.87	19.59		
20	16QAM	100	0	19.74	19.83	19.54		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	21.46	21.71	21.27	23	0
15	QPSK	1	37	21.59	21.76	21.63		
15	QPSK	1	74	21.49	21.60	21.33		
15	QPSK	36	0	20.56	20.71	20.27	22	1
15	QPSK	36	20	20.69	20.75	20.45		
15	QPSK	36	39	20.56	20.71	20.43		
15	QPSK	75	0	20.56	20.68	20.41		
15	16QAM	1	0	20.77	21.01	20.57	22	1
15	16QAM	1	37	20.99	21.03	20.76		
15	16QAM	1	74	20.80	20.92	20.65		
15	16QAM	36	0	19.57	19.74	19.25	21	2
15	16QAM	36	20	19.65	19.74	19.41		
15	16QAM	36	39	19.57	19.70	19.39		
15	16QAM	75	0	19.56	19.65	19.39		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	21.41	21.73	21.41	23	0
10	QPSK	1	25	21.73	21.72	21.55		
10	QPSK	1	49	21.53	21.70	21.40		
10	QPSK	25	0	20.47	20.74	20.34	22	1
10	QPSK	25	12	20.58	20.72	20.41		
10	QPSK	25	25	20.51	20.68	20.43		
10	QPSK	50	0	20.53	20.67	20.38		
10	16QAM	1	0	20.74	21.06	20.74	22	1
10	16QAM	1	25	20.93	21.06	20.77		
10	16QAM	1	49	20.87	21.05	20.73		
10	16QAM	25	0	19.49	19.71	19.35	21	2
10	16QAM	25	12	19.62	19.69	19.42		
10	16QAM	25	25	19.48	19.69	19.43		
10	16QAM	50	0	19.54	19.63	19.36		

Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	21.52	21.76	21.40	23	0
5	QPSK	1	12	21.51	21.76	21.47		
5	QPSK	1	24	21.60	21.73	21.40		
5	QPSK	12	0	20.52	20.64	20.34	22	1
5	QPSK	12	7	20.54	20.73	20.42		
5	QPSK	12	13	20.55	20.70	20.35		
5	QPSK	25	0	20.47	20.70	20.39		
5	16QAM	1	0	20.75	21.04	20.69	22	1
5	16QAM	1	12	20.87	21.07	20.83		
5	16QAM	1	24	20.90	21.04	20.74		
5	16QAM	12	0	19.54	19.72	19.44	21	2
5	16QAM	12	7	19.55	19.78	19.48		
5	16QAM	12	13	19.58	19.76	19.44		
5	16QAM	25	0	19.51	19.73	19.40		

<LTE Band 12>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	22.97	23.00	22.84	24	0
10	QPSK	1	25	22.96	22.98	22.99		
10	QPSK	1	49	22.91	22.98	22.82		
10	QPSK	25	0	21.93	22.00	21.77	23	1
10	QPSK	25	12	21.90	21.86	21.76		
10	QPSK	25	25	21.77	21.76	21.75		
10	QPSK	50	0	21.84	21.92	21.72		
10	16QAM	1	0	22.22	22.14	22.13	23	1
10	16QAM	1	25	22.28	22.17	22.15		
10	16QAM	1	49	22.11	22.14	22.09		
10	16QAM	25	0	20.89	20.81	20.79	22	2
10	16QAM	25	12	20.91	20.87	20.77		
10	16QAM	25	25	20.83	20.75	20.72		
10	16QAM	50	0	20.92	20.82	20.72		
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	22.95	22.82	22.72	24	0
5	QPSK	1	12	22.94	22.69	22.67		
5	QPSK	1	24	22.79	22.73	22.68		
5	QPSK	12	0	21.77	21.72	21.59	23	1
5	QPSK	12	7	21.83	21.68	21.71		
5	QPSK	12	13	21.77	21.69	21.57		
5	QPSK	25	0	21.87	21.69	21.70		
5	16QAM	1	0	22.17	22.04	21.93	23	1
5	16QAM	1	12	22.40	22.11	22.18		
5	16QAM	1	24	22.10	21.99	21.95		
5	16QAM	12	0	20.75	20.74	20.59	22	2
5	16QAM	12	7	20.78	20.69	20.72		
5	16QAM	12	13	20.79	20.69	20.64		
5	16QAM	25	0	20.88	20.72	20.65		
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	22.92	22.78	22.69	24	0
3	QPSK	1	8	22.85	22.70	22.73		
3	QPSK	1	14	22.83	22.66	22.65		
3	QPSK	8	0	21.82	21.67	21.70	23	1
3	QPSK	8	4	21.89	21.68	21.66		
3	QPSK	8	7	21.78	21.64	21.69		
3	QPSK	15	0	21.88	21.67	21.69		
3	16QAM	1	0	22.12	22.01	21.88	23	1
3	16QAM	1	8	22.12	21.91	21.89		
3	16QAM	1	14	22.11	21.89	21.95		
3	16QAM	8	0	20.91	20.73	20.75	22	2
3	16QAM	8	4	20.94	20.76	20.68		
3	16QAM	8	7	20.83	20.71	20.71		
3	16QAM	15	0	20.85	20.70	20.71		

Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	22.88	22.80	22.77	24	0
1.4	QPSK	1	3	22.86	22.80	22.78		
1.4	QPSK	1	5	22.83	22.80	22.74		
1.4	QPSK	3	0	22.65	22.68	22.62		
1.4	QPSK	3	1	22.69	22.75	22.73		
1.4	QPSK	3	3	22.62	22.69	22.65		
1.4	QPSK	6	0	21.60	21.64	21.62	23	1
1.4	16QAM	1	0	22.04	22.08	22.04	23	1
1.4	16QAM	1	3	22.06	22.09	22.05		
1.4	16QAM	1	5	22.13	22.09	22.09		
1.4	16QAM	3	0	21.73	21.73	21.65		
1.4	16QAM	3	1	21.63	21.70	21.66		
1.4	16QAM	3	3	21.66	21.72	21.69		
1.4	16QAM	6	0	20.66	20.72	20.67	22	2

<LTE Band 13>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23230				
Frequency (MHz)				782				
10	QPSK	1	0	22.57			24	0
10	QPSK	1	25	22.53				
10	QPSK	1	49	22.44				
10	QPSK	25	0	21.45			23	1
10	QPSK	25	12	21.42				
10	QPSK	25	25	21.34				
10	QPSK	50	0	21.15				
10	16QAM	1	0	21.59			23	1
10	16QAM	1	25	21.81				
10	16QAM	1	49	21.74				
10	16QAM	25	0	20.39			22	2
10	16QAM	25	12	20.44				
10	16QAM	25	25	20.36				
10	16QAM	50	0	20.44				
Channel				23205	23230	23255	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				779.5	782	784.5		
5	QPSK	1	0	22.17	22.45	22.55	24	0
5	QPSK	1	12	22.50	22.43	22.46		
5	QPSK	1	24	22.51	22.34	22.51		
5	QPSK	12	0	21.49	21.38	21.45	23	1
5	QPSK	12	7	21.49	21.46	21.54		
5	QPSK	12	13	21.50	21.42	21.47		
5	QPSK	25	0	21.51	21.36	21.49		
5	16QAM	1	0	21.46	21.67	21.79	23	1
5	16QAM	1	12	21.84	21.84	21.85		
5	16QAM	1	24	21.74	21.63	21.83		
5	16QAM	12	0	20.42	20.37	20.49	22	2
5	16QAM	12	7	20.49	20.41	20.59		
5	16QAM	12	13	20.48	20.44	20.58		
5	16QAM	25	0	20.53	20.43	20.45		

<LTE Band 25>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26140	26340	26590		
Frequency (MHz)				1860	1880	1905		
20	QPSK	1	0	22.85	23.00	22.99	24	0
20	QPSK	1	49	22.79	22.67	22.90		
20	QPSK	1	99	22.66	22.54	22.67		
20	QPSK	50	0	21.78	21.88	21.86	23	1
20	QPSK	50	24	21.85	21.77	21.81		
20	QPSK	50	50	21.83	21.72	21.76		
20	QPSK	100	0	21.71	21.92	21.90		
20	16QAM	1	0	22.12	22.22	22.23	23	1
20	16QAM	1	49	22.13	21.97	22.18		
20	16QAM	1	99	21.98	21.76	21.96		
20	16QAM	50	0	20.75	20.85	20.88	22	2
20	16QAM	50	24	20.77	20.78	20.83		
20	16QAM	50	50	20.76	20.73	20.75		
20	16QAM	100	0	20.73	20.82	20.82		
Channel				26115	26340	26615	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1907.5		
15	QPSK	1	0	22.80	22.87	22.83	24	0
15	QPSK	1	37	22.84	22.80	22.85		
15	QPSK	1	74	22.71	22.64	22.80		
15	QPSK	36	0	21.72	21.79	21.84	23	1
15	QPSK	36	20	21.79	21.86	21.82		
15	QPSK	36	39	21.75	21.71	21.80		
15	QPSK	75	0	21.65	21.80	21.87		
15	16QAM	1	0	22.06	22.13	22.21	23	1
15	16QAM	1	37	21.99	21.96	22.09		
15	16QAM	1	74	21.99	21.88	22.04		
15	16QAM	36	0	20.74	20.81	20.77	22	2
15	16QAM	36	20	20.82	20.90	20.76		
15	16QAM	36	39	20.74	20.75	20.78		
15	16QAM	75	0	20.67	20.81	20.82		
Channel				26090	26340	26640	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1910		
10	QPSK	1	0	22.75	22.88	22.79	24	0
10	QPSK	1	25	22.79	22.85	22.75		
10	QPSK	1	49	22.55	22.57	22.68		
10	QPSK	25	0	21.52	21.67	21.69	23	1
10	QPSK	25	12	21.48	21.59	21.72		
10	QPSK	25	25	21.50	21.60	21.70		
10	QPSK	50	0	21.57	21.60	21.69		
10	16QAM	1	0	21.96	22.04	22.03	23	1
10	16QAM	1	25	21.84	21.97	21.97		
10	16QAM	1	49	21.74	21.78	22.01		
10	16QAM	25	0	20.53	20.69	20.70	22	2
10	16QAM	25	12	20.52	20.61	20.68		
10	16QAM	25	25	20.55	20.62	20.69		
10	16QAM	50	0	20.56	20.60	20.65		

Channel				26065	26340	26665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1912.5		
5	QPSK	1	0	22.62	22.63	22.66	24	0
5	QPSK	1	12	22.61	22.59	22.65		
5	QPSK	1	24	22.46	22.60	22.68		
5	QPSK	12	0	21.53	21.53	21.55	23	1
5	QPSK	12	7	21.55	21.59	21.66		
5	QPSK	12	13	21.45	21.55	21.73		
5	QPSK	25	0	21.49	21.55	21.68		
5	16QAM	1	0	21.90	22.05	21.94	23	1
5	16QAM	1	12	21.84	21.85	22.08		
5	16QAM	1	24	21.71	21.85	21.97		
5	16QAM	12	0	20.64	20.62	20.58	22	2
5	16QAM	12	7	20.61	20.67	20.68		
5	16QAM	12	13	20.51	20.65	20.75		
5	16QAM	25	0	20.53	20.58	20.68		
Channel				26055	26340	26675	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1913.5		
3	QPSK	1	0	22.66	22.71	22.66	24	0
3	QPSK	1	8	22.54	22.57	22.53		
3	QPSK	1	14	22.58	22.67	22.54		
3	QPSK	8	0	21.64	21.63	21.63	23	1
3	QPSK	8	4	21.63	21.66	21.68		
3	QPSK	8	7	21.49	21.64	21.55		
3	QPSK	15	0	21.46	21.56	21.63		
3	16QAM	1	0	21.84	21.91	21.76	23	1
3	16QAM	1	8	21.89	21.94	21.89		
3	16QAM	1	14	21.77	21.85	21.81		
3	16QAM	8	0	20.73	20.71	20.69	22	2
3	16QAM	8	4	20.74	20.72	20.71		
3	16QAM	8	7	20.56	20.69	20.63		
3	16QAM	15	0	20.50	20.56	20.67		
Channel				26047	26340	26683	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1914.3		
1.4	QPSK	1	0	22.71	22.68	22.69	24	0
1.4	QPSK	1	3	22.63	22.64	22.72		
1.4	QPSK	1	5	22.51	22.66	22.61		
1.4	QPSK	3	0	22.52	22.61	22.56		
1.4	QPSK	3	1	22.58	22.62	22.67		
1.4	QPSK	3	3	22.44	22.55	22.54		
1.4	QPSK	6	0	21.51	21.50	21.55	23	1
1.4	16QAM	1	0	21.89	22.04	22.00	23	1
1.4	16QAM	1	3	21.88	21.88	22.00		
1.4	16QAM	1	5	21.82	21.92	21.94		
1.4	16QAM	3	0	21.51	21.64	21.64		
1.4	16QAM	3	1	21.67	21.72	21.66		
1.4	16QAM	3	3	21.57	21.61	21.58		
1.4	16QAM	6	0	20.63	20.69	20.66	22	2

<LTE Band 26>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	22.52	22.61	22.26	24	0
15	QPSK	1	37	22.36	22.13	22.21		
15	QPSK	1	74	22.22	22.24	22.21		
15	QPSK	36	0	21.58	21.60	21.37	23	1
15	QPSK	36	20	21.56	21.38	21.33		
15	QPSK	36	39	21.41	21.19	21.27		
15	QPSK	75	0	21.42	21.45	21.39		
15	16QAM	1	0	21.68	21.91	21.46	23	1
15	16QAM	1	37	21.55	21.88	21.52		
15	16QAM	1	74	21.58	21.53	21.48		
15	16QAM	36	0	20.41	20.58	20.21	22	2
15	16QAM	36	20	20.38	20.53	20.34		
15	16QAM	36	39	20.19	20.39	20.35		
15	16QAM	75	0	20.33	20.60	20.42		
Channel				26740	26865	26990	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	22.35	22.57	22.29	24	0
10	QPSK	1	25	22.39	22.58	22.43		
10	QPSK	1	49	22.20	22.38	22.25		
10	QPSK	25	0	21.23	21.53	21.29	23	1
10	QPSK	25	12	21.21	21.43	21.34		
10	QPSK	25	25	21.18	21.45	21.23		
10	QPSK	50	0	21.20	21.51	21.31		
10	16QAM	1	0	21.67	21.91	21.65	23	1
10	16QAM	1	25	21.61	21.84	21.71		
10	16QAM	1	49	21.51	21.72	21.51		
10	16QAM	25	0	20.24	20.54	20.28	22	2
10	16QAM	25	12	20.20	20.38	20.33		
10	16QAM	25	25	20.11	20.43	20.21		
10	16QAM	50	0	20.20	20.47	20.29		
Channel				26715	26865	27015	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	22.23	22.53	22.33	24	0
5	QPSK	1	12	22.17	22.52	22.33		
5	QPSK	1	24	22.17	22.43	22.27		
5	QPSK	12	0	21.10	21.58	21.21	23	1
5	QPSK	12	7	21.24	21.60	21.26		
5	QPSK	12	13	21.13	21.52	21.22		
5	QPSK	25	0	21.18	21.57	21.26		
5	16QAM	1	0	21.51	21.99	21.62	23	1
5	16QAM	1	12	21.62	21.98	21.65		
5	16QAM	1	24	21.49	21.87	21.54		
5	16QAM	12	0	20.14	20.61	20.25	22	2
5	16QAM	12	7	20.22	20.58	20.32		
5	16QAM	12	13	20.13	20.54	20.28		
5	16QAM	25	0	20.19	20.60	20.23		

Channel				26705	26865	27025	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	22.25	22.57	22.28	24	0
3	QPSK	1	8	22.25	22.53	22.34		
3	QPSK	1	14	22.20	22.54	22.25		
3	QPSK	8	0	21.22	21.66	21.25	23	1
3	QPSK	8	4	21.24	21.66	21.33		
3	QPSK	8	7	21.17	21.56	21.28		
3	QPSK	15	0	21.19	21.60	21.27		
3	16QAM	1	0	21.49	21.89	21.55	23	1
3	16QAM	1	8	21.52	21.86	21.60		
3	16QAM	1	14	21.42	21.85	21.54		
3	16QAM	8	0	20.24	20.72	20.28	22	2
3	16QAM	8	4	20.27	20.72	20.34		
3	16QAM	8	7	20.23	20.62	20.30		
3	16QAM	15	0	20.21	20.64	20.27		
Channel				26697	26865	27033	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	22.15	22.40	22.17	24	0
1.4	QPSK	1	3	22.14	22.39	22.17		
1.4	QPSK	1	5	22.07	22.37	22.11		
1.4	QPSK	3	0	22.00	22.37	22.11		
1.4	QPSK	3	1	22.07	22.29	22.16		
1.4	QPSK	3	3	22.03	22.39	22.11		
1.4	QPSK	6	0	21.00	21.38	21.05	23	1
1.4	16QAM	1	0	21.51	21.84	21.48	23	1
1.4	16QAM	1	3	21.43	21.80	21.46		
1.4	16QAM	1	5	21.42	21.76	21.43		
1.4	16QAM	3	0	21.03	21.44	21.11		
1.4	16QAM	3	1	21.06	21.53	21.19		
1.4	16QAM	3	3	21.08	21.51	21.14		
1.4	16QAM	6	0	20.08	20.53	20.17	22	2

Reduced Power Mode

<LTE Band 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	13.54	13.65	13.56	15	0
20	QPSK	1	49	13.31	13.46	13.43		
20	QPSK	1	99	13.29	13.30	13.35		
20	QPSK	50	0	13.54	13.60	13.51	15	0
20	QPSK	50	24	13.53	13.53	13.43		
20	QPSK	50	50	13.45	13.49	13.44		
20	QPSK	100	0	13.47	13.52	13.50		
20	16QAM	1	0	13.63	13.60	13.64	15	0
20	16QAM	1	49	13.48	13.57	13.62		
20	16QAM	1	99	13.44	13.55	13.58		
20	16QAM	50	0	13.56	13.55	13.40	15	0
20	16QAM	50	24	13.57	13.53	13.48		
20	16QAM	50	50	13.44	13.52	13.45		
20	16QAM	100	0	13.49	13.53	13.51		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	13.48	13.57	13.54	15	0
15	QPSK	1	37	13.23	13.43	13.33		
15	QPSK	1	74	13.29	13.23	13.30		
15	QPSK	36	0	13.52	13.59	13.50	15	0
15	QPSK	36	20	13.46	13.49	13.38		
15	QPSK	36	39	13.36	13.46	13.43		
15	QPSK	75	0	13.45	13.49	13.48		
15	16QAM	1	0	13.62	13.56	13.54	15	0
15	16QAM	1	37	13.41	13.52	13.53		
15	16QAM	1	74	13.43	13.52	13.49		
15	16QAM	36	0	13.50	13.48	13.31	15	0
15	16QAM	36	20	13.53	13.48	13.46		
15	16QAM	36	39	13.41	13.51	13.40		
15	16QAM	75	0	13.41	13.53	13.46		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	13.44	13.60	13.49	15	0
10	QPSK	1	25	13.31	13.36	13.37		
10	QPSK	1	49	13.25	13.27	13.34		
10	QPSK	25	0	13.49	13.60	13.42	15	0
10	QPSK	25	12	13.46	13.43	13.37		
10	QPSK	25	25	13.40	13.41	13.40		
10	QPSK	50	0	13.45	13.43	13.41		
10	16QAM	1	0	13.56	13.58	13.60	15	0
10	16QAM	1	25	13.41	13.52	13.62		
10	16QAM	1	49	13.36	13.51	13.58		
10	16QAM	25	0	13.48	13.54	13.34	15	0
10	16QAM	25	12	13.47	13.49	13.40		
10	16QAM	25	25	13.43	13.43	13.37		
10	16QAM	50	0	13.49	13.52	13.41		

Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	13.53	13.62	13.50	15	0
5	QPSK	1	12	13.30	13.37	13.42		
5	QPSK	1	24	13.22	13.28	13.33		
5	QPSK	12	0	13.46	13.58	13.49	15	0
5	QPSK	12	7	13.49	13.45	13.40		
5	QPSK	12	13	13.45	13.47	13.35		
5	QPSK	25	0	13.46	13.42	13.50		
5	16QAM	1	0	13.62	13.51	13.56	15	0
5	16QAM	1	12	13.43	13.55	13.55		
5	16QAM	1	24	13.44	13.45	13.55		
5	16QAM	12	0	13.55	13.51	13.39	15	0
5	16QAM	12	7	13.57	13.43	13.39		
5	16QAM	12	13	13.44	13.52	13.40		
5	16QAM	25	0	13.42	13.53	13.45		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	13.48	13.64	13.50	15	0
3	QPSK	1	8	13.29	13.40	13.40		
3	QPSK	1	14	13.22	13.24	13.34		
3	QPSK	8	0	13.53	13.59	13.50	15	0
3	QPSK	8	4	13.47	13.44	13.36		
3	QPSK	8	7	13.45	13.44	13.40		
3	QPSK	15	0	13.38	13.44	13.47		
3	16QAM	1	0	13.59	13.56	13.61	15	0
3	16QAM	1	8	13.46	13.51	13.56		
3	16QAM	1	14	13.42	13.50	13.57		
3	16QAM	8	0	13.55	13.45	13.36	15	0
3	16QAM	8	4	13.51	13.48	13.41		
3	16QAM	8	7	13.34	13.43	13.39		
3	16QAM	15	0	13.43	13.48	13.51		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	13.49	13.64	13.50	15	0
1.4	QPSK	1	3	13.27	13.45	13.33		
1.4	QPSK	1	5	13.28	13.28	13.33		
1.4	QPSK	3	0	13.54	13.53	13.48		
1.4	QPSK	3	1	13.48	13.50	13.38		
1.4	QPSK	3	3	13.44	13.47	13.42		
1.4	QPSK	6	0	13.42	13.50	13.43	15	0
1.4	16QAM	1	0	13.62	13.60	13.64	15	0
1.4	16QAM	1	3	13.41	13.48	13.56		
1.4	16QAM	1	5	13.38	13.46	13.54		
1.4	16QAM	3	0	13.56	13.55	13.31		
1.4	16QAM	3	1	13.54	13.45	13.47		
1.4	16QAM	3	3	13.44	13.52	13.42		
1.4	16QAM	6	0	13.39	13.45	13.43	15	0

