

FCC SAR Test Report

APPLICANT : Sonim Technologies, Inc.
EQUIPMENT : 5G Feature Phone
BRAND NAME : Sonim
MODEL NAME : X320(S1303), X320(S1403), X320(S1301),
X320(S1401), X320(S1302), X320(S1402),
X320(S1304), X320(S1404), X320(S1305),
X320(S1405), X320(S1310), X320(S1410)
FCC ID : WYPS13030
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has 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. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang

Sporton International Inc. (Kunshan)
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People's Republic of China



Table of Contents

1. Statement of Compliance 4
2. Administration Data 6
3. Guidance Applied 6
4. Equipment Under Test (EUT) Information 7
4.1 General Information 7
4.2 General LTE SAR Test and Reporting Considerations 9
4.3 General 5G NR SAR Test and Reporting Considerations 13
5. RF Exposure Limits 17
5.1 Uncontrolled Environment 17
5.2 Controlled Environment 17
6. Specific Absorption Rate (SAR) 18
6.1 Introduction 18
6.2 SAR Definition 18
7. System Description and Setup 19
7.1 E-Field Probe 20
7.2 Data Acquisition Electronics (DAE) 20
7.3 Phantom 21
7.4 Device Holder 22
8. Measurement Procedures 23
8.1 Spatial Peak SAR Evaluation 23
8.2 Power Reference Measurement 24
8.3 Area Scan 24
8.4 Zoom Scan 25
8.5 Volume Scan Procedures 25
8.6 Power Drift Monitoring 25
9. Test Equipment List 26
10. System Verification 27
10.1 Tissue Simulating Liquids 27
10.2 Tissue Verification 27
10.3 System Performance Check Results 29
11. RF Exposure Positions 31
11.1 Ear and handset reference point 31
11.2 Definition of the cheek position 32
11.3 Definition of the tilt position 33
11.4 Body Worn Accessory 34
11.5 Product Specific 10g SAR Exposure 35
11.6 Wireless Router 35
12. Conducted RF Output Power (Unit: dBm) 36
13. Antenna Location 50
14. SAR Test Results 51
14.1 Head SAR 54
14.2 Hotspot SAR 61
14.3 Body-Worn SAR 82
14.4 Product specific 10g SAR 87
14.5 Repeated SAR Measurement 89
14.6 TDD LTE and NR Linearity Data Analysis 90
15. Simultaneous Transmission Analysis 97
15.1 Head Exposure Conditions 98
<Flip Open> 98
15.2 Hotspot Exposure Conditions 108
15.3 Body-Worn Accessory Exposure Conditions 123
15.4 Product specific 10g SAR Exposure Conditions 129
15.5 SPLSR Evaluation and Analysis 132
16. Uncertainty Assessment 135
17. References 136
Appendix A. Plots of System Performance Check
Appendix B. Plots of High SAR Measurement
Appendix C. DASY Calibration Certificate
Appendix D. Test Setup Photos
Appendix E. Conducted RF Output Power Table
Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table
Appendix G. Power reduction mechanism verification



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Sonim Technologies, Inc., 5G Feature Phone, X320(S1303), X320(S1403), X320(S1301), X320(S1401), X320(S1302), X320(S1402), X320(S1304), X320(S1404), X320(S1305), X320(S1405), X320(S1310), X320(S1410)**, are as follows.