<LTE Band 4>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	16.65	16.80	16.67	17.5	0
20	QPSK	1	49	16.60	16.46	16.44		
20	QPSK	1	99	16.33	16.34	16.43		
20	QPSK	50	0	16.63	16.65	16.58	17.5	0
20	QPSK	50	24	16.50	16.50	16.53		
20	QPSK	50	50	16.51	16.42	16.49		
20	QPSK	100	0	16.48	16.60	16.59		
20	16QAM	1	0	16.70	16.77	16.76	17.5	0
20	16QAM	1	49	16.73	16.72	16.69		
20	16QAM	1	99	16.60	16.51	16.56		
20	16QAM	50	0	16.57	16.55	16.56	17.5	0
20	16QAM	50	24	16.57	16.51	16.58		
20	16QAM	50	50	16.48	16.45	16.45		
20	16QAM	100	0	16.52	16.50	16.61		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	16.59	16.75	16.61	17.5	0
15	QPSK	1	37	16.58	16.43	16.40		
15	QPSK	1	74	16.31	16.30	16.41		
15	QPSK	36	0	16.60	16.57	16.55	17.5	0
15	QPSK	36	20	16.50	16.42	16.53		
15	QPSK	36	39	16.42	16.40	16.49		
15	QPSK	75	0	16.46	16.56	16.49		
15	16QAM	1	0	16.67	16.74	16.71	17.5	0
15	16QAM	1	37	16.66	16.62	16.69		
15	16QAM	1	74	16.60	16.45	16.55		
15	16QAM	36	0	16.47	16.47	16.56	17.5	0
15	16QAM	36	20	16.54	16.42	16.51		
15	16QAM	36	39	16.44	16.42	16.39		
15	16QAM	75	0	16.48	16.40	16.58		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	16.60	16.76	16.57	17.5	0
10	QPSK	1	25	16.51	16.42	16.35		
10	QPSK	1	49	16.31	16.31	16.34		
10	QPSK	25	0	16.54	16.58	16.55	17.5	0
10	QPSK	25	12	16.49	16.40	16.43		
10	QPSK	25	25	16.50	16.38	16.45		
10	QPSK	50	0	16.43	16.60	16.59		
10	16QAM	1	0	16.63	16.70	16.66	17.5	0
10	16QAM	1	25	16.68	16.68	16.64		
10	16QAM	1	49	16.59	16.48	16.49		
10	16QAM	25	0	16.47	16.55	16.51	17.5	0
10	16QAM	25	12	16.47	16.51	16.54		
10	16QAM	25	25	16.43	16.45	16.35		
10	16QAM	50	0	16.50	16.50	16.61		

Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	16.57	16.73	16.59	17.5	0
5	QPSK	1	12	16.51	16.44	16.34		
5	QPSK	1	24	16.32	16.30	16.33		
5	QPSK	12	0	16.57	16.61	16.51	17.5	0
5	QPSK	12	7	16.49	16.48	16.46		
5	QPSK	12	13	16.44	16.34	16.41		
5	QPSK	25	0	16.48	16.51	16.52		
5	16QAM	1	0	16.62	16.69	16.71	17.5	0
5	16QAM	1	12	16.68	16.69	16.69		
5	16QAM	1	24	16.60	16.44	16.55		
5	16QAM	12	0	16.50	16.49	16.50	17.5	0
5	16QAM	12	7	16.56	16.47	16.49		
5	16QAM	12	13	16.43	16.41	16.40		
5	16QAM	25	0	16.46	16.49	16.61		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	16.55	16.79	16.62	17.5	0
3	QPSK	1	8	16.59	16.46	16.39		
3	QPSK	1	14	16.34	16.36	16.40		
3	QPSK	8	0	16.55	16.61	16.49	17.5	0
3	QPSK	8	4	16.46	16.48	16.43		
3	QPSK	8	7	16.43	16.41	16.44		
3	QPSK	15	0	16.46	16.56	16.56		
3	16QAM	1	0	16.65	16.77	16.66	17.5	0
3	16QAM	1	8	16.65	16.68	16.64		
3	16QAM	1	14	16.55	16.47	16.47		
3	16QAM	8	0	16.54	16.50	16.48	17.5	0
3	16QAM	8	4	16.48	16.41	16.52		
3	16QAM	8	7	16.38	16.44	16.43		
3	16QAM	15	0	16.43	16.43	16.56		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	16.65	16.79	16.60	17.5	0
1.4	QPSK	1	3	16.53	16.45	16.37		
1.4	QPSK	1	5	16.30	16.36	16.41		
1.4	QPSK	3	0	16.57	16.59	16.54		
1.4	QPSK	3	1	16.50	16.43	16.52		
1.4	QPSK	3	3	16.50	16.38	16.48		
1.4	QPSK	6	0	16.48	16.55	16.59	17.5	0
1.4	16QAM	1	0	16.61	16.73	16.71	17.5	0
1.4	16QAM	1	3	16.66	16.70	16.63		
1.4	16QAM	1	5	16.55	16.43	16.49		
1.4	16QAM	3	0	16.56	16.55	16.49		
1.4	16QAM	3	1	16.54	16.41	16.56		
1.4	16QAM	3	3	16.48	16.41	16.37		
1.4	16QAM	6	0	16.42	16.40	16.55	17.5	0

<LTE Band 5>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	18.19	18.38	18.18	20	0
10	QPSK	1	25	18.18	18.14	18.31		
10	QPSK	1	49	18.02	18.06	18.25		
10	QPSK	25	0	18.05	18.16	18.07	20	0
10	QPSK	25	12	18.07	18.10	18.15		
10	QPSK	25	25	18.05	18.10	18.14		
10	QPSK	50	0	18.09	18.04	18.14		
10	16QAM	1	0	18.33	18.35	18.37	20	0
10	16QAM	1	25	18.30	18.36	18.32		
10	16QAM	1	49	18.07	18.29	18.28		
10	16QAM	25	0	18.07	18.01	18.09	20	0
10	16QAM	25	12	18.11	18.15	18.06		
10	16QAM	25	25	18.10	18.12	18.05		
10	16QAM	50	0	18.20	18.03	18.05		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	18.18	18.35	18.08	20	0
5	QPSK	1	12	18.14	18.09	18.23		
5	QPSK	1	24	18.05	18.01	18.19		
5	QPSK	12	0	18.04	18.00	18.09	20	0
5	QPSK	12	7	18.01	18.05	18.09		
5	QPSK	12	13	18.03	18.00	18.09		
5	QPSK	25	0	18.07	18.07	18.07		
5	16QAM	1	0	18.29	18.32	18.30	20	0
5	16QAM	1	12	18.20	18.31	18.30		
5	16QAM	1	24	18.00	18.23	18.22		
5	16QAM	12	0	18.03	18.04	18.09	20	0
5	16QAM	12	7	18.01	18.08	18.05		
5	16QAM	12	13	18.02	18.12	18.07		
5	16QAM	25	0	18.14	18.16	18.15		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	18.14	18.36	18.10	20	0
3	QPSK	1	8	18.14	18.07	18.26		
3	QPSK	1	14	18.09	18.04	18.18		
3	QPSK	8	0	18.05	18.08	18.09	20	0
3	QPSK	8	4	18.04	18.07	18.06		
3	QPSK	8	7	18.00	18.04	18.13		
3	QPSK	15	0	18.06	18.02	18.12		
3	16QAM	1	0	18.24	18.32	18.27	20	0
3	16QAM	1	8	18.21	18.36	18.32		
3	16QAM	1	14	18.05	18.28	18.18		
3	16QAM	8	0	18.09	18.08	18.09	20	0
3	16QAM	8	4	18.11	18.10	18.07		
3	16QAM	8	7	18.02	18.12	18.08		
3	16QAM	15	0	18.12	18.04	18.08		

Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	18.17	18.32	18.13	20	0
1.4	QPSK	1	3	18.09	18.04	18.29		
1.4	QPSK	1	5	18.07	18.03	18.19		
1.4	QPSK	3	0	18.06	18.07	18.09		
1.4	QPSK	3	1	18.02	18.02	18.13		
1.4	QPSK	3	3	18.08	18.06	18.14		
1.4	QPSK	6	0	18.03	18.08	18.09	20	0
1.4	16QAM	1	0	18.24	18.33	18.33	20	0
1.4	16QAM	1	3	18.25	18.26	18.29		
1.4	16QAM	1	5	18.18	18.25	18.28		
1.4	16QAM	3	0	18.07	18.03	18.07		
1.4	16QAM	3	1	18.05	18.07	18.04		
1.4	16QAM	3	3	18.04	18.03	18.04		
1.4	16QAM	6	0	18.11	18.15	18.05	20	0

<LTE Band 7>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	15.83	15.98	15.71	16	0
20	QPSK	1	49	15.80	15.93	15.69		
20	QPSK	1	99	15.75	15.89	15.60		
20	QPSK	50	0	15.81	15.85	15.65	16	0
20	QPSK	50	24	15.85	15.89	15.71		
20	QPSK	50	50	15.88	15.92	15.73		
20	QPSK	100	0	15.83	15.79	15.62		
20	16QAM	1	0	15.81	15.95	15.65	16	0
20	16QAM	1	49	15.79	15.92	15.61		
20	16QAM	1	99	15.72	15.87	15.57		
20	16QAM	50	0	15.82	15.87	15.69	16	0
20	16QAM	50	24	15.84	15.89	15.72		
20	16QAM	50	50	15.89	15.88	15.70		
20	16QAM	100	0	15.87	15.79	15.61		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	15.80	15.88	15.65	16	0
15	QPSK	1	37	15.78	15.83	15.70		
15	QPSK	1	74	15.74	15.89	15.52		
15	QPSK	36	0	15.76	15.76	15.57	16	0
15	QPSK	36	20	15.82	15.89	15.65		
15	QPSK	36	39	15.80	15.85	15.64		
15	QPSK	75	0	15.79	15.78	15.53		
15	16QAM	1	0	15.76	15.93	15.60	16	0
15	16QAM	1	37	15.79	15.83	15.51		
15	16QAM	1	74	15.70	15.87	15.57		
15	16QAM	36	0	15.72	15.85	15.60	16	0
15	16QAM	36	20	15.80	15.79	15.66		
15	16QAM	36	39	15.86	15.80	15.60		
15	16QAM	75	0	15.82	15.72	15.60		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	15.73	15.90	15.65	16	0
10	QPSK	1	25	15.77	15.83	15.66		
10	QPSK	1	49	15.72	15.79	15.55		
10	QPSK	25	0	15.73	15.85	15.56	16	0
10	QPSK	25	12	15.76	15.88	15.65		
10	QPSK	25	25	15.86	15.82	15.69		
10	QPSK	50	0	15.79	15.73	15.52		
10	16QAM	1	0	15.72	15.87	15.56	16	0
10	16QAM	1	25	15.77	15.86	15.52		
10	16QAM	1	49	15.67	15.81	15.47		
10	16QAM	25	0	15.82	15.78	15.62	16	0
10	16QAM	25	12	15.82	15.87	15.68		
10	16QAM	25	25	15.83	15.82	15.63		
10	16QAM	50	0	15.84	15.73	15.58		

Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	15.74	15.95	15.68	16	0
5	QPSK	1	12	15.73	15.88	15.69		
5	QPSK	1	24	15.67	15.79	15.52		
5	QPSK	12	0	15.75	15.80	15.59	16	0
5	QPSK	12	7	15.85	15.85	15.64		
5	QPSK	12	13	15.79	15.83	15.63		
5	QPSK	25	0	15.76	15.77	15.53		
5	16QAM	1	0	15.71	15.94	15.61	16	0
5	16QAM	1	12	15.76	15.85	15.58		
5	16QAM	1	24	15.68	15.84	15.48		
5	16QAM	12	0	15.80	15.85	15.60	16	0
5	16QAM	12	7	15.81	15.83	15.63		
5	16QAM	12	13	15.84	15.84	15.65		
5	16QAM	25	0	15.79	15.71	15.59		

<LTE Band 12>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	21.64	21.80	21.60	22.5	0
10	QPSK	1	25	21.78	21.77	21.68		
10	QPSK	1	49	21.57	21.66	21.56		
10	QPSK	25	0	21.64	21.65	21.52	22.5	0
10	QPSK	25	12	21.62	21.63	21.49		
10	QPSK	25	25	21.50	21.48	21.52		
10	QPSK	50	0	21.55	21.57	21.48		
10	16QAM	1	0	21.76	21.70	21.71	22.5	0
10	16QAM	1	25	21.74	21.79	21.70		
10	16QAM	1	49	21.77	21.62	21.72		
10	16QAM	25	0	20.52	20.63	20.54	22.5	0
10	16QAM	25	12	20.63	20.63	20.52		
10	16QAM	25	25	20.51	20.54	20.50		
10	16QAM	50	0	20.59	20.65	20.56		
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	21.56	21.72	21.52	22.5	0
5	QPSK	1	12	21.75	21.75	21.61		
5	QPSK	1	24	21.49	21.57	21.53		
5	QPSK	12	0	21.56	21.56	21.45	22.5	0
5	QPSK	12	7	21.55	21.59	21.43		
5	QPSK	12	13	21.47	21.48	21.51		
5	QPSK	25	0	21.53	21.49	21.47		
5	16QAM	1	0	21.73	21.67	21.68	22.5	0
5	16QAM	1	12	21.72	21.73	21.60		
5	16QAM	1	24	21.71	21.56	21.64		
5	16QAM	12	0	20.50	20.60	20.58	22.5	0
5	16QAM	12	7	20.58	20.62	20.53		
5	16QAM	12	13	20.50	20.59	20.54		
5	16QAM	25	0	20.59	20.61	20.55		
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	21.57	21.79	21.50	22.5	0
3	QPSK	1	8	21.74	21.70	21.63		
3	QPSK	1	14	21.48	21.66	21.51		
3	QPSK	8	0	21.61	21.62	21.47	22.5	0
3	QPSK	8	4	21.61	21.54	21.44		
3	QPSK	8	7	21.48	21.42	21.50		
3	QPSK	15	0	21.54	21.47	21.40		
3	16QAM	1	0	21.75	21.68	21.62	22.5	0
3	16QAM	1	8	21.68	21.73	21.60		
3	16QAM	1	14	21.70	21.61	21.66		
3	16QAM	8	0	20.52	20.61	20.59	22.5	0
3	16QAM	8	4	20.60	20.55	20.52		
3	16QAM	8	7	20.51	20.53	20.57		
3	16QAM	15	0	20.53	20.55	20.52		

Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	21.60	21.72	21.57	22.5	0
1.4	QPSK	1	3	21.72	21.67	21.61		
1.4	QPSK	1	5	21.50	21.58	21.46		
1.4	QPSK	3	0	21.62	21.55	21.43		
1.4	QPSK	3	1	21.59	21.53	21.45		
1.4	QPSK	3	3	21.46	21.39	21.52		
1.4	QPSK	6	0	21.49	21.49	21.46	22.5	0
1.4	16QAM	1	0	21.75	21.64	21.64	22.5	0
1.4	16QAM	1	3	21.73	21.78	21.67		
1.4	16QAM	1	5	21.67	21.58	21.70		
1.4	16QAM	3	0	20.51	20.62	20.54		
1.4	16QAM	3	1	20.62	20.61	20.52		
1.4	16QAM	3	3	20.52	20.50	20.56		
1.4	16QAM	6	0	20.58	20.59	20.54	22.5	0

<LTE Band 13>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					23230			
Frequency (MHz)					782			
10	QPSK	1	0		21.50		21.5	0
10	QPSK	1	25		21.49			
10	QPSK	1	49		21.37			
10	QPSK	25	0		21.33		21.5	0
10	QPSK	25	12		21.31			
10	QPSK	25	25		21.24			
10	QPSK	50	0		21.35			
10	16QAM	1	0		21.48		21.5	0
10	16QAM	1	25		21.42			
10	16QAM	1	49		21.43			
10	16QAM	25	0		20.32		21.5	0
10	16QAM	25	12		20.34			
10	16QAM	25	25		20.20			
10	16QAM	50	0		20.32			
Channel				23205	23230	23255	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				779.5	782	784.5		
5	QPSK	1	0	21.47	21.48	21.32	21.5	0
5	QPSK	1	12	21.34	21.40	21.35		
5	QPSK	1	24	21.19	21.29	21.23		
5	QPSK	12	0	21.18	21.23	21.19	21.5	0
5	QPSK	12	7	21.22	21.22	21.23		
5	QPSK	12	13	21.18	21.21	21.08		
5	QPSK	25	0	21.26	21.27	21.20		
5	16QAM	1	0	21.37	21.41	21.44	21.5	0
5	16QAM	1	12	21.38	21.38	21.35		
5	16QAM	1	24	21.39	21.38	21.33		
5	16QAM	12	0	20.20	20.24	20.24	21.5	0
5	16QAM	12	7	20.23	20.29	20.18		
5	16QAM	12	13	20.11	20.11	20.17		
5	16QAM	25	0	20.29	20.23	20.19		

<LTE Band 25>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26140	26340	26590		
Frequency (MHz)				1860	1880	1905		
20	QPSK	1	0	13.91	13.96	13.90	15	0
20	QPSK	1	49	13.65	13.73	13.62		
20	QPSK	1	99	13.61	13.79	13.53		
20	QPSK	50	0	13.79	13.80	13.69	15	0
20	QPSK	50	24	13.76	13.78	13.66		
20	QPSK	50	50	13.66	13.79	13.54		
20	QPSK	100	0	13.66	13.70	13.61		
20	16QAM	1	0	13.93	13.87	13.87	15	0
20	16QAM	1	49	13.64	13.81	13.68		
20	16QAM	1	99	13.88	13.79	13.86		
20	16QAM	50	0	13.80	13.78	13.82	15	0
20	16QAM	50	24	13.80	13.79	13.82		
20	16QAM	50	50	13.71	13.65	13.72		
20	16QAM	100	0	13.86	13.88	13.78		
Channel				26115	26340	26615	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1907.5		
15	QPSK	1	0	13.90	13.89	13.88	15	0
15	QPSK	1	37	13.64	13.71	13.53		
15	QPSK	1	74	13.58	13.71	13.44		
15	QPSK	36	0	13.78	13.72	13.61	15	0
15	QPSK	36	20	13.72	13.74	13.59		
15	QPSK	36	39	13.61	13.79	13.46		
15	QPSK	75	0	13.59	13.64	13.60		
15	16QAM	1	0	13.86	13.87	13.80	15	0
15	16QAM	1	37	13.56	13.74	13.67		
15	16QAM	1	74	13.84	13.74	13.84		
15	16QAM	36	0	13.78	13.74	13.75	15	0
15	16QAM	36	20	13.76	13.75	13.79		
15	16QAM	36	39	13.62	13.65	13.69		
15	16QAM	75	0	13.84	13.87	13.75		
Channel				26090	26340	26640	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1910		
10	QPSK	1	0	13.85	13.92	13.82	15	0
10	QPSK	1	25	13.55	13.70	13.60		
10	QPSK	1	49	13.58	13.75	13.49		
10	QPSK	25	0	13.77	13.76	13.67	15	0
10	QPSK	25	12	13.68	13.69	13.62		
10	QPSK	25	25	13.59	13.79	13.53		
10	QPSK	50	0	13.61	13.61	13.58		
10	16QAM	1	0	13.88	13.87	13.87	15	0
10	16QAM	1	25	13.63	13.74	13.65		
10	16QAM	1	49	13.79	13.73	13.76		
10	16QAM	25	0	13.73	13.78	13.72	15	0
10	16QAM	25	12	13.73	13.76	13.79		
10	16QAM	25	25	13.64	13.61	13.71		
10	16QAM	50	0	13.83	13.81	13.77		

Channel				26065	26340	26665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1912.5		
5	QPSK	1	0	13.83	13.89	13.88	15	0
5	QPSK	1	12	13.65	13.65	13.58		
5	QPSK	1	24	13.60	13.69	13.50		
5	QPSK	12	0	13.74	13.77	13.66	15	0
5	QPSK	12	7	13.76	13.78	13.62		
5	QPSK	12	13	13.58	13.79	13.44		
5	QPSK	25	0	13.58	13.60	13.61		
5	16QAM	1	0	13.91	13.85	13.82	15	0
5	16QAM	1	12	13.62	13.73	13.67		
5	16QAM	1	24	13.88	13.78	13.82		
5	16QAM	12	0	13.80	13.76	13.76	15	0
5	16QAM	12	7	13.79	13.77	13.79		
5	16QAM	12	13	13.66	13.63	13.63		
5	16QAM	25	0	13.80	13.83	13.72		
Channel				26055	26340	26675	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1913.5		
3	QPSK	1	0	13.88	13.95	13.90	15	0
3	QPSK	1	8	13.59	13.63	13.53		
3	QPSK	1	14	13.55	13.71	13.51		
3	QPSK	8	0	13.73	13.74	13.68	15	0
3	QPSK	8	4	13.76	13.77	13.60		
3	QPSK	8	7	13.59	13.76	13.51		
3	QPSK	15	0	13.63	13.66	13.60		
3	16QAM	1	0	13.84	13.81	13.78	15	0
3	16QAM	1	8	13.63	13.78	13.61		
3	16QAM	1	14	13.85	13.77	13.77		
3	16QAM	8	0	13.73	13.75	13.80	15	0
3	16QAM	8	4	13.72	13.71	13.73		
3	16QAM	8	7	13.61	13.63	13.63		
3	16QAM	15	0	13.80	13.80	13.74		
Channel				26047	26340	26683	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1914.3		
1.4	QPSK	1	0	13.84	13.92	13.80	15	0
1.4	QPSK	1	3	13.61	13.64	13.52		
1.4	QPSK	1	5	13.57	13.79	13.47		
1.4	QPSK	3	0	13.69	13.80	13.61		
1.4	QPSK	3	1	13.75	13.76	13.60		
1.4	QPSK	3	3	13.62	13.71	13.44		
1.4	QPSK	6	0	13.59	13.65	13.57	15	0
1.4	16QAM	1	0	13.91	13.83	13.84	15	0
1.4	16QAM	1	3	13.57	13.80	13.67		
1.4	16QAM	1	5	13.87	13.69	13.77		
1.4	16QAM	3	0	13.70	13.73	13.81		
1.4	16QAM	3	1	13.76	13.75	13.75		
1.4	16QAM	3	3	13.70	13.65	13.69		
1.4	16QAM	6	0	13.84	13.83	13.71	15	0

<LTE Band 26>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	18.20	18.43	18.00	20	0
15	QPSK	1	37	18.20	18.33	18.03		
15	QPSK	1	74	18.18	18.20	18.02		
15	QPSK	36	0	18.17	18.39	18.10	20	0
15	QPSK	36	20	18.18	18.34	18.12		
15	QPSK	36	39	18.00	18.18	18.12		
15	QPSK	75	0	18.07	18.35	18.19		
15	16QAM	1	0	18.39	18.32	18.37	20	0
15	16QAM	1	37	18.39	18.35	18.40		
15	16QAM	1	74	18.34	18.31	18.33		
15	16QAM	36	0	18.21	18.40	18.09	20	0
15	16QAM	36	20	18.16	18.36	18.15		
15	16QAM	36	39	18.00	18.21	18.14		
15	16QAM	75	0	18.12	18.41	18.24		
Channel				26740	26865	26990	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	18.10	18.38	18.09	20	0
10	QPSK	1	25	18.18	18.33	18.01		
10	QPSK	1	49	18.12	18.16	18.07		
10	QPSK	25	0	18.10	18.36	18.10	20	0
10	QPSK	25	12	18.14	18.28	18.09		
10	QPSK	25	25	18.00	18.12	18.03		
10	QPSK	50	0	18.07	18.33	18.13		
10	16QAM	1	0	18.29	18.31	18.30	20	0
10	16QAM	1	25	18.33	18.35	18.37		
10	16QAM	1	49	18.32	18.23	18.28		
10	16QAM	25	0	18.16	18.37	18.08	20	0
10	16QAM	25	12	18.09	18.31	18.07		
10	16QAM	25	25	18.09	18.21	18.13		
10	16QAM	50	0	18.11	18.31	18.17		
Channel				26715	26865	27015	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	18.20	18.40	18.00	20	0
5	QPSK	1	12	18.18	18.23	18.03		
5	QPSK	1	24	18.14	18.18	18.07		
5	QPSK	12	0	18.16	18.31	18.02	20	0
5	QPSK	12	7	18.18	18.32	18.05		
5	QPSK	12	13	18.03	18.15	18.04		
5	QPSK	25	0	18.06	18.25	18.10		
5	16QAM	1	0	18.39	18.26	18.34	20	0
5	16QAM	1	12	18.30	18.28	18.40		
5	16QAM	1	24	18.25	18.28	18.28		
5	16QAM	12	0	18.15	18.35	18.07	20	0
5	16QAM	12	7	18.13	18.31	18.12		
5	16QAM	12	13	18.07	18.18	18.13		
5	16QAM	25	0	18.04	18.32	18.15		

Channel				26705	26865	27025	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	18.19	18.42	18.12	20	0
3	QPSK	1	8	18.12	18.26	18.01		
3	QPSK	1	14	18.16	18.14	18.19		
3	QPSK	8	0	18.07	18.33	18.01	20	0
3	QPSK	8	4	18.13	18.25	18.12		
3	QPSK	8	7	18.08	18.08	18.05		
3	QPSK	15	0	18.18	18.31	18.12		
3	16QAM	1	0	18.36	18.23	18.29	20	0
3	16QAM	1	8	18.34	18.30	18.32		
3	16QAM	1	14	18.25	18.26	18.31		
3	16QAM	8	0	18.19	18.38	18.02	20	0
3	16QAM	8	4	18.13	18.26	18.12		
3	16QAM	8	7	18.15	18.13	18.06		
3	16QAM	15	0	18.12	18.38	18.21		
Channel				26697	26865	27033	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	18.13	18.38	18.00	20	0
1.4	QPSK	1	3	18.18	18.27	18.14		
1.4	QPSK	1	5	18.15	18.18	18.13		
1.4	QPSK	3	0	18.07	18.39	18.05		
1.4	QPSK	3	1	18.10	18.25	18.03		
1.4	QPSK	3	3	18.08	18.09	18.05		
1.4	QPSK	6	0	18.04	18.28	18.16	20	0
1.4	16QAM	1	0	18.33	18.28	18.28	20	0
1.4	16QAM	1	3	18.39	18.27	18.38		
1.4	16QAM	1	5	18.24	18.31	18.29		
1.4	16QAM	3	0	18.16	18.36	18.07		
1.4	16QAM	3	1	18.13	18.30	18.06		
1.4	16QAM	3	3	18.00	18.11	18.05		
1.4	16QAM	6	0	18.10	18.41	18.24	20	0

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations

b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS

c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

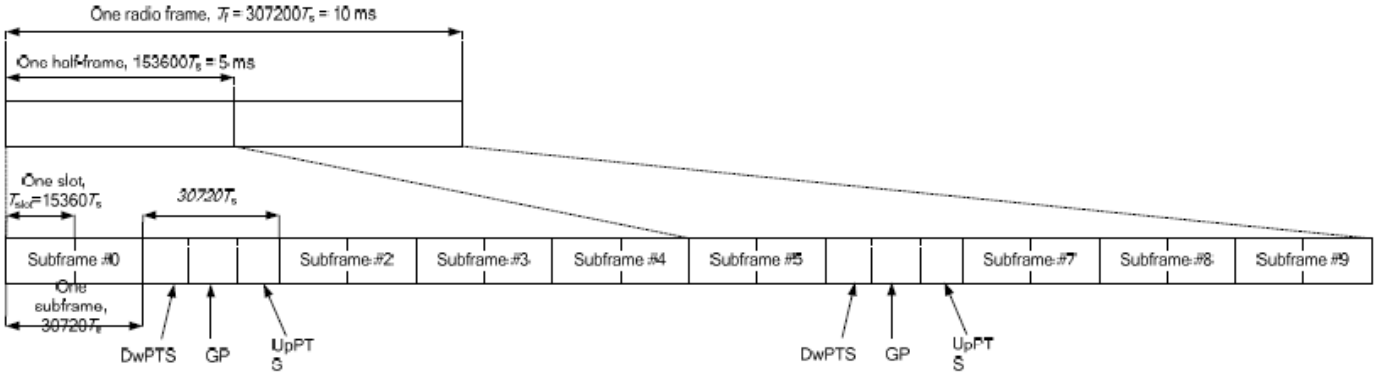


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~4**	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~3**	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

Default Power Mode

<LTE Band 41>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.38	21.47	21.60	21.29	21.55	23	0
20	QPSK	1	49	21.44	21.44	21.55	21.45	21.32		
20	QPSK	1	99	21.34	21.34	21.44	21.41	21.26		
20	QPSK	50	0	20.47	20.39	20.68	20.30	20.41	22	1
20	QPSK	50	24	20.53	20.41	20.58	20.44	20.43		
20	QPSK	50	50	20.47	20.41	20.46	20.42	20.37		
20	QPSK	100	0	20.46	20.32	20.54	20.29	20.34		
20	16QAM	1	0	20.42	20.48	20.44	20.38	20.57	22	1
20	16QAM	1	49	20.59	20.51	20.59	20.48	20.48		
20	16QAM	1	99	20.42	20.34	20.48	20.42	20.23		
20	16QAM	50	0	19.46	19.43	19.50	19.37	19.46	21	2
20	16QAM	50	24	19.53	19.33	19.54	19.52	19.44		
20	16QAM	50	50	19.49	19.38	19.44	19.46	19.42		
20	16QAM	100	0	19.51	19.34	19.51	19.39	19.42		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	21.44	21.34	21.52	21.24	21.57	23	0
15	QPSK	1	37	21.47	21.33	21.50	21.54	21.55		
15	QPSK	1	74	21.40	21.32	21.51	21.37	21.23		
15	QPSK	36	0	20.58	20.38	20.55	20.39	20.52	22	1
15	QPSK	36	20	20.67	20.36	20.61	20.46	20.48		
15	QPSK	36	39	20.45	20.31	20.60	20.41	20.39		
15	QPSK	75	0	20.43	20.31	20.48	20.42	20.37		
15	16QAM	1	0	20.51	20.45	20.47	20.38	20.50	22	1
15	16QAM	1	37	20.57	20.45	20.80	20.31	20.66		
15	16QAM	1	74	20.54	20.37	20.48	20.41	20.33		
15	16QAM	36	0	19.49	19.37	19.45	19.40	19.43	21	2
15	16QAM	36	20	19.59	19.33	19.53	19.50	19.37		
15	16QAM	36	39	19.41	19.33	19.49	19.46	19.30		
15	16QAM	75	0	19.49	19.34	19.52	19.41	19.38		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.41	21.49	21.53	21.48	21.35	23	0
10	QPSK	1	25	21.53	21.38	21.54	21.52	21.34		
10	QPSK	1	49	21.48	21.32	21.55	21.45	21.16		
10	QPSK	25	0	20.48	20.46	20.39	20.37	20.38	22	1
10	QPSK	25	12	20.47	20.36	20.48	20.36	20.34		
10	QPSK	25	25	20.52	20.35	20.44	20.37	20.31		
10	QPSK	50	0	20.42	20.35	20.43	20.36	20.31		
10	16QAM	1	0	20.59	20.59	20.57	20.50	20.58	22	1
10	16QAM	1	25	20.68	20.56	20.65	20.54	20.56		
10	16QAM	1	49	20.58	20.41	20.55	20.39	20.34		
10	16QAM	25	0	19.55	19.51	19.45	19.42	19.31	21	2
10	16QAM	25	12	19.55	19.43	19.55	19.47	19.31		
10	16QAM	25	25	19.54	19.37	19.49	19.44	19.22		
10	16QAM	50	0	19.49	19.39	19.50	19.43	19.28		

Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	21.39	21.39	21.39	21.38	21.12	23	0
5	QPSK	1	12	21.46	21.35	21.41	21.34	21.12		
5	QPSK	1	24	21.44	21.32	21.40	21.35	21.04		
5	QPSK	12	0	20.50	20.48	20.50	20.40	20.24	22	1
5	QPSK	12	7	20.60	20.50	20.51	20.41	20.29		
5	QPSK	12	13	20.56	20.40	20.44	20.39	20.22		
5	QPSK	25	0	20.52	20.44	20.44	20.39	20.26		
5	16QAM	1	0	20.55	20.53	20.51	20.49	20.39	22	1
5	16QAM	1	12	20.74	20.59	20.50	20.47	20.40		
5	16QAM	1	24	20.69	20.56	20.58	20.49	20.38		
5	16QAM	12	0	19.48	19.49	19.53	19.43	19.27	21	2
5	16QAM	12	7	19.59	19.47	19.53	19.44	19.32		
5	16QAM	12	13	19.55	19.40	19.47	19.42	19.27		
5	16QAM	25	0	19.58	19.52	19.53	19.48	19.30		

Reduced Power Mode

<LTE Band 41>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	18.06	18.01	18.17	18.02	17.98	18.5	0
20	QPSK	1	49	18.03	17.90	17.98	17.96	17.84		
20	QPSK	1	99	17.86	17.73	17.88	17.93	17.79		
20	QPSK	50	0	17.98	17.86	17.96	17.86	17.97	18.5	0
20	QPSK	50	24	18.06	17.90	18.04	18.04	17.93		
20	QPSK	50	50	17.99	17.87	17.90	17.95	17.87		
20	QPSK	100	0	18.00	17.82	17.96	17.84	17.89		
20	16QAM	1	0	17.98	18.07	17.97	17.93	18.14	18.5	0
20	16QAM	1	49	17.89	17.96	17.73	17.85	17.91		
20	16QAM	1	99	17.98	17.89	17.96	17.99	17.72		
20	16QAM	50	0	18.00	17.89	17.99	17.89	18.00	18.5	0
20	16QAM	50	24	18.08	17.92	18.05	18.06	17.93		
20	16QAM	50	50	18.04	17.91	17.96	18.01	17.93		
20	16QAM	100	0	18.12	17.87	18.01	17.89	17.92		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	18.00	17.91	18.01	17.89	17.99	18.5	0
15	QPSK	1	37	17.96	18.06	18.01	18.14	18.04		
15	QPSK	1	74	18.05	17.89	17.95	17.95	17.75		
15	QPSK	36	0	18.11	17.96	17.94	17.97	17.96	18.5	0
15	QPSK	36	20	18.09	17.93	18.00	18.00	17.89		
15	QPSK	36	39	18.02	17.89	18.00	17.97	17.80		
15	QPSK	75	0	18.02	17.87	17.97	17.95	17.86		
15	16QAM	1	0	18.06	17.97	18.02	17.93	17.99	18.5	0
15	16QAM	1	37	18.14	18.01	18.16	17.93	18.12		
15	16QAM	1	74	18.15	17.90	17.98	17.98	17.83		
15	16QAM	36	0	18.07	17.92	17.89	17.91	17.92	18.5	0
15	16QAM	36	20	18.14	17.91	17.99	17.98	17.87		
15	16QAM	36	39	17.96	17.86	17.98	17.94	17.78		
15	16QAM	75	0	18.03	17.90	18.01	17.96	17.88		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	18.15	18.12	18.05	18.03	18.10	18.5	0
10	QPSK	1	25	18.08	18.00	18.14	18.08	18.01		
10	QPSK	1	49	18.13	17.94	18.05	18.00	17.93		
10	QPSK	25	0	18.14	18.07	17.97	17.97	17.98	18.5	0
10	QPSK	25	12	18.13	17.98	18.02	17.97	17.93		
10	QPSK	25	25	18.12	17.94	17.99	17.99	17.90		
10	QPSK	50	0	18.07	17.94	17.97	17.98	17.89		
10	16QAM	1	0	18.03	18.06	18.11	18.11	18.15	18.5	0
10	16QAM	1	25	18.08	18.16	18.16	18.14	18.14		
10	16QAM	1	49	18.11	17.96	18.10	18.05	17.98		
10	16QAM	25	0	18.08	18.14	18.00	18.03	18.00	18.5	0
10	16QAM	25	12	18.16	18.04	18.08	18.07	17.99		
10	16QAM	25	25	18.11	17.98	18.01	18.01	17.88		
10	16QAM	50	0	18.14	17.98	18.03	18.01	17.93		

Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	18.06	18.05	17.89	17.91	17.89	18.5	0
5	QPSK	1	12	18.12	17.97	17.91	17.90	17.84		
5	QPSK	1	24	18.09	17.94	17.86	17.87	17.84		
5	QPSK	12	0	18.09	18.09	18.01	17.99	17.86	18.5	0
5	QPSK	12	7	18.16	18.05	18.04	17.99	17.95		
5	QPSK	12	13	18.16	17.96	17.99	17.97	17.89		
5	QPSK	25	0	18.08	17.98	17.98	17.93	17.84		
5	16QAM	1	0	18.14	18.10	17.99	18.01	18.01	18.5	0
5	16QAM	1	12	18.07	18.15	18.07	18.04	18.02		
5	16QAM	1	24	18.08	18.07	18.05	18.13	18.01		
5	16QAM	12	0	18.07	18.08	18.04	17.98	17.84	18.5	0
5	16QAM	12	7	18.15	18.04	18.03	18.02	17.91		
5	16QAM	12	13	18.13	17.96	17.98	17.99	17.85		
5	16QAM	25	0	18.08	18.07	18.07	18.05	17.95		

<LTE Carrier Aggregation>

General Note:

1. This device supports Carrier Aggregation on downlink only for inter and intra band, Uplink CA is not supported. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. All permutations exist. No restrictions on Pcell & Scell combinations. Only LTE Band 29A is limited to Scell.

E-UTRA CA Configuration	E-UTRA Bands	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_2A-5A	2			Yes	Yes	Yes	Yes	30	0
	5			Yes	Yes				
CA_2A-5A	2			Yes	Yes			20	1
	5			Yes	Yes				
CA_2A-12A	2			Yes	Yes	Yes	Yes	30	0
	12			Yes	Yes				
CA_2A-12A	2			Yes	Yes	Yes	Yes	30	1
	12		Yes	Yes	Yes				
CA_2A-12A	2			Yes	Yes			20	2
	12			Yes	Yes				
CA_2A-13A	2			Yes	Yes	Yes	Yes	30	0
	13				Yes				
CA_2A-13A	2			Yes	Yes			20	1
	13				Yes				
CA_2A-29A	2			Yes	Yes			20	0
	29		Yes	Yes	Yes				
CA_2A-29A	2			Yes	Yes			20	1
	29			Yes	Yes				
CA_2A-29A	2			Yes	Yes	Yes	Yes	30	2
CA_4A-5A	4			Yes	Yes			20	0
	5			Yes	Yes				
CA_4A-5A	4			Yes	Yes	Yes	Yes	30	1
	5			Yes	Yes				
CA_4A-12A	4	Yes	Yes	Yes	Yes			20	0
	12			Yes	Yes				
CA_4A-12A	4	Yes	Yes	Yes	Yes	Yes	Yes	30	1
	12			Yes	Yes				
CA_4A-12A	4			Yes	Yes	Yes	Yes	30	2
	12		Yes	Yes	Yes				
CA_4A-12A	4			Yes	Yes			20	3
	12			Yes	Yes				
CA_4A-12A	4			Yes	Yes	Yes	Yes	30	4
	12			Yes	Yes				
CA_4A-12A	4			Yes	Yes	Yes		20	5
	12			Yes					
CA_4A-13A	4			Yes	Yes	Yes	Yes	30	0
	13				Yes				
CA_4A-13A	4			Yes	Yes			20	1
	13				Yes				
CA_4A-29A	4			Yes	Yes			20	0
	29		Yes	Yes	Yes				
CA_4A-29A	4			Yes	Yes			20	1
	29			Yes	Yes				
CA_4A-29A	4			Yes	Yes	Yes	Yes	30	2
	29			Yes	Yes				

E-UTRA CA Configuration	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_2C	5	20	40	0
	10	15,20		
	15	10,15,20		
	20	5,10,15,20		
CA_7C	15	15	40	0
	20	20		
	10	20	40	1
	15	15,20		
	20	10,15,20		
	15	10,15	40	2
	20	15,20		
CA_41C	10	20	40	0
	15	15,20		
	20	10,15,20		
	5,10	20	40	1
	15	15,20		
	20	5,10,15,20		
CA_2A-2A	5,10,15,20	5,10,15,20	40	0
CA_7A-7A	5	15	40	0
	10	10,15		
	15	15,20		
	20	20		
	5,10,15,20	5,10,15,20	40	1
CA_41A-41A	10,15,20	10,15,20	40	0
	5,10,15,20	5,10,15,20	40	1

<LTE Carrier Aggregation Power verification>

General Note:

i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.

ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

iii. The device supports downlink carrier aggregation only. Uplink carrier aggregation is not supported. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.

vi. For inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band.

vii. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lfloor \frac{BW_{Channel(1)} + BW_{Channel(2)} - 0.1\left|BW_{Channel(1)} - BW_{Channel(2)}\right|}{0.6} \right\rfloor 0.3 \ \ [\text{MHz}]$$

Configure		PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band Contiguous		Band 2	20	1880	18900	QPSK	1	0	Band 5	10	881.5	2525	22.80	22.85
		Band 5	10	836.5	20525	QPSK	1	0	Band 2	20	1960	900	22.35	22.38
		Band 2	20	1880	18900	QPSK	1	0	Band 12	10	737.5	5095	22.83	22.85
		Band 12	10	707.5	23095	QPSK	1	0	Band 2	20	1960	900	22.99	23.00
		Band 4	20	1732.5	20175	QPSK	1	0	Band 5	10	881.5	2525	23.80	23.83
		Band 5	10	836.5	20525	QPSK	1	0	Band 4	20	2132.5	2175	22.36	22.38
		Band 4	20	1732.5	20175	QPSK	1	0	Band 12	10	737.5	5095	23.81	23.83
		Band 12	10	707.5	23095	QPSK	1	0	Band 4	20	2132.5	2175	22.98	23.00
		Band 4	20	1732.5	20175	QPSK	1	0	Band 13	10	751	5230	23.80	23.83
		Ban 13	10	782	23230	QPSK	1	0	Band 4	20	2132.5	2175	22.55	22.57
		Band 2	20	1880	18900	QPSK	1	0	Band 5	10	881.5	2525	22.80	22.85
		Band 5	10	836.5	20525	QPSK	1	0	Band 2	20	1960	900	22.35	22.38
		Band 2	20	1880	18900	QPSK	1	0	Band 12	10	737.5	5095	22.83	22.85
		Band 12	10	707.5	23095	QPSK	1	0	Band 2	20	1960	900	22.99	23.00
Intra-Band	Non-Contiguous	Band 2	20	1880	18900	QPSK	1	0	Band 2	5	1987.5	1175	22.84	22.85
		Band 7	20	2535	21100	QPSK	1	0	Band 7	5	2687.5	3425	21.78	21.80
		Band 41	20	2593	40620	QPSK	1	0	Band 41	5	2687.5	41565	21.58	21.60
	Contiguous	Band 2	20	1880	18900	QPSK	1	0	Band 2	20	1979.8	1098	22.84	22.85
		Band 7	20	2535	21100	QPSK	1	0	Band 7	20	2649.8	3048	21.80	21.80
		Band 41	20	2593	40620	QPSK	1	0	Band 41	20	2612.8	40818	21.58	21.60

14. SAR test exclusion table

General Note:

1. The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
2. Maximum power is the source-based time-average power and represents the maximum RF output power among production units
3. Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
4. Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
5. Per KDB 447498 D01v06, 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:
   [(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
   - 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
6. Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
   a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz
   b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
7. For the bottom-face that proximity sensor power reduction is applied for SAR compliance, additional SAR testing at "sensor trigger distance – 1mm" with EUT transmitting full power in normal mode was performed.