Highest 1g SAR Summary							
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission 1g SAR (W/kg)	
			1g SAR (W/kg)				
Licensed	WCDMA	WCDMA II	<0.10	1.14	0.54	1.59	
		WCDMA IV	0.15	1.13	0.66		
		WCDMA V	0.29	0.64	0.50		
	LTE	LTE Band 7	0.27	1.01	0.49		
		LTE Band 12	0.33	0.74	0.50		
		LTE Band 13	0.33	0.76	0.76		
		LTE Band 14	0.40	1.02	0.81		
		LTE Band 25/2	0.46	1.20	0.73		
		LTE Band 26/5	0.56	1.20	0.83		
		LTE Band 66/4	0.50	1.21	0.72		
		LTE Band 71	0.28	0.87	0.63		
		LTE Band 41/38	0.14	0.88	0.49		
		LTE Band 42	0.32	0.90	0.31		
		LTE Band 48/43	0.56	0.91	0.48		
		5G NR	FR1 n5	0.54	1.20		0.90
			FR1 n7	0.24	1.03		0.49
	FR1 n14		0.50	1.07	0.79		
	FR1 n25/2		0.48	1.20	0.71		
	FR1 n66		0.55	1.13	0.70		
	FR1 n71		0.30	0.88	0.60		
FR1 n41/38	0.26		1.22	0.67			
FR1 n48	1.22	1.07	0.68				
FR1 n77/78	1.08	1.23	0.64				
DTS	WLAN	2.4GHz WLAN	0.30	0.39	0.17	1.56	
NII		5GHz WLAN	1.15	0.34	0.48	1.59	
DSS	Bluetooth	2.4GHz Bluetooth	<0.10	0.12	<0.10	1.48	

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	WCDMA	WCDMA II	3.03	3.97
	LTE	LTE Band 25/2	3.00	
		LTE Band 66/4	3.39	
	5G NR	FR1 n25/2	2.71	
		FR1 n66	2.72	
		FR1 n41/38	3.14	
		FR1 n48	3.49	
FR1 n77/78	2.90			
NII	WLAN	5GHz WLAN	1.76	3.97
Date of Testing:			2024/7/31 ~ 2024/9/27	



Remark:

1. This device supports LTE B2 / B4 / B5 / B38 / B43 and B25 / B66 / B26 / B41 / B48. Since the supported frequency span for LTE B2 / B4 / B5 / B38 / B43 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B41 / B48, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B41 / B48.
2. This device supports 5GNR n2/n38/n78 and n25/n41/n77. Since the supported frequency span for 5GNR n2/n38/n78 falls completely within the supports frequency span for n25/n41/n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n25/n41/n77.

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) 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

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory			
Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR03-KS, SAR07-KS	CN1257	314309

Applicant	
Company Name	Sonim Technologies, Inc.
Address	4445 Eastgate Mall, Suite 200, San Diego, CA 92121, USA

Manufacturer	
Company Name	Sonim Technologies, Inc.
Address	4445 Eastgate Mall, Suite 200, San Diego, CA 92121, USA

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 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01



4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	5G Feature Phone
Brand Name	Sonim
Model Name	X320(S1303), X320(S1403), X320(S1301), X320(S1401), X320(S1302), X320(S1402), X320(S1304), X320(S1404), X320(S1305), X320(S1405), X320(S1310), X320(S1410)
FCC ID	WYPS13030
IMEI Code	Sample 1: 016562000017963 Sample 2: 016561000001308
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 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 14: 788 MHz ~ 798 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3800 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
Mode	RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is support) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	V1.0
SW Version	X32.0-01-14.0-19.01.00
EUT Stage	Identical Prototype
Remark:	1. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. 2. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports



- WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
- 3. For dual SIM card mobile supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active).
- 4. The device implements receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
- 5. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, hotspot exposure condition.
- 6. This device supports HPUE for LTE Band 41 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
- 7. For 5G NR n41/n77 HPUE, 5G NR n41/n77 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
- 8. This device supports HPUE mode for 5G NR n41/n77 (Part 270&27Q) with higher power, so power class 2 was chosen to perform full SAR testing and power class 2 SAR can represent power class 3 SAR.
- 9. Part 96 for 5G NR n77 is not supports HPUE mode.
- 10. There are two samples under test: Sample 1(With camera) and Sample2 (Without camera), there is no other difference. According to the difference, we choose sample 1 to perform full test and sample 2 to verify the worst cases of sample 1.
- 11. For the different model names, please refer to the Operational Description of Product Equality Declaration which is exhibit separately.
- 12. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 30, 40
	n41	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n14	FDD	15	5, 10
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 30, 40
	n41	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 20, 30, 40
n77	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	
n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	