Exposure Position	Wireless Interface	WCDMA Band V	WCDMA Band IV	WCDMA Band II	LTE Band 12	LTE Band 13	LTE Band 5 / 26	LTE Band 4	LTE Band 2 / 25	LTE Band 7	LTE Band 41
	Calculated Frequency	846MHz	1750MHz	1907MHz	715MHz	784MHz	848MHz	1754MHz	1914MHz	2570MHz	2688MHz
	Maximum power (dBm)	24	24	24	24	24	24	24	24	23	23
	Maximum rated power(mW)	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	200.0	200.0
Bottom Face	Separation distance(mm)	5.0									
	exclusion threshold	46.2	66.4	69.3	42.5	44.5	46.2	66.5	69.5	64.1	65.6
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 1	Separation distance(mm)	5.0									
	exclusion threshold	46.2	66.4	69.3	42.5	44.5	46.2	66.5	69.5	64.1	65.6
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 2	Separation distance(mm)	237.0									
	exclusion threshold	1218.0	1983.0	1979.0	1069.0	1147.0	1220.0	1983.0	1978.0	1964.0	1961.0
	Testing required?	No	No	No	No	No	No	No	No	No	No
Edge 3	Separation distance(mm)	214.5									
	exclusion threshold	1091.0	1758.0	1754.0	962.0	1029.0	1093.0	1758.0	1753.0	1739.0	1736.0
	Testing required?	No	No	No	No	No	No	No	No	No	No
Edge 4	Separation distance(mm)	5.0									
	exclusion threshold	46.2	66.4	69.3	42.5	44.5	46.2	66.5	69.5	64.1	65.6
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bottom of Laptop	Separation distance(mm)	215.5									
	exclusion threshold	1097.0	1768.0	1764.0	966.0	1034.0	1099.0	1768.0	1763.0	1749.0	1746.0
	Testing required?	No	No	No	No	No	No	No	No	No	No

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
4. For the exposure positions that proximity sensor power reduction is applied for SAR compliance, additional SAR testing with EUT transmitting full power in normal mode was performed; 10mm for bottom face, 15mm for edge1.
5. For the body SAR measurement was used a low-loss foam block performed testing, the relative permittivity and loss tangent of the foam material is 1.0 and 10-5, respectively, therefore holder perturbation verification is not required even highest reported SAR is >1.2W/kg
6. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
7. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.
8. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
9. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
10. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
11. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
12. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
13. For LTE B12 / B5 / B4 / B26 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
14. LTE band 2 / 5 SAR test was covered by Band 25 / 26; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
    a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
    b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

15.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Bottom Face	0mm	ON	9400	1880	13.94	14.50	1.138	-0.01	0.236	0.268
	WCDMA II	RMC 12.2Kbps	Edge 1	0mm	ON	9400	1880	13.94	14.50	1.138	0.08	0.919	1.045
	WCDMA II	RMC 12.2Kbps	Edge 1	0mm	ON	9262	1852.4	13.79	14.50	1.178	0.03	0.761	0.896
01	WCDMA II	RMC 12.2Kbps	Edge 1	0mm	ON	9538	1907.6	13.83	14.50	1.167	0.09	0.969	1.131
	WCDMA II	RMC 12.2Kbps	Bottom Face	10mm	OFF	9400	1880	22.96	24.00	1.271	-0.01	0.524	0.666
	WCDMA II	RMC 12.2Kbps	Edge 1	15mm	OFF	9400	1880	22.96	24.00	1.271	0.05	0.563	0.715
	WCDMA II	RMC 12.2Kbps	Edge 4	0mm	OFF	9400	1880	22.96	24.00	1.271	0.16	0.229	0.291
	WCDMA IV	RMC 12.2Kbps	Bottom Face	0mm	ON	1513	1752.6	16.50	17.00	1.122	0	0.372	0.417
	WCDMA IV	RMC 12.2Kbps	Edge 1	0mm	ON	1513	1752.6	16.50	17.00	1.122	0.02	1.040	1.167
	WCDMA IV	RMC 12.2Kbps	Edge 1	0mm	ON	1312	1712.4	16.27	17.00	1.183	0.09	0.846	1.001
	WCDMA IV	RMC 12.2Kbps	Edge 1	0mm	ON	1413	1732.6	16.35	17.00	1.161	0.13	0.949	1.102
	WCDMA IV	RMC 12.2Kbps	Bottom Face	10mm	OFF	1413	1732.6	22.99	24.00	1.262	0.02	0.527	0.665
	WCDMA IV	RMC 12.2Kbps	Edge 1	15mm	OFF	1413	1732.6	22.99	24.00	1.262	0.06	0.278	0.351
	WCDMA IV	RMC 12.2Kbps	Edge 4	0mm	OFF	1413	1732.6	22.99	24.00	1.262	-0.05	1.070	1.350
02	WCDMA IV	RMC 12.2Kbps	Edge 4	0mm	OFF	1312	1712.4	22.95	24.00	1.274	-0.06	1.090	1.388
	WCDMA IV	RMC 12.2Kbps	Edge 4	0mm	OFF	1513	1752.6	22.84	24.00	1.306	-0.05	1.010	1.319
	WCDMA V	RMC 12.2Kbps	Bottom Face	0mm	ON	4182	836.4	18.38	19.50	1.294	-0.01	0.406	0.525
	WCDMA V	RMC 12.2Kbps	Edge 1	0mm	ON	4132	826.4	18.24	19.50	1.337	0.12	0.752	1.005
	WCDMA V	RMC 12.2Kbps	Edge 1	0mm	ON	4182	836.4	18.38	19.50	1.294	0.16	0.801	1.037
03	WCDMA V	RMC 12.2Kbps	Edge 1	0mm	ON	4233	846.6	18.28	19.50	1.324	0.13	0.868	1.150
	WCDMA V	RMC 12.2Kbps	Bottom Face	10mm	OFF	4182	836.4	22.46	24.00	1.426	0.01	0.228	0.325
	WCDMA V	RMC 12.2Kbps	Edge 1	15mm	OFF	4182	836.4	22.46	24.00	1.426	0.12	0.497	0.709
	WCDMA V	RMC 12.2Kbps	Edge 4	0mm	OFF	4182	836.4	22.46	24.00	1.426	0.17	0.194	0.277

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 4	20M	QPSK	1	0	Bottom Face	0mm	ON	20175	1732.5	16.80	17.50	1.175	-0.01	0.408	0.479
	LTE Band 4	20M	QPSK	50	0	Bottom Face	0mm	ON	20175	1732.5	16.65	17.50	1.216	0.03	0.356	0.433
	LTE Band 4	20M	QPSK	1	0	Edge 1	0mm	ON	20175	1732.5	16.80	17.50	1.175	0.17	0.938	1.102
	LTE Band 4	20M	QPSK	50	0	Edge 1	0mm	ON	20175	1732.5	16.65	17.50	1.216	0.04	0.858	1.043
	LTE Band 4	20M	QPSK	100	0	Edge 1	0mm	ON	20175	1732.5	16.60	17.50	1.230	0.14	0.861	1.059
	LTE Band 4	20M	QPSK	1	0	Bottom Face	10mm	OFF	20175	1732.5	23.83	24.00	1.040	0.04	0.582	0.605
	LTE Band 4	20M	QPSK	50	0	Bottom Face	10mm	OFF	20175	1732.5	22.73	23.00	1.064	0.04	0.480	0.511
	LTE Band 4	20M	QPSK	1	0	Edge 1	15mm	OFF	20175	1732.5	23.83	24.00	1.040	0.1	0.329	0.342
	LTE Band 4	20M	QPSK	50	0	Edge 1	15mm	OFF	20175	1732.5	22.73	23.00	1.064	0.13	0.268	0.285
04	LTE Band 4	20M	QPSK	1	0	Edge 4	0mm	OFF	20175	1732.5	23.83	24.00	1.040	-0.11	1.320	1.373
	LTE Band 4	20M	QPSK	50	0	Edge 4	0mm	OFF	20175	1732.5	22.73	23.00	1.064	-0.04	1.040	1.107
	LTE Band 4	20M	QPSK	100	0	Edge 4	0mm	OFF	20175	1732.5	22.65	23.00	1.084	-0.08	1.010	1.095
	LTE Band 7	20M	QPSK	1	0	Bottom Face	0mm	ON	21100	2535	15.98	16.00	1.005	-0.07	0.226	0.227
	LTE Band 7	20M	QPSK	50	50	Bottom Face	0mm	ON	21100	2535	15.92	16.00	1.019	0	0.204	0.208
	LTE Band 7	20M	QPSK	1	0	Edge 1	0mm	ON	21100	2535	15.98	16.00	1.005	0.17	0.986	0.991
	LTE Band 7	20M	QPSK	1	0	Edge 1	0mm	ON	20850	2510	15.83	16.00	1.040	0.1	0.911	0.947
05	LTE Band 7	20M	QPSK	1	0	Edge 1	0mm	ON	21350	2560	15.71	16.00	1.069	0.12	1.020	1.090
	LTE Band 7	20M	QPSK	50	50	Edge 1	0mm	ON	21100	2535	15.92	16.00	1.019	0.01	0.917	0.934
	LTE Band 7	20M	QPSK	50	50	Edge 1	0mm	ON	20850	2510	15.88	16.00	1.028	0.06	0.832	0.855
	LTE Band 7	20M	QPSK	50	50	Edge 1	0mm	ON	21350	2560	15.73	16.00	1.064	0.01	0.923	0.982
	LTE Band 7	20M	QPSK	100	0	Edge 1	0mm	ON	20850	2510	15.83	16.00	1.040	0.06	0.834	0.867
	LTE Band 7	20M	QPSK	1	0	Bottom Face	10mm	OFF	21100	2535	21.80	23.00	1.318	0.05	0.151	0.199
	LTE Band 7	20M	QPSK	50	0	Bottom Face	10mm	OFF	21100	2535	20.90	22.00	1.288	0.04	0.123	0.158
	LTE Band 7	20M	QPSK	1	0	Edge 1	15mm	OFF	21100	2535	21.80	23.00	1.318	0.15	0.393	0.518
	LTE Band 7	20M	QPSK	50	0	Edge 1	15mm	OFF	21100	2535	20.90	22.00	1.288	0.17	0.317	0.408
	LTE Band 7	20M	QPSK	1	0	Edge 4	0mm	OFF	21100	2535	21.80	23.00	1.318	0.16	0.624	0.823
	LTE Band 7	20M	QPSK	1	0	Edge 4	0mm	OFF	20850	2510	21.68	23.00	1.355	0.04	0.469	0.636
	LTE Band 7	20M	QPSK	1	49	Edge 4	0mm	OFF	21350	2560	21.59	23.00	1.384	0.17	0.739	1.022
	LTE Band 7	20M	QPSK	50	0	Edge 4	0mm	OFF	21100	2535	20.90	22.00	1.288	0.17	0.471	0.607
	LTE Band 7	20M	QPSK	100	0	Edge 4	0mm	OFF	21100	2535	20.79	22.00	1.321	0.1	0.525	0.694
	LTE Band 12	10M	QPSK	1	0	Bottom Face	0mm	ON	23095	707.5	21.80	22.50	1.175	-0.07	0.693	0.814
	LTE Band 12	10M	QPSK	25	0	Bottom Face	0mm	ON	23095	707.5	21.65	22.50	1.216	0.1	0.383	0.466
	LTE Band 12	10M	QPSK	1	0	Edge 1	0mm	ON	23095	707.5	21.80	22.50	1.175	0.12	1.020	1.198
	LTE Band 12	10M	QPSK	25	0	Edge 1	0mm	ON	23095	707.5	21.65	22.50	1.216	0.19	0.904	1.099
06	LTE Band 12	10M	QPSK	50	0	Edge 1	0mm	ON	23095	707.5	21.48	22.50	1.265	0.11	1.010	1.277
	LTE Band 12	10M	QPSK	1	0	Bottom Face	10mm	OFF	23095	707.5	23.00	24.00	1.259	0.04	0.133	0.167
	LTE Band 12	10M	QPSK	25	0	Bottom Face	10mm	OFF	23095	707.5	22.00	23.00	1.259	-0.01	0.103	0.130
	LTE Band 12	10M	QPSK	1	0	Edge 1	15mm	OFF	23095	707.5	23.00	24.00	1.259	0.12	0.165	0.208
	LTE Band 12	10M	QPSK	25	0	Edge 1	15mm	OFF	23095	707.5	22.00	23.00	1.259	0.16	0.131	0.165
	LTE Band 12	10M	QPSK	1	0	Edge 4	0mm	OFF	23095	707.5	23.00	24.00	1.259	0.18	0.348	0.438
	LTE Band 12	10M	QPSK	25	0	Edge 4	0mm	OFF	23095	707.5	22.00	23.00	1.259	0.19	0.274	0.345

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13	10M	QPSK	1	0	Bottom Face	0mm	ON	23230	782	21.50	21.50	1.000	0.06	0.602	0.602
	LTE Band 13	10M	QPSK	25	0	Bottom Face	0mm	ON	23230	782	21.33	21.50	1.040	-0.07	0.384	0.399
	LTE Band 13	10M	QPSK	1	0	Edge 1	0mm	ON	23230	782	21.50	21.50	1.000	0.14	1.080	1.080
07	LTE Band 13	10M	QPSK	25	0	Edge 1	0mm	ON	23230	782	21.33	21.50	1.040	0.1	1.070	1.113
	LTE Band 13	10M	QPSK	50	0	Edge 1	0mm	ON	23230	782	21.35	21.50	1.035	0.11	1.030	1.066
	LTE Band 13	10M	QPSK	1	0	Bottom Face	10mm	OFF	23230	782	22.57	24.00	1.390	0.16	0.137	0.190
	LTE Band 13	10M	QPSK	25	0	Bottom Face	10mm	OFF	23230	782	21.45	23.00	1.429	-0.1	0.108	0.154
	LTE Band 13	10M	QPSK	1	0	Edge 1	15mm	OFF	23230	782	22.57	24.00	1.390	0.1	0.243	0.338
	LTE Band 13	10M	QPSK	25	0	Edge 1	15mm	OFF	23230	782	21.45	23.00	1.429	0.19	0.188	0.269
	LTE Band 13	10M	QPSK	1	0	Edge 4	0mm	OFF	23230	782	22.57	24.00	1.390	0.16	0.231	0.321
	LTE Band 13	10M	QPSK	25	0	Edge 4	0mm	OFF	23230	782	21.45	23.00	1.429	0.13	0.182	0.260
	LTE Band 25	20M	QPSK	1	0	Bottom Face	0mm	ON	26340	1880	13.96	15.00	1.271	-0.05	0.211	0.268
	LTE Band 25	20M	QPSK	50	0	Bottom Face	0mm	ON	26340	1880	13.80	15.00	1.318	-0.08	0.209	0.276
	LTE Band 25	20M	QPSK	1	0	Edge 1	0mm	ON	26340	1880	13.96	15.00	1.271	0.18	0.791	1.005
	LTE Band 25	20M	QPSK	1	0	Edge 1	0mm	ON	26140	1860	13.91	15.00	1.285	0.03	0.712	0.915
	LTE Band 25	20M	QPSK	1	0	Edge 1	0mm	ON	26590	1905	13.90	15.00	1.288	0.07	0.890	1.147
	LTE Band 25	20M	QPSK	50	0	Edge 1	0mm	ON	26340	1880	13.80	15.00	1.318	0.1	0.783	1.032
	LTE Band 25	20M	QPSK	50	0	Edge 1	0mm	ON	26140	1860	13.79	15.00	1.321	0.1	0.685	0.905
08	LTE Band 25	20M	QPSK	50	0	Edge 1	0mm	ON	26590	1905	13.69	15.00	1.352	0.13	0.863	1.167
	LTE Band 25	20M	QPSK	100	0	Edge 1	0mm	ON	26340	1880	13.70	15.00	1.349	0.09	0.851	1.148
	LTE Band 25	20M	QPSK	1	0	Bottom Face	10mm	OFF	26340	1880	23.00	24.00	1.259	-0.02	0.190	0.239
	LTE Band 25	20M	QPSK	50	0	Bottom Face	10mm	OFF	26340	1880	21.88	23.00	1.294	0.04	0.156	0.202
	LTE Band 25	20M	QPSK	1	0	Edge 1	15mm	OFF	26340	1880	23.00	24.00	1.259	0.16	0.647	0.815
	LTE Band 25	20M	QPSK	1	0	Edge 1	15mm	OFF	26140	1860	22.85	24.00	1.303	0.19	0.563	0.734
	LTE Band 25	20M	QPSK	1	0	Edge 1	15mm	OFF	26590	1905	22.99	24.00	1.262	0.13	0.784	0.989
	LTE Band 25	20M	QPSK	50	0	Edge 1	15mm	OFF	26340	1880	21.88	23.00	1.294	0.1	0.514	0.665
	LTE Band 25	20M	QPSK	100	0	Edge 1	15mm	OFF	26340	1880	21.92	23.00	1.282	0.11	0.519	0.666
	LTE Band 25	20M	QPSK	1	0	Edge 4	0mm	OFF	26340	1880	23.00	24.00	1.259	0.14	0.340	0.428
	LTE Band 25	20M	QPSK	50	0	Edge 4	0mm	OFF	26340	1880	21.88	23.00	1.294	0.09	0.245	0.317
	LTE Band 26	15M	QPSK	1	0	Bottom Face	0mm	ON	26865	831.5	18.43	20.00	1.435	0.01	0.361	0.518
	LTE Band 26	15M	QPSK	36	0	Bottom Face	0mm	ON	26865	831.5	18.39	20.00	1.449	0	0.236	0.342
09	LTE Band 26	15M	QPSK	1	0	Edge 1	0mm	ON	26865	831.5	18.43	20.00	1.435	0.14	0.726	1.042
	LTE Band 26	15M	QPSK	36	0	Edge 1	0mm	ON	26865	831.5	18.39	20.00	1.449	0.05	0.712	1.032
	LTE Band 26	15M	QPSK	75	0	Edge 1	0mm	ON	26865	831.5	18.35	20.00	1.462	0.01	0.700	1.024
	LTE Band 26	15M	QPSK	1	0	Bottom Face	10mm	OFF	26865	831.5	22.61	24.00	1.377	0.16	0.138	0.190
	LTE Band 26	15M	QPSK	36	0	Bottom Face	10mm	OFF	26865	831.5	21.60	23.00	1.380	0	0.115	0.159
	LTE Band 26	15M	QPSK	1	0	Edge 1	15mm	OFF	26865	831.5	22.61	24.00	1.377	0.19	0.271	0.373
	LTE Band 26	15M	QPSK	36	0	Edge 1	15mm	OFF	26865	831.5	21.60	23.00	1.380	0.13	0.221	0.305
	LTE Band 26	15M	QPSK	1	0	Edge 4	0mm	OFF	26865	831.5	22.61	24.00	1.377	0.18	0.187	0.258
	LTE Band 26	15M	QPSK	36	0	Edge 4	0mm	OFF	26865	831.5	21.60	23.00	1.380	0.14	0.151	0.208
	LTE Band 26	15M	QPSK	1	0	Edge 1	15mm	OFF	26865	831.5	22.61	24.00	1.377	0.19	0.271	0.373

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41	20M	QPSK	1	0	Bottom Face	0mm	ON	40620	2593	18.17	18.50	1.079	-0.03	0.196	0.213
	LTE Band 41	20M	QPSK	50	24	Bottom Face	0mm	ON	39750	2506	18.06	18.50	1.107	0.04	0.207	0.230
	LTE Band 41	20M	QPSK	1	0	Edge 1	0mm	ON	40620	2593	18.17	18.50	1.079	0.1	1.000	1.085
	LTE Band 41	20M	QPSK	1	0	Edge 1	0mm	ON	39750	2506	18.06	18.50	1.107	0.02	0.891	0.992
	LTE Band 41	20M	QPSK	1	0	Edge 1	0mm	ON	40185	2549.5	18.01	18.50	1.119	0.08	0.971	1.093
	LTE Band 41	20M	QPSK	1	0	Edge 1	0mm	ON	41055	2636.5	18.02	18.50	1.117	0.09	0.868	0.975
	LTE Band 41	20M	QPSK	1	0	Edge 1	0mm	ON	41490	2680	17.98	18.50	1.127	0.1	0.933	1.058
	LTE Band 41	20M	QPSK	50	24	Edge 1	0mm	ON	39750	2506	18.06	18.50	1.107	0.07	0.855	0.952
10	LTE Band 41	20M	QPSK	50	24	Edge 1	0mm	ON	40185	2549.5	17.90	18.50	1.148	0.03	0.986	1.139
	LTE Band 41	20M	QPSK	50	24	Edge 1	0mm	ON	40620	2593	18.04	18.50	1.112	0.12	0.953	1.066
	LTE Band 41	20M	QPSK	50	24	Edge 1	0mm	ON	41055	2636.5	18.04	18.50	1.112	0.14	0.874	0.977
	LTE Band 41	20M	QPSK	50	0	Edge 1	0mm	ON	41490	2680	17.97	18.50	1.130	0.15	0.862	0.980
	LTE Band 41	20M	QPSK	100	0	Edge 1	0mm	ON	39750	2506	18.00	18.50	1.122	0.15	0.878	0.991
	LTE Band 41	20M	QPSK	1	0	Bottom Face	10mm	OFF	40620	2593	21.60	23.00	1.380	0.08	0.098	0.136
	LTE Band 41	20M	QPSK	50	0	Bottom Face	10mm	OFF	40620	2593	20.68	22.00	1.355	0.05	0.080	0.109
	LTE Band 41	20M	QPSK	1	0	Edge 1	15mm	OFF	40620	2593	21.60	23.00	1.380	0.11	0.247	0.343
	LTE Band 41	20M	QPSK	50	0	Edge 1	15mm	OFF	40620	2593	20.68	22.00	1.355	0.04	0.196	0.267
	LTE Band 41	20M	QPSK	1	0	Edge 4	0mm	OFF	40620	2593	21.60	23.00	1.380	0.1	0.456	0.633
	LTE Band 41	20M	QPSK	1	49	Edge 4	0mm	OFF	39750	2506	21.44	23.00	1.432	0.18	0.294	0.424
	LTE Band 41	20M	QPSK	1	0	Edge 4	0mm	OFF	40185	2549.5	21.47	23.00	1.422	0.1	0.411	0.588
	LTE Band 41	20M	QPSK	1	49	Edge 4	0mm	OFF	41055	2636.5	21.45	23.00	1.429	-0.13	0.256	0.368
	LTE Band 41	20M	QPSK	1	0	Edge 4	0mm	OFF	41490	2680	21.55	23.00	1.396	-0.15	0.196	0.275
	LTE Band 41	20M	QPSK	50	0	Edge 4	0mm	OFF	40620	2593	20.68	22.00	1.355	0.17	0.359	0.489
	LTE Band 41	20M	QPSK	100	0	Edge 4	0mm	OFF	40620	2593	20.54	22.00	1.400	0.1	0.347	0.489

15.2 Repeated SAR Measurement

Case No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA II	RMC 12.2Kbps	Edge 1	0mm	ON	9538	1907.6	13.83	14.50	1.167	0.09	0.969	-	1.131
2nd	WCDMA II	RMC 12.2Kbps	Edge 1	0mm	ON	9538	1907.6	13.83	14.50	1.167	0.09	0.920	1.05	1.073
1st	WCDMA V	RMC 12.2Kbps	Edge 1	0mm	ON	4233	846.6	18.28	19.50	1.324	0.13	0.868	-	1.150
2nd	WCDMA V	RMC 12.2Kbps	Edge 1	0mm	ON	4233	846.6	18.28	19.50	1.324	0.14	0.825	1.05	1.093

Case No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 4	20M	QPSK	1	0	Edge 4	0mm	OFF	20175	1732.5	23.83	24.00	1.040	-0.11	1.320	-	1.373
2nd	LTE Band 4	20M	QPSK	1	0	Edge 4	0mm	OFF	20175	1732.5	23.83	24.00	1.040	-0.09	1.310	1.01	1.362
1st	LTE Band 7	20M	QPSK	1	0	Edge 1	0mm	ON	21350	2560	15.71	16.00	1.069	0.12	1.020	-	1.090
2nd	LTE Band 7	20M	QPSK	1	0	Edge 1	0mm	ON	21350	2535	15.71	16.00	1.069	0.02	0.987	1.03	1.055
1st	LTE Band 13	10M	QPSK	1	0	Edge 1	0mm	ON	23230	782	21.50	21.50	1.000	0.14	1.080	-	1.080
2nd	LTE Band 13	10M	QPSK	1	0	Edge 1	0mm	ON	23230	782	21.50	21.50	1.000	0.09	0.999	1.08	0.999

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR <1.45W/kg, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

16. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body
1.	WCDMA + WLAN2.4GHz	Yes
2.	LTE + WLAN2.4GHz	Yes
3.	WCDMA+ BT	Yes
4.	LTE + BT	Yes
5.	WCDMA + WLAN5GHz	Yes
6.	LTE + WLAN5GHz	Yes
7.	WCDMA + WLAN2.4GHz ANT 1 + BT ANT 2	Yes
8.	LTE + WLAN2.4GHz ANT 1 + BT ANT 2	Yes
9.	WCDMA + WLAN5GHz ANT 1 + WLAN5GHz / BT ANT2	Yes
10.	LTE + WLAN5GHz ANT 1 + WLAN5GHz / BT ANT2	Yes

General Note:

1. The WLAN module intel 8265NGW is also integrated into this host and have two kind antenna vendors within two kind color material hosts for WLAN tested, for WLAN tests results within difference vendors and hosts are evaluated as following reports and the results are used perform simultaneous transmission analysis.
2. For simultaneous transmission analysis for exposure position of edge 15mm and bottom face 10mm, WLAN SAR tested at 0mm separation is worse and the test data is used for conservative SAR summation.
3. 2.4GHz WLAN and Bluetooth share the same antenna 2, and cannot transmit simultaneously.
4. EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment.
5. The Scaled SAR summation is calculated based on the same configuration and test position.
6. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
   iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
   v) The SPLSR calculated results please following below section.
   vi) For SPLSR analysis = (SAR1 + SAR2)1.5 / (min. separation distance, mm). If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary
   vii) For WLAN SPLSR calculation is based on below WLAN test report to doing WWAN and WLAN SPLSR calculation, if the WLAN test report no evaluated SPLSR analysis, the minimum distance between each transmitter antenna is used perform WWAN and WLAN SPLSR calculation.

WLAN Report Information			
FCC ID	Report No.	WLAN Antenna Vendor	Color Material
PD98265NG	161024-01.TR02	WNC	Black
PD98265NG	161024-01.TR04	WNC	Silver
PD98265NG	161024-01.TR03	Jiengtai	Silver
PD98265NG	161024-01.TR01	Jiengtai	Black

16.1 Body Exposure Conditions for WNC Black

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 1 1g SAR (W/kg)	3 2.4GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.350	0.340	0.040	**0.62**	**0.61**	**0.96**	**0.66**		
		Edge 1 at 0mm	1.131	0.370	0.140	0.020	**1.50**	**1.27**	**1.64**	**1.52**	**0.02**	**Case 1**
		Bottom Face at 10mm	0.666	0.350	0.340	0.040	**1.02**	**1.01**	**1.36**	**1.06**		
		Edge 1 at 15mm	0.715	0.370	0.140	0.020	**1.09**	**0.86**	**1.23**	**1.11**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	0.291				**0.29**	**0.29**	**0.29**	**0.29**		
		Back of Display Screen at 25mm	0.462				**0.46**	**0.46**	**0.46**	**0.46**		
	WCDMA IV	Bottom Face at 0mm	0.417	0.350	0.340	0.040	**0.77**	**0.76**	**1.11**	**0.81**		
		Edge 1 at 0mm	1.167	0.370	0.140	0.020	**1.54**	**1.31**	**1.68**	**1.56**	**0.02**	**Case 2**
		Bottom Face at 10mm	0.665	0.350	0.340	0.040	**1.02**	**1.01**	**1.36**	**1.06**		
		Edge 1 at 15mm	0.351	0.370	0.140	0.020	**0.72**	**0.49**	**0.86**	**0.74**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	1.388				**1.39**	**1.39**	**1.39**	**1.39**		
		Back of Display Screen at 25mm	0.414				**0.41**	**0.41**	**0.41**	**0.41**		
	WCDMA V	Bottom Face at 0mm	0.525	0.350	0.340	0.040	**0.88**	**0.87**	**1.22**	**0.92**		
		Edge 1 at 0mm	1.150	0.370	0.140	0.020	**1.52**	**1.29**	**1.66**	**1.54**	**0.02**	**Case 3**
		Bottom Face at 10mm	0.325	0.350	0.340	0.040	**0.68**	**0.67**	**1.02**	**0.72**		
		Edge 1 at 15mm	0.709	0.370	0.140	0.020	**1.08**	**0.85**	**1.22**	**1.10**		
		Edge 2 at 0mm	0.041		0.570	0.100	**0.04**	**0.61**	**0.61**	**0.14**		
		Edge 3 at 0mm	0.051				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.277				**0.28**	**0.28**	**0.28**	**0.28**		
		Back of Display Screen at 25mm	0.195				**0.20**	**0.20**	**0.20**	**0.20**		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.350	0.340	0.040	**0.83**	**0.82**	**1.17**	**0.87**		
		Edge 1 at 0mm	1.102	0.370	0.140	0.020	**1.47**	**1.24**	**1.61**	**1.49**	**0.02**	**Case 4**
		Bottom Face at 10mm	0.605	0.350	0.340	0.040	**0.96**	**0.95**	**1.30**	**1.00**		
		Edge 1 at 15mm	0.342	0.370	0.140	0.020	**0.71**	**0.48**	**0.85**	**0.73**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	1.373				**1.37**	**1.37**	**1.37**	**1.37**		
		Back of Display Screen at 25mm	0.398				**0.40**	**0.40**	**0.40**	**0.40**		
	LTE Band 7	Bottom Face at 0mm	0.227	0.350	0.340	0.040	**0.58**	**0.57**	**0.92**	**0.62**		
		Edge 1 at 0mm	1.090	0.370	0.140	0.020	**1.46**	**1.23**	**1.60**	**1.48**	**0.02**	**Case 5**
		Bottom Face at 10mm	0.199	0.350	0.340	0.040	**0.55**	**0.54**	**0.89**	**0.59**		
		Edge 1 at 15mm	0.518	0.370	0.140	0.020	**0.89**	**0.66**	**1.03**	**0.91**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	1.022				**1.02**	**1.02**	**1.02**	**1.02**		
		Back of Display Screen at 25mm	0.200				**0.20**	**0.20**	**0.20**	**0.20**		
	LTE Band 12	Bottom Face at 0mm	0.814	0.350	0.340	0.040	**1.16**	**1.15**	**1.50**	**1.20**		
		Edge 1 at 0mm	1.277	0.370	0.140	0.020	**1.65**	**1.42**	**1.79**	**1.67**	**0.02**	**Case 6**
		Bottom Face at 10mm	0.167	0.350	0.340	0.040	**0.52**	**0.51**	**0.86**	**0.56**		
		Edge 1 at 15mm	0.208	0.370	0.140	0.020	**0.58**	**0.35**	**0.72**	**0.60**		
		Edge 2 at 0mm	0.016		0.570	0.100	**0.02**	**0.59**	**0.59**	**0.12**		
		Edge 3 at 0mm	0.043				**0.04**	**0.04**	**0.04**	**0.04**		
		Edge 4 at 0mm	0.438				**0.44**	**0.44**	**0.44**	**0.44**		
		Back of Display Screen at 25mm	0.198				**0.20**	**0.20**	**0.20**	**0.20**		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 1 1g SAR (W/kg)	3 2.4GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.350	0.340	0.040	**0.95**	**0.94**	**1.29**	**0.99**		
		Edge 1 at 0mm	1.113	0.370	0.140	0.020	**1.48**	**1.25**	**1.62**	**1.50**	**0.02**	**Case 7**
		Bottom Face at 10mm	0.190	0.350	0.340	0.040	**0.54**	**0.53**	**0.88**	**0.58**		
		Edge 1 at 15mm	0.338	0.370	0.140	0.020	**0.71**	**0.48**	**0.85**	**0.73**		
		Edge 2 at 0mm	0.019		0.570	0.100	**0.02**	**0.59**	**0.59**	**0.12**		
		Edge 3 at 0mm	0.050				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.321				**0.32**	**0.32**	**0.32**	**0.32**		
		Back of Display Screen at 25mm	0.228				**0.23**	**0.23**	**0.23**	**0.23**		
	LTE Band 25	Bottom Face at 0mm	0.276	0.350	0.340	0.040	**0.63**	**0.62**	**0.97**	**0.67**		
		Edge 1 at 0mm	1.167	0.370	0.140	0.020	**1.54**	**1.31**	**1.68**	**1.56**	**0.02**	**Case 8**
		Bottom Face at 10mm	0.239	0.350	0.340	0.040	**0.59**	**0.58**	**0.93**	**0.63**		
		Edge 1 at 15mm	0.989	0.370	0.140	0.020	**1.36**	**1.13**	**1.50**	**1.38**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	0.428				**0.43**	**0.43**	**0.43**	**0.43**		
		Back of Display Screen at 25mm	0.446				**0.45**	**0.45**	**0.45**	**0.45**		
	LTE Band 26	Bottom Face at 0mm	0.518	0.350	0.340	0.040	**0.87**	**0.86**	**1.21**	**0.91**		
		Edge 1 at 0mm	1.042	0.370	0.140	0.020	**1.41**	**1.18**	**1.55**	**1.43**		
		Bottom Face at 10mm	0.190	0.350	0.340	0.040	**0.54**	**0.53**	**0.88**	**0.58**		
		Edge 1 at 15mm	0.373	0.370	0.140	0.020	**0.74**	**0.51**	**0.88**	**0.76**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	0.258				**0.26**	**0.26**	**0.26**	**0.26**		
	LTE Band 41	Bottom Face at 0mm	0.230	0.350	0.340	0.040	**0.58**	**0.57**	**0.92**	**0.62**		
		Edge 1 at 0mm	1.139	0.370	0.140	0.020	**1.51**	**1.28**	**1.65**	**1.53**	**0.01**	**Case 9**
		Bottom Face at 10mm	0.136	0.350	0.340	0.040	**0.49**	**0.48**	**0.83**	**0.53**		
		Edge 1 at 15mm	0.343	0.370	0.140	0.020	**0.71**	**0.48**	**0.85**	**0.73**		
		Edge 2 at 0mm			0.570	0.100	**0.00**	**0.57**	**0.57**	**0.10**		
		Edge 4 at 0mm	0.633				**0.63**	**0.63**	**0.63**	**0.63**		
		Back of Display Screen at 25mm	0.114				**0.11**	**0.11**	**0.11**	**0.11**		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.450	0.490	0.040	0.72	0.76	1.21	1.25		
		Edge 1 at 0mm	1.131	1.190	1.400	0.020	2.32	2.53	3.72	3.74	0.04	Case 10
		Bottom Face at 10mm	0.666	0.450	0.490	0.040	1.12	1.16	1.61	1.65	0.01	Case 11
		Edge 1 at 15mm	0.715	1.190	1.400	0.020	1.91	2.12	3.31	3.33	0.04	Case 12
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	0.291				0.29	0.29	0.29	0.29		
		Back of Display Screen at 25mm	0.462				0.46	0.46	0.46	0.46		
	WCDMA IV	Bottom Face at 0mm	0.417	0.450	0.490	0.040	0.87	0.91	1.36	1.40		
		Edge 1 at 0mm	1.167	1.190	1.400	0.020	2.36	2.57	3.76	3.78	0.04	Case 13
		Bottom Face at 10mm	0.665	0.450	0.490	0.040	1.12	1.16	1.61	1.65	0.01	Case 14
		Edge 1 at 15mm	0.351	1.190	1.400	0.020	1.54	1.75	2.94	2.96	0.04	Case 15
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	1.388				1.39	1.39	1.39	1.39		
		Back of Display Screen at 25mm	0.414				0.41	0.41	0.41	0.41		
	WCDMA V	Bottom Face at 0mm	0.525	0.450	0.490	0.040	0.98	1.02	1.47	1.51		
		Edge 1 at 0mm	1.150	1.190	1.400	0.020	2.34	2.55	3.74	3.76	0.04	Case 16
		Bottom Face at 10mm	0.325	0.450	0.490	0.040	0.78	0.82	1.27	1.31		
		Edge 1 at 15mm	0.709	1.190	1.400	0.020	1.90	2.11	3.30	3.32	0.04	Case 17
		Edge 2 at 0mm	0.041		0.240	0.100	0.04	0.28	0.28	0.38		
		Edge 3 at 0mm	0.051				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.277				0.28	0.28	0.28	0.28		
		Back of Display Screen at 25mm	0.195				0.20	0.20	0.20	0.20		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.450	0.490	0.040	0.93	0.97	1.42	1.46		
		Edge 1 at 0mm	1.102	1.190	1.400	0.020	2.29	2.50	3.69	3.71	0.04	Case 18
		Bottom Face at 10mm	0.605	0.450	0.490	0.040	1.06	1.10	1.55	1.59		
		Edge 1 at 15mm	0.342	1.190	1.400	0.020	1.53	1.74	2.93	2.95	0.04	Case 19
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	1.373				1.37	1.37	1.37	1.37		
		Back of Display Screen at 25mm	0.398				0.40	0.40	0.40	0.40		
	LTE Band 7	Bottom Face at 0mm	0.227	0.450	0.490	0.040	0.68	0.72	1.17	1.21		
		Edge 1 at 0mm	1.090	1.190	1.400	0.020	2.28	2.49	3.68	3.70	0.04	Case 20
		Bottom Face at 10mm	0.199	0.450	0.490	0.040	0.65	0.69	1.14	1.18		
		Edge 1 at 15mm	0.518	1.190	1.400	0.020	1.71	1.92	3.11	3.13	0.04	Case 21
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	1.022				1.02	1.02	1.02	1.02		
		Back of Display Screen at 25mm	0.200				0.20	0.20	0.20	0.20		
	LTE Band 12	Bottom Face at 0mm	0.814	0.450	0.490	0.040	1.26	1.30	1.75	1.79	0.01	Case 22
		Edge 1 at 0mm	1.277	1.190	1.400	0.020	2.47	2.68	3.87	3.89	0.04	Case 23
		Bottom Face at 10mm	0.167	0.450	0.490	0.040	0.62	0.66	1.11	1.15		
		Edge 1 at 15mm	0.208	1.190	1.400	0.020	1.40	1.61	2.80	2.82	0.04	Case 24
		Edge 2 at 0mm	0.016		0.240	0.100	0.02	0.26	0.26	0.36		
		Edge 3 at 0mm	0.043				0.04	0.04	0.04	0.04		
		Edge 4 at 0mm	0.438				0.44	0.44	0.44	0.44		
		Back of Display Screen at 25mm	0.198				0.20	0.20	0.20	0.20		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.450	0.490	0.040	1.05	1.09	1.54	1.58		
		Edge 1 at 0mm	1.113	1.190	1.400	0.020	2.30	2.51	3.70	3.72	0.04	Case 25
		Bottom Face at 10mm	0.190	0.450	0.490	0.040	0.64	0.68	1.13	1.17		
		Edge 1 at 15mm	0.338	1.190	1.400	0.020	1.53	1.74	2.93	2.95	0.02	Case 26
		Edge 2 at 0mm	0.019		0.240	0.100	0.02	0.26	0.26	0.36		
		Edge 3 at 0mm	0.050				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.321				0.32	0.32	0.32	0.32		
		Back of Display Screen at 25mm	0.228				0.23	0.23	0.23	0.23		
	LTE Band 25	Bottom Face at 0mm	0.276	0.450	0.490	0.040	0.73	0.77	1.22	1.26		
		Edge 1 at 0mm	1.167	1.190	1.400	0.020	2.36	2.57	3.76	3.78	0.04	Case 27
		Bottom Face at 10mm	0.239	0.450	0.490	0.040	0.69	0.73	1.18	1.22		
		Edge 1 at 15mm	0.989	1.190	1.400	0.020	2.18	2.39	3.58	3.60	0.04	Case 28
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	0.428				0.43	0.43	0.43	0.43		
		Back of Display Screen at 25mm	0.446				0.45	0.45	0.45	0.45		
	LTE Band 26	Bottom Face at 0mm	0.518	0.450	0.490	0.040	0.97	1.01	1.46	1.50		
		Edge 1 at 0mm	1.042	1.190	1.400	0.020	2.23	2.44	3.63	3.65	0.04	Case 29
		Bottom Face at 10mm	0.190	0.450	0.490	0.040	0.64	0.68	1.13	1.17		
		Edge 1 at 15mm	0.373	1.190	1.400	0.020	1.56	1.77	2.96	2.98	0.04	Case 30
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	0.258				0.26	0.26	0.26	0.26		
	LTE Band 41	Bottom Face at 0mm	0.230	0.450	0.490	0.040	0.68	0.72	1.17	1.21		
		Edge 1 at 0mm	1.139	1.190	1.400	0.020	2.33	2.54	3.73	3.75	0.04	Case 33
		Bottom Face at 10mm	0.136	0.450	0.490	0.040	0.59	0.63	1.08	1.12		
		Edge 1 at 15mm	0.343	1.190	1.400	0.020	1.53	1.74	2.93	2.95	0.04	Case 34
		Edge 2 at 0mm			0.240	0.100	0.00	0.24	0.24	0.34		
		Edge 4 at 0mm	0.633				0.63	0.63	0.63	0.63		
		Back of Display Screen at 25mm	0.114				0.11	0.11	0.11	0.11		

16.2 SPLSR Evaluation and Analysis for WNC Black

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	WCDMA II	Edge 1	1.131	113.5	1.50	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	WCDMA II	Edge 1	1.131	213.5	1.27	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 2	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	1.167	113.5	1.54	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	WCDMA IV	Edge 1	1.167	213.5	1.31	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 3	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	1.52	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	WCDMA V	Edge 1	1.15	213.5	1.29	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 4	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	1.102	113.5	1.47	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 4	Edge 1	1.102	213.5	1.24	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 5	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	1.09	113.5	1.46	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 7	Edge 1	1.09	213.5	1.23	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 6	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	1.277	113.5	1.65	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 12	Edge 1	1.277	213.5	1.42	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.39	0.00	Not required
	BT ANT 2		0.02				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 7	LTE Band 13	Edge 1	1.113	113.5	1.48	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 13	Edge 1	1.113	213.5	1.25	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 8	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.54	0.02	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 25	Edge 1	1.167	213.5	1.31	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 9	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 41	Edge 1	1.039	113.5	1.41	0.01	Not required
	2.4GHz WLAN ANT 1		0.37				
	LTE Band 41	Edge 1	1.039	213.5	1.18	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.37	80.0	0.51	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 10	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Edge 1	1.131	113.5	2.32	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA II	Edge 1	1.131	213.5	2.55	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 11	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Bottom Face	0.666	113.5	1.12	0.01	Not required
	5GHz WLAN ANT 1		0.45				
	WCDMA II	Bottom Face	0.666	213.5	1.20	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
	5GHz WLAN ANT 1	Bottom Face	0.45	80.0	0.98	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
Case 12	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Edge 1	0.715	113.5	1.91	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA II	Edge 1	0.715	213.5	2.14	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 13	WCDMA IV	Edge 1	1.167	113.5	2.36	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA IV	Edge 1	1.167	213.5	2.59	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 14	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Bottom Face	0.665	113.5	1.12	0.01	Not required
	5GHz WLAN ANT 1		0.45				
	WCDMA IV	Bottom Face	0.665	213.5	1.20	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
	5GHz WLAN ANT 1	Bottom Face	0.45	80.0	0.98	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
Case 15	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	0.351	113.5	1.54	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA IV	Edge 1	0.351	213.5	1.77	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 16	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	2.34	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA V	Edge 1	1.15	213.5	2.57	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 17	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	0.709	113.5	1.90	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	WCDMA V	Edge 1	0.709	213.5	2.13	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 18	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	1.102	113.5	2.29	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 4	Edge 1	1.102	213.5	2.52	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 19	LTE Band 4	Edge 1	0.342	113.5	1.53	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 4	Edge 1	0.342	213.5	1.76	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 20	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	1.09	113.5	2.28	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 7	Edge 1	1.09	213.5	2.51	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 21	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	0.518	113.5	1.71	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 7	Edge 1	0.518	213.5	1.94	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 22	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Bottom Face	0.814	113.5	1.26	0.01	Not required
	5GHz WLAN ANT 1		0.45				
	LTE Band 12	Bottom Face	0.814	213.5	1.34	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
	5GHz WLAN ANT 1	Bottom Face	0.45	80.0	0.98	0.01	Not required
	5GHz WLAN / BT ANT 2		0.53				
Case 23	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	1.277	113.5	2.47	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 12	Edge 1	1.277	213.5	2.70	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 24	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	0.208	113.5	1.40	0.01	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 12	Edge 1	0.208	213.5	1.63	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 25	LTE Band 13	Edge 1	1.113	113.5	2.30	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 13	Edge 1	1.113	213.5	2.53	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 26	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	0.338	113.5	1.53	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 13	Edge 1	0.338	213.5	1.76	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	1.21	0.01	Not required
	5GHz WLAN / BT ANT 2		0.02				
Case 27	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	2.36	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 25	Edge 1	1.167	213.5	2.59	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 28	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	0.989	113.5	2.18	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 25	Edge 1	0.989	213.5	2.41	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 29	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	1.042	113.5	2.23	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 26	Edge 1	1.042	213.5	2.46	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
Case 30	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	0.373	113.5	1.56	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 26	Edge 1	0.373	213.5	1.79	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 33	LTE Band 41	Edge 1	1.039	113.5	2.23	0.03	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 41	Edge 1	1.039	213.5	2.46	0.02	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 34	LTE Band 41	Edge 1	0.343	113.5	1.53	0.02	Not required
	5GHz WLAN ANT 1		1.19				
	LTE Band 41	Edge 1	0.343	213.5	1.76	0.01	Not required
	5GHz WLAN / BT ANT 2		1.42				
	5GHz WLAN ANT 1	Edge 1	1.19	93.9	2.61	0.04	Not required
	5GHz WLAN / BT ANT 2		1.42				