4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	WYPS13030																																																														
Equipment Name	5G Feature Phone																																																														
Operating Frequency Range of each LTE transmission band	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 14: 788 MHz ~ 798 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																														
Channel Bandwidth	LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 25: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 43: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE Release Version	R15																																																														
CA Support	Yes, Downlink only																																																														
LTE MPR permanently built-in by design	<p align="center">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{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> </thead> <tbody> <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> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6" style="text-align: center;">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
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256 QAM	≥ 1						≤ 5																																																								
LTE A-MPR	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)																																																														
Spectrum plots for RB configuration	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.																																																														
Power reduction applied to satisfy SAR compliance	Yes, when operating in receiver/hotspot detect mechanism, head/body -worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 12.																																																														
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 12.																																																														
LTE Carrier Aggregation Additional Information	This device supports maximum of 2 carriers in the downlink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



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)	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	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)	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	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)	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	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)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782					
M	23230		782		23230		782					
H	23255		784.5		23230		782					
LTE Band 14												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23305		790.5		23330		793					
M	23330		793		23330		793					
H	23355		795.5		23330		793					
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)	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	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		

LTE Band 38								
	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	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

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
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 48								
	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	55265	3552.5	55290	3555	55315	3557.5	55340	3560
L M	55810	3607	55815	3607.5	55820	3608	55830	3609
M H	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

LTE Band 66												
	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	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

LTE Band 71								
	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	133147	665.5	133172	668	133197	670.5	133222	673
M	133247	675.5	133272	678	133297	680.5	133322	683
H	133447	695.5	133422	693	133397	690.5	133372	688

LTE Band 42								
	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	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540

LTE Band 42								
	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	43115	3552.5	43140	3555	43165	3557.5	43190	3560
M	43340	3575	43340	3575	43340	3575	43340	3575
H	43565	3597.5	43540	3595	43515	3592.5	43490	3590

LTE Band 43								
	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	43615	3602.5	43640	3605	43665	3607.5	43690	3610
M	44090	3650	44090	3650	44090	3650	44090	3650
H	44565	3697.5	44540	3695	44515	3692.5	44490	3690

<For LTE Overlap Bands Description>

1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes
LTE Band 43			Yes	Yes	Yes	Yes
LTE Band 48			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Head DSI 4 Tune-up Limit	Head DSI 6 Tune-up Limit	Body-worn Extremity DSI 1 Tune-up Limit	Body-worn Extremity DSI 2 Tune-up Limit	Hotspot DSI 3 Tune-up Limit	Default Tune-up Limit
LTE Band 25(2)	Ant 1	24.50	24.50	22.50	22.50	21.50	24.50
LTE Band 25(2) For ENDC	Ant 1	24.50	24.50	22.50	21.50	20.50	24.50
LTE Band 25(2) For ENDC	Ant 4	24.50	24.50	20.50	19.00	16.50	24.50
LTE Band 66(4)	Ant 1	24.50	24.50	24.50	24.50	23.00	24.50
LTE Band 66(4) For ENDC	Ant 1	24.50	24.50	23.50	21.50	22.00	24.50
LTE Band 66(4) For ENDC	Ant 4	24.50	24.50	19.00	17.50	15.50	24.50
LTE Band 26(5)	Ant 1	25.00	25.00	25.00	25.00	25.00	25.00
LTE Band 26(5) For ENDC	Ant 1	25.00	24.00	25.00	23.00	22.50	25.00
LTE Band 41(38)	Ant 2	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 41_HPUE	Ant 2	27.00	27.00	27.00	27.00	27.00	27.00
LTE Band 42	Ant 6	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 48(43)	Ant 6	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 48(43) For ENDC	Ant 6	24.00	22.00	24.00	24.00	23.00	24.00