16.3 Body Exposure Conditions for WNC Silver

WWAN Band		Exposure Position	1	2	3	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
			WWAN	2.4GHz WLAN Ant 1	2.4GHz WLAN Ant 2	Bluetooth Ant 2						
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)						
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.620	0.470	0.070	**0.89**	**0.74**	**1.36**	**0.96**		
		Edge 1 at 0mm	1.131	0.340	0.140	0.020	**1.47**	**1.27**	**1.61**	**1.49**	**0.02**	**Case 1**
		Bottom Face at 10mm	0.666	0.620	0.470	0.070	**1.29**	**1.14**	**1.76**	**1.36**	**0.01**	**Case 2**
		Edge 1 at 15mm	0.715	0.340	0.140	0.020	**1.06**	**0.86**	**1.20**	**1.08**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	0.291				**0.29**	**0.29**	**0.29**	**0.29**		
		Back of Display Screen at 25mm	0.462				**0.46**	**0.46**	**0.46**	**0.46**		
	WCDMA IV	Bottom Face at 0mm	0.417	0.620	0.470	0.070	**1.04**	**0.89**	**1.51**	**1.11**		
		Edge 1 at 0mm	1.167	0.340	0.140	0.020	**1.51**	**1.31**	**1.65**	**1.53**	**0.02**	**Case 3**
		Bottom Face at 10mm	0.665	0.620	0.470	0.070	**1.29**	**1.14**	**1.76**	**1.36**	**0.01**	**Case 4**
		Edge 1 at 15mm	0.351	0.340	0.140	0.020	**0.69**	**0.49**	**0.83**	**0.71**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	1.388				**1.39**	**1.39**	**1.39**	**1.39**		
		Back of Display Screen at 25mm	0.414				**0.41**	**0.41**	**0.41**	**0.41**		
	WCDMA V	Bottom Face at 0mm	0.525	0.620	0.470	0.070	**1.15**	**1.00**	**1.62**	**1.22**	**0.01**	**Case 5**
		Edge 1 at 0mm	1.150	0.340	0.140	0.020	**1.49**	**1.29**	**1.63**	**1.51**	**0.02**	**Case 6**
		Bottom Face at 10mm	0.325	0.620	0.470	0.070	**0.95**	**0.80**	**1.42**	**1.02**		
		Edge 1 at 15mm	0.709	0.340	0.140	0.020	**1.05**	**0.85**	**1.19**	**1.07**		
		Edge 2 at 0mm	0.041		0.510	0.080	**0.04**	**0.55**	**0.55**	**0.12**		
		Edge 3 at 0mm	0.051				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.277				**0.28**	**0.28**	**0.28**	**0.28**		
		Back of Display Screen at 25mm	0.195				**0.20**	**0.20**	**0.20**	**0.20**		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.620	0.470	0.070	**1.10**	**0.95**	**1.57**	**1.17**		
		Edge 1 at 0mm	1.102	0.340	0.140	0.020	**1.44**	**1.24**	**1.58**	**1.46**		
		Bottom Face at 10mm	0.605	0.620	0.470	0.070	**1.23**	**1.08**	**1.70**	**1.30**	**0.01**	**Case 7**
		Edge 1 at 15mm	0.342	0.340	0.140	0.020	**0.68**	**0.48**	**0.82**	**0.70**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	1.373				**1.37**	**1.37**	**1.37**	**1.37**		
		Back of Display Screen at 25mm	0.398				**0.40**	**0.40**	**0.40**	**0.40**		
	LTE Band 7	Bottom Face at 0mm	0.227	0.620	0.470	0.070	**0.85**	**0.70**	**1.32**	**0.92**		
		Edge 1 at 0mm	1.090	0.340	0.140	0.020	**1.43**	**1.23**	**1.57**	**1.45**		
		Bottom Face at 10mm	0.199	0.620	0.470	0.070	**0.82**	**0.67**	**1.29**	**0.89**		
		Edge 1 at 15mm	0.518	0.340	0.140	0.020	**0.86**	**0.66**	**1.00**	**0.88**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	1.022				**1.02**	**1.02**	**1.02**	**1.02**		
		Back of Display Screen at 25mm	0.200				**0.20**	**0.20**	**0.20**	**0.20**		
	LTE Band 12	Bottom Face at 0mm	0.814	0.620	0.470	0.070	**1.43**	**1.28**	**1.90**	**1.50**	**0.02**	**Case 8**
		Edge 1 at 0mm	1.277	0.340	0.140	0.020	**1.62**	**1.42**	**1.76**	**1.64**	**0.02**	**Case 9**
		Bottom Face at 10mm	0.167	0.620	0.470	0.070	**0.79**	**0.64**	**1.26**	**0.86**		
		Edge 1 at 15mm	0.208	0.340	0.140	0.020	**0.55**	**0.35**	**0.69**	**0.57**		
		Edge 2 at 0mm	0.016		0.510	0.080	**0.02**	**0.53**	**0.53**	**0.10**		
		Edge 3 at 0mm	0.043				**0.04**	**0.04**	**0.04**	**0.04**		
		Edge 4 at 0mm	0.438				**0.44**	**0.44**	**0.44**	**0.44**		
		Back of Display Screen at 25mm	0.198				**0.20**	**0.20**	**0.20**	**0.20**		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 1 1g SAR (W/kg)	3 2.4GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.620	0.470	0.070	**1.22**	**1.07**	**1.69**	**1.29**	**0.01**	**Case 10**
		Edge 1 at 0mm	1.113	0.340	0.140	0.020	**1.45**	**1.25**	**1.59**	**1.47**		
		Bottom Face at 10mm	0.190	0.620	0.470	0.070	**0.81**	**0.66**	**1.28**	**0.88**		
		Edge 1 at 15mm	0.338	0.340	0.140	0.020	**0.68**	**0.48**	**0.82**	**0.70**		
		Edge 2 at 0mm	0.019		0.510	0.080	**0.02**	**0.53**	**0.53**	**0.10**		
		Edge 3 at 0mm	0.050				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.321				**0.32**	**0.32**	**0.32**	**0.32**		
		Back of Display Screen at 25mm	0.228				**0.23**	**0.23**	**0.23**	**0.23**		
	LTE Band 25	Bottom Face at 0mm	0.276	0.620	0.470	0.070	**0.90**	**0.75**	**1.37**	**0.97**		
		Edge 1 at 0mm	1.167	0.340	0.140	0.020	**1.51**	**1.31**	**1.65**	**1.53**	**0.02**	**Case 11**
		Bottom Face at 10mm	0.239	0.620	0.470	0.070	**0.86**	**0.71**	**1.33**	**0.93**		
		Edge 1 at 15mm	0.989	0.340	0.140	0.020	**1.33**	**1.13**	**1.47**	**1.35**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	0.428				**0.43**	**0.43**	**0.43**	**0.43**		
		Back of Display Screen at 25mm	0.446				**0.45**	**0.45**	**0.45**	**0.45**		
	LTE Band 26	Bottom Face at 0mm	0.518	0.620	0.470	0.070	**1.14**	**0.99**	**1.61**	**1.21**	**0.01**	**Case 12**
		Edge 1 at 0mm	1.042	0.340	0.140	0.020	**1.38**	**1.18**	**1.52**	**1.40**		
		Bottom Face at 10mm	0.190	0.620	0.470	0.070	**0.81**	**0.66**	**1.28**	**0.88**		
		Edge 1 at 15mm	0.373	0.340	0.140	0.020	**0.71**	**0.51**	**0.85**	**0.73**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	0.258				**0.26**	**0.26**	**0.26**	**0.26**		
	LTE Band 41	Bottom Face at 0mm	0.230	0.620	0.470	0.070	**0.85**	**0.70**	**1.32**	**0.92**		
		Edge 1 at 0mm	1.139	0.340	0.140	0.020	**1.48**	**1.28**	**1.62**	**1.50**	**0.02**	**Case 13**
		Bottom Face at 10mm	0.136	0.620	0.470	0.070	**0.76**	**0.61**	**1.23**	**0.83**		
		Edge 1 at 15mm	0.343	0.340	0.140	0.020	**0.68**	**0.48**	**0.82**	**0.70**		
		Edge 2 at 0mm			0.510	0.080	**0.00**	**0.51**	**0.51**	**0.08**		
		Edge 4 at 0mm	0.633				**0.63**	**0.63**	**0.63**	**0.63**		
		Back of Display Screen at 25mm	0.114				**0.11**	**0.11**	**0.11**	**0.11**		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.360	0.610	0.070	0.63	0.88	1.24	1.31		
		Edge 1 at 0mm	1.131	0.900	1.530	0.020	2.03	2.66	3.56	3.58	0.04	Case 14
		Bottom Face at 10mm	0.666	0.360	0.610	0.070	1.03	1.28	1.64	1.71	0.01	Case 15
		Edge 1 at 15mm	0.715	0.900	1.530	0.020	1.62	2.25	3.15	3.17	0.04	Case 16
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	0.291				0.29	0.29	0.29	0.29		
		Back of Display Screen at 25mm	0.462				0.46	0.46	0.46	0.46		
	WCDMA IV	Bottom Face at 0mm	0.417	0.360	0.610	0.070	0.78	1.03	1.39	1.46		
		Edge 1 at 0mm	1.167	0.900	1.530	0.020	2.07	2.70	3.60	3.62	0.04	Case 17
		Bottom Face at 10mm	0.665	0.360	0.610	0.070	1.03	1.28	1.64	1.71	0.01	Case 18
		Edge 1 at 15mm	0.351	0.900	1.530	0.020	1.25	1.88	2.78	2.80	0.04	Case 19
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	1.388				1.39	1.39	1.39	1.39		
		Back of Display Screen at 25mm	0.414				0.41	0.41	0.41	0.41		
	WCDMA V	Bottom Face at 0mm	0.525	0.360	0.610	0.070	0.89	1.14	1.50	1.57		
		Edge 1 at 0mm	1.150	0.900	1.530	0.020	2.05	2.68	3.58	3.60	0.04	Case 20
		Bottom Face at 10mm	0.325	0.360	0.610	0.070	0.69	0.94	1.30	1.37		
		Edge 1 at 15mm	0.709	0.900	1.530	0.020	1.61	2.24	3.14	3.16	0.04	Case 21
		Edge 2 at 0mm	0.041		0.220	0.080	0.04	0.26	0.26	0.34		
		Edge 3 at 0mm	0.051				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.277				0.28	0.28	0.28	0.28		
		Back of Display Screen at 25mm	0.195				0.20	0.20	0.20	0.20		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.360	0.610	0.070	0.84	1.09	1.45	1.52		
		Edge 1 at 0mm	1.102	0.900	1.530	0.020	2.00	2.63	3.53	3.55	0.04	Case 22
		Bottom Face at 10mm	0.605	0.360	0.610	0.070	0.97	1.22	1.58	1.65	0.01	Case 23
		Edge 1 at 15mm	0.342	0.900	1.530	0.020	1.24	1.87	2.77	2.79	0.04	Case 24
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	1.373				1.37	1.37	1.37	1.37		
		Back of Display Screen at 25mm	0.398				0.40	0.40	0.40	0.40		
	LTE Band 7	Bottom Face at 0mm	0.227	0.360	0.610	0.070	0.59	0.84	1.20	1.27		
		Edge 1 at 0mm	1.090	0.900	1.530	0.020	1.99	2.62	3.52	3.54	0.04	Case 25
		Bottom Face at 10mm	0.199	0.360	0.610	0.070	0.56	0.81	1.17	1.24		
		Edge 1 at 15mm	0.518	0.900	1.530	0.020	1.42	2.05	2.95	2.97	0.04	Case 26
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	1.022				1.02	1.02	1.02	1.02		
		Back of Display Screen at 25mm	0.200				0.20	0.20	0.20	0.20		
	LTE Band 12	Bottom Face at 0mm	0.814	0.360	0.610	0.070	1.17	1.42	1.78	1.85	0.01	Case 27
		Edge 1 at 0mm	1.277	0.900	1.530	0.020	2.18	2.81	3.71	3.73	0.04	Case 28
		Bottom Face at 10mm	0.167	0.360	0.610	0.070	0.53	0.78	1.14	1.21		
		Edge 1 at 15mm	0.208	0.900	1.530	0.020	1.11	1.74	2.64	2.66	0.04	Case 29
		Edge 2 at 0mm	0.016		0.220	0.080	0.02	0.24	0.24	0.32		
		Edge 3 at 0mm	0.043				0.04	0.04	0.04	0.04		
		Edge 4 at 0mm	0.438				0.44	0.44	0.44	0.44		
		Back of Display Screen at 25mm	0.198				0.20	0.20	0.20	0.20		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.360	0.610	0.070	0.96	1.21	1.57	1.64	0.01	Case 30
		Edge 1 at 0mm	1.113	0.900	1.530	0.020	2.01	2.64	3.54	3.56	0.04	Case 31
		Bottom Face at 10mm	0.190	0.360	0.610	0.070	0.55	0.80	1.16	1.23		
		Edge 1 at 15mm	0.338	0.900	1.530	0.020	1.24	1.87	2.77	2.79	0.01	Case 32
		Edge 2 at 0mm	0.019		0.220	0.080	0.02	0.24	0.24	0.32		
		Edge 3 at 0mm	0.050				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.321				0.32	0.32	0.32	0.32		
		Back of Display Screen at 25mm	0.228				0.23	0.23	0.23	0.23		
	LTE Band 25	Bottom Face at 0mm	0.276	0.360	0.610	0.070	0.64	0.89	1.25	1.32		
		Edge 1 at 0mm	1.167	0.900	1.530	0.020	2.07	2.70	3.60	3.62	0.04	Case 33
		Bottom Face at 10mm	0.239	0.360	0.610	0.070	0.60	0.85	1.21	1.28		
		Edge 1 at 15mm	0.989	0.900	1.530	0.020	1.89	2.52	3.42	3.44	0.04	Case 34
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	0.428				0.43	0.43	0.43	0.43		
		Back of Display Screen at 25mm	0.446				0.45	0.45	0.45	0.45		
	LTE Band 26	Bottom Face at 0mm	0.518	0.360	0.610	0.070	0.88	1.13	1.49	1.56		
		Edge 1 at 0mm	1.042	0.900	1.530	0.020	1.94	2.57	3.47	3.49	0.04	Case 35
		Bottom Face at 10mm	0.190	0.360	0.610	0.070	0.55	0.80	1.16	1.23		
		Edge 1 at 15mm	0.373	0.900	1.530	0.020	1.27	1.90	2.80	2.82	0.04	Case 36
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	0.258				0.26	0.26	0.26	0.26		
	LTE Band 41	Bottom Face at 0mm	0.230	0.360	0.610	0.070	0.59	0.84	1.20	1.27		
		Edge 1 at 0mm	1.139	0.900	1.530	0.020	2.04	2.67	3.57	3.59	0.04	Case 39
		Bottom Face at 10mm	0.136	0.360	0.610	0.070	0.50	0.75	1.11	1.18		
		Edge 1 at 15mm	0.343	0.900	1.530	0.020	1.24	1.87	2.77	2.79	0.04	Case 40
		Edge 2 at 0mm			0.220	0.080	0.00	0.22	0.22	0.30		
		Edge 4 at 0mm	0.633				0.63	0.63	0.63	0.63		
		Back of Display Screen at 25mm	0.114				0.11	0.11	0.11	0.11		

16.4 SPLSR Evaluation and Analysis for WNC Silver

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	WCDMA II	Edge 1	1.131	113.5	1.47	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	WCDMA II	Edge 1	1.131	213.5	1.27	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 2	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA I	Bottom Face	0.666	113.5	1.29	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	WCDMA I	Bottom Face	0.666	213.5	1.14	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 3	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	1.167	113.5	1.51	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	WCDMA IV	Edge 1	1.167	213.5	1.31	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 4	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Bottom Face	0.665	113.5	1.29	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	WCDMA IV	Bottom Face	0.665	213.5	1.14	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 5	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Bottom Face	0.525	113.5	1.15	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	WCDMA V	Bottom Face	0.525	213.5	1.00	0.00	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 6	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	1.49	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	WCDMA V	Edge 1	1.15	213.5	1.29	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 7	LTE Band 4	Bottom Face	0.605	113.5	1.23	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	LTE Band 4	Bottom Face	0.605	213.5	1.08	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 8	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Bottom Face	0.814	113.5	1.43	0.02	Not required
	2.4GHz WLAN ANT 1		0.62				
	LTE Band 12	Bottom Face	0.814	213.5	1.28	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 9	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	1.277	113.5	1.62	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	LTE Band 12	Edge 1	1.277	213.5	1.42	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.36	0.00	Not required
	BT ANT 2		0.02				
Case 10	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Bottom Face	0.602	113.5	1.22	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	LTE Band 13	Bottom Face	0.602	213.5	1.07	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				
Case 11	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.51	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	LTE Band 25	Edge 1	1.167	213.5	1.31	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
Case 12	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Bottom Face	0.518	113.5	1.14	0.01	Not required
	2.4GHz WLAN ANT 1		0.62				
	LTE Band 26	Bottom Face	0.518	213.5	0.99	0.00	Not required
	2.4GHz WLAN ANT 2		0.47				
	2.4GHz WLAN ANT 1	Bottom Face	0.62	80.0	1.09	0.01	Not required
	2.4GHz WLAN ANT 2		0.47				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 13	LTE Band 41	Edge 1	1.139	113.5	1.48	0.02	Not required
	2.4GHz WLAN ANT 1		0.34				
	LTE Band 41	Edge 1	1.139	213.5	1.28	0.01	Not required
	2.4GHz WLAN ANT 2		0.14				
	2.4GHz WLAN ANT 1	Edge 1	0.34	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.14				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 14	WCDMA II	Edge 1	1.131	113.5	2.03	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA II	Edge 1	1.131	213.5	2.68	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 15	WCDMA II	Bottom Face	0.666	113.5	1.03	0.01	Not required
	5GHz WLAN ANT 1		0.36				
	WCDMA II	Bottom Face	0.666	213.5	1.35	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	5GHz WLAN ANT 1	Bottom Face	0.36	80.0	1.04	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 16	WCDMA II	Edge 1	0.715	113.5	1.62	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA II	Edge 1	0.715	213.5	2.27	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 17	WCDMA IV	Edge 1	1.167	113.5	2.07	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA IV	Edge 1	1.167	213.5	2.72	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 18	WCDMA IV	Bottom Face	0.665	113.5	1.03	0.01	Not required
	5GHz WLAN ANT 1		0.36				
	WCDMA IV	Bottom Face	0.665	213.5	1.35	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	5GHz WLAN ANT 1	Bottom Face	0.36	80.0	1.04	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 19	WCDMA IV	Edge 1	0.351	113.5	1.25	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA IV	Edge 1	0.351	213.5	1.90	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 20	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	2.05	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA V	Edge 1	1.15	213.5	2.70	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 21	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	0.709	113.5	1.61	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	WCDMA V	Edge 1	0.709	213.5	2.26	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 22	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	1.102	113.5	2.00	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 4	Edge 1	1.102	213.5	2.65	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 23	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Bottom Face	0.605	113.5	0.97	0.01	Not required
	5GHz WLAN ANT 1		0.36				
	LTE Band 4	Bottom Face	0.605	213.5	1.29	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	5GHz WLAN ANT 1	Bottom Face	0.36	80.0	1.04	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
Case 24	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	0.342	113.5	1.24	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 4	Edge 1	0.342	213.5	1.89	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 25	LTE Band 7	Edge 1	1.09	113.5	1.99	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 7	Edge 1	1.09	213.5	2.64	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 26	LTE Band 7	Edge 1	0.518	113.5	1.42	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 7	Edge 1	0.518	213.5	2.07	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 27	LTE Band 12	Bottom Face	0.814	113.5	1.17	0.01	Not required
	5GHz WLAN ANT 1		0.36				
	LTE Band 12	Bottom Face	0.814	213.5	1.49	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	5GHz WLAN ANT 1	Bottom Face	0.36	80.0	1.04	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 28	LTE Band 12	Edge 1	1.277	113.5	2.18	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 12	Edge 1	1.277	213.5	2.83	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 29	LTE Band 12	Edge 1	0.208	113.5	1.11	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 12	Edge 1	0.208	213.5	1.76	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 30	LTE Band 13	Bottom Face	0.602	113.5	0.96	0.01	Not required
	5GHz WLAN ANT 1		0.36				
	LTE Band 13	Bottom Face	0.602	213.5	1.28	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				
	5GHz WLAN ANT 1	Bottom Face	0.36	80.0	1.04	0.01	Not required
	5GHz WLAN / BT ANT 2		0.68				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 31	LTE Band 13	Edge 1	1.113	113.5	2.01	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 13	Edge 1	1.113	213.5	2.66	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 32	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	0.338	113.5	1.24	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 13	Edge 1	0.338	213.5	1.89	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	0.92	0.01	Not required
	5GHz WLAN / BT ANT 2		0.02				
Case 33	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	2.07	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 25	Edge 1	1.167	213.5	2.72	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 34	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	0.989	113.5	1.89	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 25	Edge 1	0.989	213.5	2.54	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 35	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	1.042	113.5	1.94	0.02	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 26	Edge 1	1.042	213.5	2.59	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
Case 36	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	0.373	113.5	1.27	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 26	Edge 1	0.373	213.5	1.92	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 39	LTE Band 41	Edge 1	1.139	113.5	2.04	0.03	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 41	Edge 1	1.039	213.5	2.59	0.02	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 40	LTE Band 41	Edge 1	0.343	113.5	1.24	0.01	Not required
	5GHz WLAN ANT 1		0.9				
	LTE Band 41	Edge 1	0.32	213.5	1.87	0.01	Not required
	5GHz WLAN / BT ANT 2		1.55				
	5GHz WLAN ANT 1	Edge 1	0.9	99.8	2.45	0.04	Not required
	5GHz WLAN / BT ANT 2		1.55				

16.5 Body Exposure Conditions for Jiengtai_Silver

WWAN Band		Exposure Position	1	2	3	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
			WWAN	2.4GHz WLAN Ant 1	2.4GHz WLAN Ant 2	Bluetooth Ant 2						
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)						
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.550	0.320	0.070	**0.82**	**0.59**	**1.14**	**0.89**		
		Edge 1 at 0mm	1.131	0.280	0.200	0.020	**1.41**	**1.33**	**1.61**	**1.43**	**0.01**	**Case 1**
		Bottom Face at 10mm	0.666	0.550	0.320	0.070	**1.22**	**0.99**	**1.54**	**1.29**		
		Edge 1 at 15mm	0.715	0.280	0.200	0.020	**1.00**	**0.92**	**1.20**	**1.02**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	0.291				**0.29**	**0.29**	**0.29**	**0.29**		
		Back of Display Screen at 25mm	0.462				**0.46**	**0.46**	**0.46**	**0.46**		
	WCDMA IV	Bottom Face at 0mm	0.417	0.550	0.320	0.070	**0.97**	**0.74**	**1.29**	**1.04**		
		Edge 1 at 0mm	1.167	0.280	0.200	0.020	**1.45**	**1.37**	**1.65**	**1.47**	**0.02**	**Case 2**
		Bottom Face at 10mm	0.665	0.550	0.320	0.070	**1.22**	**0.99**	**1.54**	**1.29**		
		Edge 1 at 15mm	0.351	0.280	0.200	0.020	**0.63**	**0.55**	**0.83**	**0.65**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	1.388				**1.39**	**1.39**	**1.39**	**1.39**		
		Back of Display Screen at 25mm	0.414				**0.41**	**0.41**	**0.41**	**0.41**		
	WCDMA V	Bottom Face at 0mm	0.525	0.550	0.320	0.070	**1.08**	**0.85**	**1.40**	**1.15**		
		Edge 1 at 0mm	1.150	0.280	0.200	0.020	**1.43**	**1.35**	**1.63**	**1.45**	**0.02**	**Case 3**
		Bottom Face at 10mm	0.325	0.550	0.320	0.070	**0.88**	**0.65**	**1.20**	**0.95**		
		Edge 1 at 15mm	0.709	0.280	0.200	0.020	**0.99**	**0.91**	**1.19**	**1.01**		
		Edge 2 at 0mm	0.041		0.570	0.090	**0.04**	**0.61**	**0.61**	**0.13**		
		Edge 3 at 0mm	0.051				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.277				**0.28**	**0.28**	**0.28**	**0.28**		
		Back of Display Screen at 25mm	0.195				**0.20**	**0.20**	**0.20**	**0.20**		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.550	0.320	0.070	**1.03**	**0.80**	**1.35**	**1.10**		
		Edge 1 at 0mm	1.102	0.280	0.200	0.020	**1.38**	**1.30**	**1.58**	**1.40**		
		Bottom Face at 10mm	0.605	0.550	0.320	0.070	**1.16**	**0.93**	**1.48**	**1.23**		
		Edge 1 at 15mm	0.342	0.280	0.200	0.020	**0.62**	**0.54**	**0.82**	**0.64**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	1.373				**1.37**	**1.37**	**1.37**	**1.37**		
		Back of Display Screen at 25mm	0.398				**0.40**	**0.40**	**0.40**	**0.40**		
	LTE Band 7	Bottom Face at 0mm	0.227	0.550	0.320	0.070	**0.78**	**0.55**	**1.10**	**0.85**		
		Edge 1 at 0mm	1.090	0.280	0.200	0.020	**1.37**	**1.29**	**1.57**	**1.39**		
		Bottom Face at 10mm	0.199	0.550	0.320	0.070	**0.75**	**0.52**	**1.07**	**0.82**		
		Edge 1 at 15mm	0.518	0.280	0.200	0.020	**0.80**	**0.72**	**1.00**	**0.82**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	1.022				**1.02**	**1.02**	**1.02**	**1.02**		
		Back of Display Screen at 25mm	0.200				**0.20**	**0.20**	**0.20**	**0.20**		
	LTE Band 12	Bottom Face at 0mm	0.814	0.550	0.320	0.070	**1.36**	**1.13**	**1.68**	**1.43**	**0.01**	**Case 4**
		Edge 1 at 0mm	1.277	0.280	0.200	0.020	**1.56**	**1.48**	**1.76**	**1.58**	**0.02**	**Case 5**
		Bottom Face at 10mm	0.167	0.550	0.320	0.070	**0.72**	**0.49**	**1.04**	**0.79**		
		Edge 1 at 15mm	0.208	0.280	0.200	0.020	**0.49**	**0.41**	**0.69**	**0.51**		
		Edge 2 at 0mm	0.016		0.570	0.090	**0.02**	**0.59**	**0.59**	**0.11**		
		Edge 3 at 0mm	0.043				**0.04**	**0.04**	**0.04**	**0.04**		
		Edge 4 at 0mm	0.438				**0.44**	**0.44**	**0.44**	**0.44**		
		Back of Display Screen at 25mm	0.198				**0.20**	**0.20**	**0.20**	**0.20**		

WWAN Band		Exposure Position	1	2	3	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
			WWAN	2.4GHz WLAN Ant 1	2.4GHz WLAN Ant 2	Bluetooth Ant 2						
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)						
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.550	0.320	0.070	**1.15**	**0.92**	**1.47**	**1.22**		
		Edge 1 at 0mm	1.113	0.280	0.200	0.020	**1.39**	**1.31**	**1.59**	**1.41**		
		Bottom Face at 10mm	0.190	0.550	0.320	0.070	**0.74**	**0.51**	**1.06**	**0.81**		
		Edge 1 at 15mm	0.338	0.280	0.200	0.020	**0.62**	**0.54**	**0.82**	**0.64**		
		Edge 2 at 0mm	0.019		0.570	0.090	**0.02**	**0.59**	**0.59**	**0.11**		
		Edge 3 at 0mm	0.050				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.321				**0.32**	**0.32**	**0.32**	**0.32**		
		Back of Display Screen at 25mm	0.228				**0.23**	**0.23**	**0.23**	**0.23**		
	LTE Band 25	Bottom Face at 0mm	0.276	0.550	0.320	0.070	**0.83**	**0.60**	**1.15**	**0.90**		
		Edge 1 at 0mm	1.167	0.280	0.200	0.020	**1.45**	**1.37**	**1.65**	**1.47**	**0.02**	**Case 6**
		Bottom Face at 10mm	0.239	0.550	0.320	0.070	**0.79**	**0.56**	**1.11**	**0.86**		
		Edge 1 at 15mm	0.989	0.280	0.200	0.020	**1.27**	**1.19**	**1.47**	**1.29**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	0.428				**0.43**	**0.43**	**0.43**	**0.43**		
		Back of Display Screen at 25mm	0.446				**0.45**	**0.45**	**0.45**	**0.45**		
	LTE Band 26	Bottom Face at 0mm	0.518	0.550	0.320	0.070	**1.07**	**0.84**	**1.39**	**1.14**		
		Edge 1 at 0mm	1.042	0.280	0.200	0.020	**1.32**	**1.24**	**1.52**	**1.34**		
		Bottom Face at 10mm	0.190	0.550	0.320	0.070	**0.74**	**0.51**	**1.06**	**0.81**		
		Edge 1 at 15mm	0.373	0.280	0.200	0.020	**0.65**	**0.57**	**0.85**	**0.67**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	0.258				**0.26**	**0.26**	**0.26**	**0.26**		
	LTE Band 41	Bottom Face at 0mm	0.230	0.550	0.320	0.070	**0.78**	**0.55**	**1.10**	**0.85**		
		Edge 1 at 0mm	1.139	0.280	0.200	0.020	**1.42**	**1.34**	**1.62**	**1.44**	**0.01**	**Case 7**
		Bottom Face at 10mm	0.136	0.550	0.320	0.070	**0.69**	**0.46**	**1.01**	**0.76**		
		Edge 1 at 15mm	0.343	0.280	0.200	0.020	**0.62**	**0.54**	**0.82**	**0.64**		
		Edge 2 at 0mm			0.570	0.090	**0.00**	**0.57**	**0.57**	**0.09**		
		Edge 4 at 0mm	0.633				**0.63**	**0.63**	**0.63**	**0.63**		
		Back of Display Screen at 25mm	0.114				**0.11**	**0.11**	**0.11**	**0.11**		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.420	0.520	0.070	0.69	0.79	1.21	1.28		
		Edge 1 at 0mm	1.131	0.640	1.050	0.020	1.77	2.18	2.82	2.84	0.03	Case 8
		Bottom Face at 10mm	0.666	0.420	0.520	0.070	1.09	1.19	1.61	1.68	0.01	Case 9
		Edge 1 at 15mm	0.715	0.640	1.050	0.020	1.36	1.77	2.41	2.43	0.03	Case 10
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	0.291				0.29	0.29	0.29	0.29		
		Back of Display Screen at 25mm	0.462				0.46	0.46	0.46	0.46		
	WCDMA IV	Bottom Face at 0mm	0.417	0.420	0.520	0.070	0.84	0.94	1.36	1.43		
		Edge 1 at 0mm	1.167	0.640	1.050	0.020	1.81	2.22	2.86	2.88	0.03	Case 11
		Bottom Face at 10mm	0.665	0.420	0.520	0.070	1.09	1.19	1.61	1.68	0.01	Case 12
		Edge 1 at 15mm	0.351	0.640	1.050	0.020	0.99	1.40	2.04	2.06	0.03	Case 13
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	1.388				1.39	1.39	1.39	1.39		
		Back of Display Screen at 25mm	0.414				0.41	0.41	0.41	0.41		
	WCDMA V	Bottom Face at 0mm	0.525	0.420	0.520	0.070	0.95	1.05	1.47	1.54		
		Edge 1 at 0mm	1.150	0.640	1.050	0.020	1.79	2.20	2.84	2.86	0.03	Case 14
		Bottom Face at 10mm	0.325	0.420	0.520	0.070	0.75	0.85	1.27	1.34		
		Edge 1 at 15mm	0.709	0.640	1.050	0.020	1.35	1.76	2.40	2.42	0.03	Case 15
		Edge 2 at 0mm	0.041		0.300	0.090	0.04	0.34	0.34	0.43		
		Edge 3 at 0mm	0.051				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.277				0.28	0.28	0.28	0.28		
		Back of Display Screen at 25mm	0.195				0.20	0.20	0.20	0.20		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.420	0.520	0.070	0.90	1.00	1.42	1.49		
		Edge 1 at 0mm	1.102	0.640	1.050	0.020	1.74	2.15	2.79	2.81	0.03	Case 16
		Bottom Face at 10mm	0.605	0.420	0.520	0.070	1.03	1.13	1.55	1.62	0.01	Case 17
		Edge 1 at 15mm	0.342	0.640	1.050	0.020	0.98	1.39	2.03	2.05	0.03	Case 18
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	1.373				1.37	1.37	1.37	1.37		
		Back of Display Screen at 25mm	0.398				0.40	0.40	0.40	0.40		
	LTE Band 7	Bottom Face at 0mm	0.227	0.420	0.520	0.070	0.65	0.75	1.17	1.24		
		Edge 1 at 0mm	1.090	0.640	1.050	0.020	1.73	2.14	2.78	2.80	0.03	Case 19
		Bottom Face at 10mm	0.199	0.420	0.520	0.070	0.62	0.72	1.14	1.21		
		Edge 1 at 15mm	0.518	0.640	1.050	0.020	1.16	1.57	2.21	2.23	0.03	Case 20
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	1.022				1.02	1.02	1.02	1.02		
		Back of Display Screen at 25mm	0.200				0.20	0.20	0.20	0.20		
	LTE Band 12	Bottom Face at 0mm	0.814	0.420	0.520	0.070	1.23	1.33	1.75	1.82	0.01	Case 21
		Edge 1 at 0mm	1.277	0.640	1.050	0.020	1.92	2.33	2.97	2.99	0.03	Case 22
		Bottom Face at 10mm	0.167	0.420	0.520	0.070	0.59	0.69	1.11	1.18		
		Edge 1 at 15mm	0.208	0.640	1.050	0.020	0.85	1.26	1.90	1.92	0.03	Case 23
		Edge 2 at 0mm	0.016		0.300	0.090	0.02	0.32	0.32	0.41		
		Edge 3 at 0mm	0.043				0.04	0.04	0.04	0.04		
		Edge 4 at 0mm	0.438				0.44	0.44	0.44	0.44		
		Back of Display Screen at 25mm	0.198				0.20	0.20	0.20	0.20		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.420	0.520	0.070	1.02	1.12	1.54	1.61	0.01	Case 24
		Edge 1 at 0mm	1.113	0.640	1.050	0.020	1.75	2.16	2.80	2.82	0.03	Case 25
		Bottom Face at 10mm	0.190	0.420	0.520	0.070	0.61	0.71	1.13	1.20		
		Edge 1 at 15mm	0.338	0.640	1.050	0.020	0.98	1.39	2.03	2.05	0.01	Case 26
		Edge 2 at 0mm	0.019		0.300	0.090	0.02	0.32	0.32	0.41		
		Edge 3 at 0mm	0.050				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.321				0.32	0.32	0.32	0.32		
		Back of Display Screen at 25mm	0.228				0.23	0.23	0.23	0.23		
	LTE Band 25	Bottom Face at 0mm	0.276	0.420	0.520	0.070	0.70	0.80	1.22	1.29		
		Edge 1 at 0mm	1.167	0.640	1.050	0.020	1.81	2.22	2.86	2.88	0.03	Case 27
		Bottom Face at 10mm	0.239	0.420	0.520	0.070	0.66	0.76	1.18	1.25		
		Edge 1 at 15mm	0.989	0.640	1.050	0.020	1.63	2.04	2.68	2.70	0.03	Case 28
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	0.428				0.43	0.43	0.43	0.43		
		Back of Display Screen at 25mm	0.446				0.45	0.45	0.45	0.45		
	LTE Band 26	Bottom Face at 0mm	0.518	0.420	0.520	0.070	0.94	1.04	1.46	1.53		
		Edge 1 at 0mm	1.042	0.640	1.050	0.020	1.68	2.09	2.73	2.75	0.03	Case 29
		Bottom Face at 10mm	0.190	0.420	0.520	0.070	0.61	0.71	1.13	1.20		
		Edge 1 at 15mm	0.373	0.640	1.050	0.020	1.01	1.42	2.06	2.08	0.03	Case 30
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	0.258				0.26	0.26	0.26	0.26		
	LTE Band 41	Bottom Face at 0mm	0.230	0.420	0.520	0.070	0.65	0.75	1.17	1.24		
		Edge 1 at 0mm	1.139	0.640	1.050	0.020	1.78	2.19	2.83	2.85	0.03	Case 33
		Bottom Face at 10mm	0.136	0.420	0.520	0.070	0.56	0.66	1.08	1.15		
		Edge 1 at 15mm	0.343	0.640	1.050	0.020	0.98	1.39	2.03	2.05	0.03	Case 34
		Edge 2 at 0mm			0.300	0.090	0.00	0.30	0.30	0.39		
		Edge 4 at 0mm	0.633				0.63	0.63	0.63	0.63		
		Back of Display Screen at 25mm	0.114				0.11	0.11	0.11	0.11		

16.6 SPLSR Evaluation and Analysis for iengtai_Silver

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	WCDMA II	Edge 1	1.131	113.5	1.41	0.01	Not required
	2.4GHz WLAN ANT 1		0.28				
	WCDMA II	Edge 1	1.131	213.5	1.33	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				
Case 2	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	1.167	113.5	1.45	0.02	Not required
	2.4GHz WLAN ANT 1		0.28				
	WCDMA IV	Edge 1	1.167	213.5	1.37	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				
Case 3	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	1.43	0.02	Not required
	2.4GHz WLAN ANT 1		0.28				
	WCDMA V	Edge 1	1.15	213.5	1.35	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				
Case 4	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Bottom Face	0.814	113.5	1.36	0.01	Not required
	2.4GHz WLAN ANT 1		0.55				
	LTE Band 12	Bottom Face	0.814	213.5	1.13	0.01	Not required
	2.4GHz WLAN ANT 2		0.32				
	2.4GHz WLAN ANT 1	Bottom Face	0.55	80.0	0.87	0.01	Not required
	2.4GHz WLAN ANT 2		0.32				
Case 5	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	1.277	113.5	1.56	0.02	Not required
	2.4GHz WLAN ANT 1		0.28				
	LTE Band 12	Edge 1	1.277	213.5	1.48	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				
Case 6	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.45	0.02	Not required
	2.4GHz WLAN ANT 1		0.28				
	LTE Band 25	Edge 1	1.167	213.5	1.37	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 7	LTE Band 41	Edge 1	1.139	113.5	1.42	0.01	Not required
	2.4GHz WLAN ANT 1		0.28				
	LTE Band 41	Edge 1	1.139	213.5	1.34	0.01	Not required
	2.4GHz WLAN ANT 2		0.2				
	2.4GHz WLAN ANT 1	Edge 1	0.28	80.0	0.48	0.00	Not required
	2.4GHz WLAN ANT 2		0.2				
Case 8	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Edge 1	1.131	113.5	1.77	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA II	Edge 1	1.131	213.5	2.20	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 9	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Bottom Face	0.666	113.5	1.09	0.01	Not required
	5GHz WLAN ANT 1		0.42				
	WCDMA II	Bottom Face	0.666	213.5	1.26	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	5GHz WLAN ANT 1	Bottom Face	0.42	80.0	1.01	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
Case 10	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Edge 1	0.715	113.5	1.36	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA II	Edge 1	0.715	213.5	1.79	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 11	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	1.167	113.5	1.81	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA IV	Edge 1	1.167	213.5	2.24	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 12	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Bottom Face	0.665	113.5	1.09	0.01	Not required
	5GHz WLAN ANT 1		0.42				
	WCDMA IV	Bottom Face	0.665	213.5	1.26	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	5GHz WLAN ANT 1	Bottom Face	0.42	80.0	1.01	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 13	WCDMA IV	Edge 1	0.351	113.5	0.99	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA IV	Edge 1	0.351	213.5	1.42	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 14	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	1.79	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA V	Edge 1	1.15	213.5	2.22	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 15	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	0.709	113.5	1.35	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	WCDMA V	Edge 1	0.709	213.5	1.78	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 16	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	1.102	113.5	1.74	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 4	Edge 1	1.102	213.5	2.17	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 17	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Bottom Face	0.605	113.5	1.03	0.01	Not required
	5GHz WLAN ANT 1		0.42				
	LTE Band 4	Bottom Face	0.605	213.5	1.20	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	5GHz WLAN ANT 1	Bottom Face	0.42	80.0	1.01	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
Case 18	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	0.342	113.5	0.98	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 4	Edge 1	0.342	213.5	1.41	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 19	LTE Band 7	Edge 1	1.09	113.5	1.73	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 7	Edge 1	1.09	213.5	2.16	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 20	LTE Band 7	Edge 1	0.518	113.5	1.16	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 7	Edge 1	0.518	213.5	1.59	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 21	LTE Band 12	Bottom Face	0.814	113.5	1.23	0.01	Not required
	5GHz WLAN ANT 1		0.42				
	LTE Band 12	Bottom Face	0.814	213.5	1.40	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	5GHz WLAN ANT 1	Bottom Face	0.42	80.0	1.01	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 22	LTE Band 12	Edge 1	1.277	113.5	1.92	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 12	Edge 1	1.277	213.5	2.35	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 23	LTE Band 12	Edge 1	0.208	113.5	0.85	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 12	Edge 1	0.208	213.5	1.28	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case 24	LTE Band 13	Bottom Face	0.602	113.5	1.02	0.01	Not required
	5GHz WLAN ANT 1		0.42				
	LTE Band 13	Bottom Face	0.602	213.5	1.19	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				
	5GHz WLAN ANT 1	Bottom Face	0.42	80.0	1.01	0.01	Not required
	5GHz WLAN / BT ANT 2		0.59				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 25	LTE Band 13	Edge 1	1.113	113.5	1.75	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 13	Edge 1	1.113	213.5	2.18	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 26	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	0.338	113.5	0.98	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 13	Edge 1	0.338	213.5	1.41	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	0.66	0.01	Not required
	5GHz WLAN / BT ANT 2		0.02				
Case 27	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.81	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 25	Edge 1	1.167	213.5	2.24	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 28	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	0.989	113.5	1.63	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 25	Edge 1	0.989	213.5	2.06	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 29	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	1.042	113.5	1.68	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 26	Edge 1	1.042	213.5	2.11	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 30	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	0.373	113.5	1.01	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 26	Edge 1	0.373	213.5	1.44	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 33	LTE Band 41	Edge 1	1.139	113.5	1.78	0.02	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 41	Edge 1	1.139	213.5	2.21	0.02	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				
Case 34	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 41	Edge 1	0.343	113.5	0.98	0.01	Not required
	5GHz WLAN ANT 1		0.64				
	LTE Band 41	Edge 1	0.343	213.5	1.41	0.01	Not required
	5GHz WLAN / BT ANT 2		1.07				
	5GHz WLAN ANT 1	Edge 1	0.64	76.8	1.71	0.03	Not required
	5GHz WLAN / BT ANT 2		1.07				

16.7 Body Exposure Conditions for jiengtai Black

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 1 1g SAR (W/kg)	3 2.4GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.420	0.410	0.080	0.69	0.68	1.10	0.77		
		Edge 1 at 0mm	1.131	0.290	0.230	0.040	1.42	1.36	1.65	1.46	0.01	Case1
		Bottom Face at 10mm	0.666	0.420	0.410	0.080	1.09	1.08	1.50	1.17		
		Edge 1 at 15mm	0.715	0.290	0.230	0.040	1.01	0.95	1.24	1.05		
		Edge 2 at 0mm			0.530	0.090	0.00	0.53	0.53	0.09		
		Edge 4 at 0mm	0.291				0.29	0.29	0.29	0.29		
		Back of Display Screen at 25mm	0.462				0.46	0.46	0.46	0.46		
	WCDMA IV	Bottom Face at 0mm	0.417	0.420	0.410	0.080	0.84	0.83	1.25	0.92		
		Edge 1 at 0mm	1.167	0.290	0.230	0.040	1.46	1.40	1.69	1.50	0.02	Case2
		Bottom Face at 10mm	0.665	0.420	0.410	0.080	1.09	1.08	1.50	1.17		
		Edge 1 at 15mm	0.351	0.290	0.230	0.040	0.64	0.58	0.87	0.68		
		Edge 2 at 0mm			0.530	0.090	0.00	0.53	0.53	0.09		
		Edge 4 at 0mm	1.388				1.39	1.39	1.39	1.39		
		Back of Display Screen at 25mm	0.414				0.41	0.41	0.41	0.41		
	WCDMA V	Bottom Face at 0mm	0.525	0.420	0.410	0.080	0.95	0.94	1.36	1.03		
		Edge 1 at 0mm	1.150	0.290	0.230	0.040	1.44	1.38	1.67	1.48	0.02	Case3
		Bottom Face at 10mm	0.325	0.420	0.410	0.080	0.75	0.74	1.16	0.83		
		Edge 1 at 15mm	0.709	0.290	0.230	0.040	1.00	0.94	1.23	1.04		
		Edge 2 at 0mm	0.041		0.530	0.090	0.04	0.57	0.57	0.13		
		Edge 3 at 0mm	0.051				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.277				0.28	0.28	0.28	0.28		
		Back of Display Screen at 25mm	0.195				0.20	0.20	0.20	0.20		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.420	0.410	0.080	0.90	0.89	1.31	0.98		
		Edge 1 at 0mm	1.102	0.290	0.230	0.040	1.39	1.33	1.62	1.43	0.01	Case4
		Bottom Face at 10mm	0.605	0.420	0.410	0.080	1.03	1.02	1.44	1.11		
		Edge 1 at 15mm	0.342	0.290	0.230	0.040	0.63	0.57	0.86	0.67		
		Edge 2 at 0mm			0.530	0.090	0.00	0.53	0.53	0.09		
		Edge 4 at 0mm	1.373				1.37	1.37	1.37	1.37		
		Back of Display Screen at 25mm	0.398				0.40	0.40	0.40	0.40		
	LTE Band 7	Bottom Face at 0mm	0.227	0.420	0.410	0.080	0.65	0.64	1.06	0.73		
		Edge 1 at 0mm	1.090	0.290	0.230	0.040	1.38	1.32	1.61	1.42	0.01	Case5
		Bottom Face at 10mm	0.199	0.420	0.410	0.080	0.62	0.61	1.03	0.70		
		Edge 1 at 15mm	0.518	0.290	0.230	0.040	0.81	0.75	1.04	0.85		
		Edge 2 at 0mm			0.530	0.090	0.00	0.53	0.53	0.09		
		Edge 4 at 0mm	1.022				1.02	1.02	1.02	1.02		
		Back of Display Screen at 25mm	0.200				0.20	0.20	0.20	0.20		
	LTE Band 12	Bottom Face at 0mm	0.814	0.420	0.410	0.080	1.23	1.22	1.64	1.31	0.01	Case6
		Edge 1 at 0mm	1.277	0.290	0.230	0.040	1.57	1.51	1.80	1.61	0.02	Case7
		Bottom Face at 10mm	0.167	0.420	0.410	0.080	0.59	0.58	1.00	0.67		
		Edge 1 at 15mm	0.208	0.290	0.230	0.040	0.50	0.44	0.73	0.54		
		Edge 2 at 0mm	0.016		0.530	0.090	0.02	0.55	0.55	0.11		
		Edge 3 at 0mm	0.043				0.04	0.04	0.04	0.04		
		Edge 4 at 0mm	0.438				0.44	0.44	0.44	0.44		
		Back of Display Screen at 25mm	0.198				0.20	0.20	0.20	0.20		

WWAN Band		Exposure Position	1	2	3	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	SPLSR	Case No
			WWAN	2.4GHz WLAN Ant 1	2.4GHz WLAN Ant 2	Bluetooth Ant 2						
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)						
LTE	LTE Band 13	Bottom Face at 0mm	0.602	0.420	0.410	0.080	**1.02**	**1.01**	**1.43**	**1.10**		
		Edge 1 at 0mm	1.113	0.290	0.230	0.040	**1.40**	**1.34**	**1.63**	**1.44**	**0.01**	**Case8**
		Bottom Face at 10mm	0.190	0.420	0.410	0.080	**0.61**	**0.60**	**1.02**	**0.69**		
		Edge 1 at 15mm	0.338	0.290	0.230	0.040	**0.63**	**0.57**	**0.86**	**0.67**		
		Edge 2 at 0mm	0.019		0.530	0.090	**0.02**	**0.55**	**0.55**	**0.11**		
		Edge 3 at 0mm	0.050				**0.05**	**0.05**	**0.05**	**0.05**		
		Edge 4 at 0mm	0.321				**0.32**	**0.32**	**0.32**	**0.32**		
		Back of Display Screen at 25mm	0.228				**0.23**	**0.23**	**0.23**	**0.23**		
	LTE Band 25	Bottom Face at 0mm	0.276	0.420	0.410	0.080	**0.70**	**0.69**	**1.11**	**0.78**		
		Edge 1 at 0mm	1.167	0.290	0.230	0.040	**1.46**	**1.40**	**1.69**	**1.50**	**0.02**	**Case9**
		Bottom Face at 10mm	0.239	0.420	0.410	0.080	**0.66**	**0.65**	**1.07**	**0.74**		
		Edge 1 at 15mm	0.989	0.290	0.230	0.040	**1.28**	**1.22**	**1.51**	**1.32**		
		Edge 2 at 0mm			0.530	0.090	**0.00**	**0.53**	**0.53**	**0.09**		
		Edge 4 at 0mm	0.428				**0.43**	**0.43**	**0.43**	**0.43**		
		Back of Display Screen at 25mm	0.446				**0.45**	**0.45**	**0.45**	**0.45**		
	LTE Band 26	Bottom Face at 0mm	0.518	0.420	0.410	0.080	**0.94**	**0.93**	**1.35**	**1.02**		
		Edge 1 at 0mm	1.042	0.290	0.230	0.040	**1.33**	**1.27**	**1.56**	**1.37**		
		Bottom Face at 10mm	0.190	0.420	0.410	0.080	**0.61**	**0.60**	**1.02**	**0.69**		
		Edge 1 at 15mm	0.373	0.290	0.230	0.040	**0.66**	**0.60**	**0.89**	**0.70**		
		Edge 2 at 0mm			0.530	0.090	**0.00**	**0.53**	**0.53**	**0.09**		
		Edge 4 at 0mm	0.258				**0.26**	**0.26**	**0.26**	**0.26**		
	LTE Band 41	Bottom Face at 0mm	0.230	0.420	0.410	0.080	**0.65**	**0.64**	**1.06**	**0.73**		
		Edge 1 at 0mm	1.139	0.290	0.230	0.040	**1.43**	**1.37**	**1.66**	**1.47**	**0.02**	**Case10**
		Bottom Face at 10mm	0.136	0.420	0.410	0.080	**0.56**	**0.55**	**0.97**	**0.64**		
		Edge 1 at 15mm	0.343	0.290	0.230	0.040	**0.63**	**0.57**	**0.86**	**0.67**		
		Edge 2 at 0mm			0.530	0.090	**0.00**	**0.53**	**0.53**	**0.09**		
		Edge 4 at 0mm	0.633				**0.63**	**0.63**	**0.63**	**0.63**		
		Back of Display Screen at 25mm	0.114				**0.11**	**0.11**	**0.11**	**0.11**		

WWAN Ban		Exposure Position	1	4	5	6	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
			WWAN	5GHz WLAN Ant 1	5GHz WLAN Ant 2	Bluetooth Ant 2						
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)						
WCDMA	WCDMA II	Bottom Face at 0mm	0.268	0.340	0.550	0.080	0.61	0.82	1.16	1.24		
		Edge 1 at 0mm	1.131	0.640	0.890	0.040	1.77	2.02	2.66	2.70	0.02	Case11
		Bottom Face at 10mm	0.666	0.340	0.550	0.080	1.01	1.22	1.56	1.64	0.01	Case12
		Edge 1 at 15mm	0.715	0.640	0.890	0.040	1.36	1.61	2.25	2.29	0.02	Case13
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	0.291				0.29	0.29	0.29	0.29		
		Back of Display Screen at 25mm	0.462				0.46	0.46	0.46	0.46		
	WCDMA IV	Bottom Face at 0mm	0.417	0.340	0.550	0.080	0.76	0.97	1.31	1.39		
		Edge 1 at 0mm	1.167	0.640	0.890	0.040	1.81	2.06	2.70	2.74	0.02	Case14
		Bottom Face at 10mm	0.665	0.340	0.550	0.080	1.01	1.22	1.56	1.64	0.01	Case15
		Edge 1 at 15mm	0.351	0.640	0.890	0.040	0.99	1.24	1.88	1.92	0.02	Case16
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	1.388				1.39	1.39	1.39	1.39		
		Back of Display Screen at 25mm	0.414				0.41	0.41	0.41	0.41		
	WCDMA V	Bottom Face at 0mm	0.525	0.340	0.550	0.080	0.87	1.08	1.42	1.50		
		Edge 1 at 0mm	1.150	0.640	0.890	0.040	1.79	2.04	2.68	2.72	0.02	Case17
		Bottom Face at 10mm	0.325	0.340	0.550	0.080	0.67	0.88	1.22	1.30		
		Edge 1 at 15mm	0.709	0.640	0.890	0.040	1.35	1.60	2.24	2.28	0.02	Case18
		Edge 2 at 0mm	0.041		0.340	0.090	0.04	0.38	0.38	0.47		
		Edge 3 at 0mm	0.051				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.277				0.28	0.28	0.28	0.28		
		Back of Display Screen at 25mm	0.195				0.20	0.20	0.20	0.20		
LTE	LTE Band 4	Bottom Face at 0mm	0.479	0.340	0.550	0.080	0.82	1.03	1.37	1.45		
		Edge 1 at 0mm	1.102	0.640	0.890	0.040	1.74	1.99	2.63	2.67	0.02	Case19
		Bottom Face at 10mm	0.605	0.340	0.550	0.080	0.95	1.16	1.50	1.58		
		Edge 1 at 15mm	0.342	0.640	0.890	0.040	0.98	1.23	1.87	1.91	0.02	Case20
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	1.373				1.37	1.37	1.37	1.37		
		Back of Display Screen at 25mm	0.398				0.40	0.40	0.40	0.40		
	LTE Band 7	Bottom Face at 0mm	0.227	0.340	0.550	0.080	0.57	0.78	1.12	1.20		
		Edge 1 at 0mm	1.090	0.640	0.890	0.040	1.73	1.98	2.62	2.66	0.02	Case21
		Bottom Face at 10mm	0.199	0.340	0.550	0.080	0.54	0.75	1.09	1.17		
		Edge 1 at 15mm	0.518	0.640	0.890	0.040	1.16	1.41	2.05	2.09	0.02	Case22
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	1.022				1.02	1.02	1.02	1.02		
		Back of Display Screen at 25mm	0.200				0.20	0.20	0.20	0.20		
	LTE Band 12	Bottom Face at 0mm	0.814	0.340	0.550	0.080	1.15	1.36	1.70	1.78	0.01	Case23
		Edge 1 at 0mm	1.277	0.640	0.890	0.040	1.92	2.17	2.81	2.85	0.02	Case24
		Bottom Face at 10mm	0.167	0.340	0.550	0.080	0.51	0.72	1.06	1.14		
		Edge 1 at 15mm	0.208	0.640	0.890	0.040	0.85	1.10	1.74	1.78	0.02	Case25
		Edge 2 at 0mm	0.016		0.340	0.090	0.02	0.36	0.36	0.45		
		Edge 3 at 0mm	0.043				0.04	0.04	0.04	0.04		
		Edge 4 at 0mm	0.438				0.44	0.44	0.44	0.44		
		Back of Display Screen at 25mm	0.198				0.20	0.20	0.20	0.20		

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	4 5GHz WLAN Ant 1 1g SAR (W/kg)	5 5GHz WLAN Ant 2 1g SAR (W/kg)	6 Bluetooth Ant 2 Estimated 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	LTE Band 13	Bottom Face at 0mm	0.602	0.340	0.550	0.080	0.94	1.15	1.49	1.57		
		Edge 1 at 0mm	1.113	0.640	0.890	0.040	1.75	2.00	2.64	2.68	0.02	Case26
		Bottom Face at 10mm	0.190	0.340	0.550	0.080	0.53	0.74	1.08	1.16		
		Edge 1 at 15mm	0.338	0.640	0.890	0.040	0.98	1.23	1.87	1.91	0.01	Case27
		Edge 2 at 0mm	0.019		0.340	0.090	0.02	0.36	0.36	0.45		
		Edge 3 at 0mm	0.050				0.05	0.05	0.05	0.05		
		Edge 4 at 0mm	0.321				0.32	0.32	0.32	0.32		
		Back of Display Screen at 25mm	0.228				0.23	0.23	0.23	0.23		
	LTE Band 25	Bottom Face at 0mm	0.276	0.340	0.550	0.080	0.62	0.83	1.17	1.25		
		Edge 1 at 0mm	1.167	0.640	0.890	0.040	1.81	2.06	2.70	2.74	0.02	Case28
		Bottom Face at 10mm	0.239	0.340	0.550	0.080	0.58	0.79	1.13	1.21		
		Edge 1 at 15mm	0.989	0.640	0.890	0.040	1.63	1.88	2.52	2.56	0.02	Case29
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	0.428				0.43	0.43	0.43	0.43		
		Back of Display Screen at 25mm	0.446				0.45	0.45	0.45	0.45		
	LTE Band 26	Bottom Face at 0mm	0.518	0.340	0.550	0.080	0.86	1.07	1.41	1.49		
		Edge 1 at 0mm	1.042	0.640	0.890	0.040	1.68	1.93	2.57	2.61	0.02	Case30
		Bottom Face at 10mm	0.190	0.340	0.550	0.080	0.53	0.74	1.08	1.16		
		Edge 1 at 15mm	0.373	0.640	0.890	0.040	1.01	1.26	1.90	1.94	0.02	Case31
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	0.258				0.26	0.26	0.26	0.26		
	LTE Band 41	Bottom Face at 0mm	0.230	0.340	0.550	0.080	0.57	0.78	1.12	1.20		
		Edge 1 at 0mm	1.139	0.640	0.890	0.040	1.78	2.03	2.67	2.71	0.02	Case34
		Bottom Face at 10mm	0.136	0.340	0.550	0.080	0.48	0.69	1.03	1.11		
		Edge 1 at 15mm	0.343	0.640	0.890	0.040	0.98	1.23	1.87	1.91	0.02	Case35
		Edge 2 at 0mm			0.340	0.090	0.00	0.34	0.34	0.43		
		Edge 4 at 0mm	0.633				0.63	0.63	0.63	0.63		
		Back of Display Screen at 25mm	0.114				0.11	0.11	0.11	0.11		

16.8 SPLSR Evaluation and Analysis for Jiengtai_Black

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case1	WCDMA II	Edge 1	1.131	113.5	1.42	0.01	Not required
	2.4GHz WLAN ANT 1		0.29				
	WCDMA II	Edge 1	1.131	213.5	1.36	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case2	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV	Edge 1	1.167	113.5	1.46	0.02	Not required
	2.4GHz WLAN ANT 1		0.29				
	WCDMA IV	Edge 1	1.167	213.5	1.40	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case3	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA V	Edge 1	1.15	113.5	1.44	0.02	Not required
	2.4GHz WLAN ANT 1		0.29				
	WCDMA V	Edge 1	1.15	213.5	1.38	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case4	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	1.102	113.5	1.39	0.01	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 4	Edge 1	1.102	213.5	1.33	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case5	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	1.09	113.5	1.38	0.01	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 7	Edge 1	1.09	213.5	1.32	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case6	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Bottom Face	0.814	113.5	1.23	0.01	Not required
	2.4GHz WLAN ANT 1		0.42				
	LTE Band 12	Bottom Face	0.814	213.5	1.22	0.01	Not required
	2.4GHz WLAN ANT 2		0.41				
	2.4GHz WLAN ANT 1	Bottom Face	0.42	80.0	0.83	0.01	Not required
	2.4GHz WLAN ANT 2		0.41				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case7	LTE Band 12	Edge 1	1.277	113.5	1.57	0.02	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 12	Edge 1	1.277	213.5	1.51	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.33	0.00	Not required
	BT ANT 2		0.04				
Case8	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	1.113	113.5	1.40	0.01	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 13	Edge 1	1.113	213.5	1.34	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case9	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.46	0.02	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 25	Edge 1	1.167	213.5	1.40	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case10	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 41	Edge 1	1.139	113.5	1.43	0.02	Not required
	2.4GHz WLAN ANT 1		0.29				
	LTE Band 41	Edge 1	1.139	213.5	1.37	0.01	Not required
	2.4GHz WLAN ANT 2		0.23				
	2.4GHz WLAN ANT 1	Edge 1	0.29	80.0	0.52	0.00	Not required
	2.4GHz WLAN ANT 2		0.23				
Case11	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Edge 1	1.131	113.5	1.77	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA II	Edge 1	1.131	213.5	2.06	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case12	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA II	Bottom Face	0.666	113.5	1.01	0.01	Not required
	5Hz WLAN ANT 1		0.34				
	WCDMA II	Bottom Face	0.666	213.5	1.30	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				
	5Hz WLAN ANT 1	Bottom Face	0.34	80.0	0.97	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case13	WCDMA II	Edge 1	0.715	113.5	1.36	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA II	Edge 1	0.715	213.5	1.65	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case14	WCDMA IV	Edge 1	1.167	113.5	1.81	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA IV	Edge 1	1.167	213.5	2.10	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case15	WCDMA IV	Bottom Face	0.665	113.5	1.01	0.01	Not required
	5Hz WLAN ANT 1		0.34				
	WCDMA IV	Bottom Face	0.665	213.5	1.30	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				
	5Hz WLAN ANT 1	Bottom Face	0.34	80.0	0.97	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case16	WCDMA IV	Edge 1	0.351	113.5	0.99	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA IV	Edge 1	0.351	213.5	1.28	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case17	WCDMA V	Edge 1	1.15	113.5	1.79	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA V	Edge 1	1.15	213.5	2.08	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
	Band	**Position**	**SAR (W/kg)**	**Distance (mm)**	**Summed SAR (W/kg)**	**SPLSR Results**	**Simultaneous SAR**
Case18	WCDMA V	Edge 1	0.709	113.5	1.35	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	WCDMA V	Edge 1	0.709	213.5	1.64	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case19	LTE Band 4	Edge 1	1.102	113.5	1.74	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 4	Edge 1	1.102	213.5	2.03	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case20	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 4	Edge 1	0.342	113.5	0.98	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 4	Edge 1	0.342	213.5	1.27	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case21	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	1.09	113.5	1.73	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 7	Edge 1	1.09	213.5	2.02	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case22	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7	Edge 1	0.518	113.5	1.16	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 7	Edge 1	0.518	213.5	1.45	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case23	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Bottom Face	0.814	113.5	1.15	0.01	Not required
	5Hz WLAN ANT 1		0.34				
	LTE Band 12	Bottom Face	0.814	213.5	1.44	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				
	5Hz WLAN ANT 1	Bottom Face	0.34	80.0	0.97	0.01	Not required
	5Hz WLAN / BT ANT 2		0.63				
Case24	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Edge 1	1.277	113.5	1.92	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 12	Edge 1	1.277	213.5	2.21	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case25	LTE Band 12	Edge 1	0.208	113.5	0.85	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 12	Edge 1	0.208	213.5	1.14	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case26	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	1.113	113.5	1.75	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 13	Edge 1	1.113	213.5	2.04	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case27	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13	Edge 1	0.338	113.5	0.98	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 13	Edge 1	0.338	213.5	1.27	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	0.68	0.01	Not required
	5Hz WLAN / BT ANT 2		0.04				
Case28	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	1.167	113.5	1.81	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 25	Edge 1	1.167	213.5	2.10	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case29	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 25	Edge 1	0.989	113.5	1.63	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 25	Edge 1	0.989	213.5	1.92	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case30	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Edge 1	1.042	113.5	1.68	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 26	Edge 1	1.042	213.5	1.97	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				

	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case31	LTE Band 26	Edge 1	0.373	113.5	1.01	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 26	Edge 1	0.373	213.5	1.30	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case34	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 41	Edge 1	1.139	113.5	1.78	0.02	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 41	Edge 1	1.139	213.5	2.07	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				
Case35	Band	Position	SAR (W/kg)	Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 41	Edge 1	0.343	113.5	0.98	0.01	Not required
	5Hz WLAN ANT 1		0.64				
	LTE Band 41	Edge 1	0.343	213.5	1.27	0.01	Not required
	5Hz WLAN / BT ANT 2		0.93				
	5Hz WLAN ANT 1	Edge 1	0.64	80.0	1.57	0.02	Not required
	5Hz WLAN / BT ANT 2		0.93				

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17. Uncertainty Assessment

The component of uncertainly may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainly by the statistical analysis of a series of observations is termed a Type An evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observation is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience, and knowledge of the behavior and properties of relevant materials and instruments, manufacture's specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in table below.

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor[a]	1/k[b]	$1/\sqrt{3}$	$1/\sqrt{6}$	$1/\sqrt{2}$

(a) standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b) κ is the coverage factor

Table 16.1. Standard Uncertainty for Assumed Distribution

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual "root-sum-squares" (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY uncertainty Budget is shown in the following tables.

Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	6.0	N	1	1	1	6.0	6.0
Axial Isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9
Boundary Effects	1.0	R	1.732	1	1	0.6	0.6
Linearity	4.7	R	1.732	1	1	2.7	2.7
System Detection Limits	1.0	R	1.732	1	1	0.6	0.6
Modulation Response	3.2	R	1.732	1	1	1.8	1.8
Readout Electronics	0.3	N	1	1	1	0.3	0.3
Response Time	0.0	R	1.732	1	1	0.0	0.0
Integration Time	2.6	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7
Probe Positioner	0.4	R	1.732	1	1	0.2	0.2
Probe Positioning	2.9	R	1.732	1	1	1.7	1.7
Max. SAR Eval.	2.0	R	1.732	1	1	1.2	1.2
Test Sample Related							
Device Positioning	3.0	N	1	1	1	3.0	3.0
Device Holder	3.6	N	1	1	1	3.6	3.6
Power Drift	5.0	R	1.732	1	1	2.9	2.9
Power Scaling	0.0	R	1.732	1	1	0.0	0.0
Phantom and Setup							
Phantom Uncertainty	6.1	R	1.732	1	1	3.5	3.5
SAR correction	0.0	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.2	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	2.5	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	3.4	R	1.732	0.78	0.71	1.5	1.4
Liquid Permittivity Repeatability	0.15	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.5	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.83	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						11.4%	11.4%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						22.9%	22.7%

Table 16.2. Uncertainty Budget for frequency range 300 MHz to 3 GHz

18. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[6] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.

[7] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015

[8] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015

[9] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015

[10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[11] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.