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77 : 3450 MHz ~ 3980 MHz 5G NR n78 : 3450 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B5/7/12/13/14/66/71
LTE Anchor Bands for n5	LTE B2/66/48
LTE Anchor Bands for n7	LTE B2/66
LTE Anchor Bands for n25	LTE B12/13/26/66
LTE Anchor Bands for n38	LTE B2/4/5/12/71/66
LTE Anchor Bands for n41	LTE B2/4/5/12/25/26/66/71
LTE Anchor Bands for n66	LTE B2/5/7/12/13/14/71/48
LTE Anchor Bands for n71	LTE B2/66
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/25/66/71
LTE Anchor Bands for n78	LTE B2/5/7/12/13/25/71/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band

NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900

NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 7														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550

NR Band 14						
	Bandwidth 5MHz			Bandwidth 10MHz		
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)	
L	158100	790.5		158600	793	
M	158600	793				
H	159100	795.5				

NR Band 25																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895



NR Band 66																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760

NR Band 71 SCS15KHz								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	134100	670.5	134600	673
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5
H	139100	695.5	138600	693	138100	690.5	137600	688

NR Band 38										
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515004	2575.02	515502	2577.51	516000	2580	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610	520998	2604.99	519996	2599.98

NR Band 41																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	500202	2501.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 48 SCS30KHz								
	Bandwidth 10MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646000	3690	645666	3684.99	645332	3679.98

NR Band 77 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652834	3792.51	652668	3790.02	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650334	3755.01		



For Part96

NR Band 77																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	337000	3555	337168	3557.52	337334	3560.01	337668	3565.02	338000	3570	338334	3575.01	338668	3580.02	339000	3585	339334	3590.01	339668	3595.02	340000	3600
M	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99	41666	3624.99
H	46332	3694.98	46166	3692.49	46000	3690	45666	3684.99	45332	3624.99	45000	3675	44666	3669.99	44332	3664.98	44000	3660	43666	3654.99	43332	3649.98

NR Band 78																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	330334	3455.01	330500	3457.5	330668	3460.02	331000	3465	331334	3470.01	331668	3475.02	332000	3480	332334	3485.01	332668	3490.02	333000	3495		
M	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98
H	36332	3544.98	36166	3542.49	36000	3540	35666	3534.99	35332	3529.98	35000	3525	34666	3519.99	34332	3514.98	34000	3510	33666	3504.99		

For <3450 MHz ~ 3550 MHz >

NR Band 77 SCS30KHz																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	330334	3455.01	330500	3457.5	330668	3460.02	331000	3465	331334	3470.01	331668	3475.02	332000	3480	332334	3485.01	332668	3490.02	333000	3495		
M	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98
H	36332	3544.98	36166	3542.49	36000	3540	35666	3534.99	35332	3529.98	35000	3525	34666	3519.99	34332	3514.98	34000	3510	33666	3504.99		

NR Band 78 SCS30KHz																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	330334	3455.01	330500	3457.5	330668	3460.02	331000	3465	331334	3470.01	331668	3475.02	332000	3480	332334	3485.01	332668	3490.02	333000	3495		
M	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98	33332	3499.98
H	36332	3544.98	36166	3542.49	36000	3540	35666	3534.99	35332	3529.98	35000	3525	34666	3519.99	34332	3514.98	34000	3510	33666	3504.99		

<For NR Overlap Bands Description>

1) NR Bands BW

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
SA/NSA	n2	FDD	15	5, 10, 15, 20
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n38	TDD	30	10, 15, 20, 30, 40
	n41	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100

2) NR Bands Tune up:

Band	Antenna	Head DSI 4 Tune-up Limit	Head DSI 6 Tune-up Limit	Body-worn Extremity DSI 1 Tune-up Limit	Body-worn Extremity DSI 2 Tune-up Limit	Hotspot DSI 3 Tune-up Limit	Default Tune-up Limit
5G NR n25(2)	Ant 1	24.50	24.50	22.50	22.50	21.50	24.50
5G NR n25(2) For ENDC	Ant 4	24.50	24.50	20.00	18.50	16.50	24.50
5G NR n41(38) PC3	Ant 2	24.00	24.00	23.50	23.50	23.50	24.00
5G NR n41 PC2	Ant 2	27.00	27.00	26.50	26.50	26.50	27.00
5G NR n41(38) PC3 For ENDC	Ant 2	24.00	24.00	24.00	22.00	20.50	24.00
5G NR n41 PC2 For ENDC	Ant 2	27.00	27.00	27.00	25.00	23.50	27.00
5G NR n41 PC3	Ant 4	22.00	22.00	22.00	22.00	22.00	22.00
5G NR n41 PC2	Ant 4	25.00	25.00	25.00	25.00	25.00	25.00
5G NR n41 PC3 For ENDC	Ant 4	22.00	22.00	22.00	22.00	19.50	22.00
5G NR n41 PC2 For ENDC	Ant 4	25.00	25.00	25.00	25.00	22.50	25.00
5G NR n41 PC3	Ant 5	24.00	24.00	24.00	24.00	24.00	24.00
5G NR n41 PC2	Ant 5	27.00	27.00	27.00	27.00	27.00	27.00
5G NR n41 PC3 For ENDC	Ant 5	24.00	24.00	24.00	24.00	22.00	24.00
5G NR n41 PC2 For ENDC	Ant 5	27.00	27.00	27.00	27.00	25.00	27.00



5G NR n41 PC3	Ant 7	25.00	25.00	21.50	21.50	21.50	25.00
5G NR n41 PC2	Ant 7	28.00	28.00	24.50	24.50	24.50	28.00
5G NR n41 PC3 For ENDC	Ant 7	25.00	25.00	18.50	18.50	18.50	25.00
5G NR n41 PC2 For ENDC	Ant 7	28.00	28.00	21.50	21.50	21.50	28.00
5G NR n77(78) PC3 Part27O&27Q&96	Ant 6	24.00	22.00	24.00	24.00	24.00	24.00
5G NR n77 PC2 Part27O&27Q	Ant 6	27.00	25.00	27.00	27.00	27.00	27.00
5G NR n77(78) PC3 For ENDC Part27O&27Q&96	Ant 6	22.00	20.00	24.00	23.00	21.00	24.00
5G NR n77 PC2 For ENDC Part27O&27Q	Ant 6	25.00	23.00	27.00	26.00	24.00	27.00
5G NR n77 PC3 Part27O&27Q&96	Ant 2	20.00	20.00	20.00	20.00	20.00	20.00
5G NR n77 PC2 Part27O&27Q	Ant 2	23.00	23.00	23.00	23.00	23.00	23.00
5G NR n77 PC3 For ENDC Part27O&27Q&96	Ant 2	20.00	20.00	20.00	20.00	18.50	20.00
5G NR n77 PC2 For ENDC Part27O&27Q	Ant 2	23.00	23.00	23.00	23.00	21.50	23.00
5G NR n77 PC3 Part27O&27Q&96	Ant 5	20.00	20.00	20.00	20.00	20.00	20.00
5G NR n77 PC2 Part27O&27Q	Ant 5	23.00	23.00	23.00	23.00	23.00	23.00
5G NR n77 PC3 For ENDC Part27O&27Q&96	Ant 5	20.00	20.00	20.00	20.00	20.00	20.00
5G NR n77 PC2 For ENDC Part27O&27Q	Ant 5	23.00	23.00	23.00	23.00	23.00	23.00
5G NR n77 PC3 Part27O&27Q&96	Ant 7	24.00	24.00	22.00	22.00	21.50	24.00
5G NR n77 PC2 Part27O&27Q	Ant 7	27.00	27.00	25.00	25.00	24.50	27.00
5G NR n77 PC3 For ENDC Part27O&27Q&96	Ant 7	24.00	24.00	18.50	18.50	18.50	24.00
5G NR n77 PC2 For ENDC Part27O&27Q	Ant 7	27.00	27.00	21.50	21.50	21.50	27.00

5. RF Exposure Limits

5.1 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.

5.2 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

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.

6. Specific Absorption Rate (SAR)

6.1 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.

6.2 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:

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

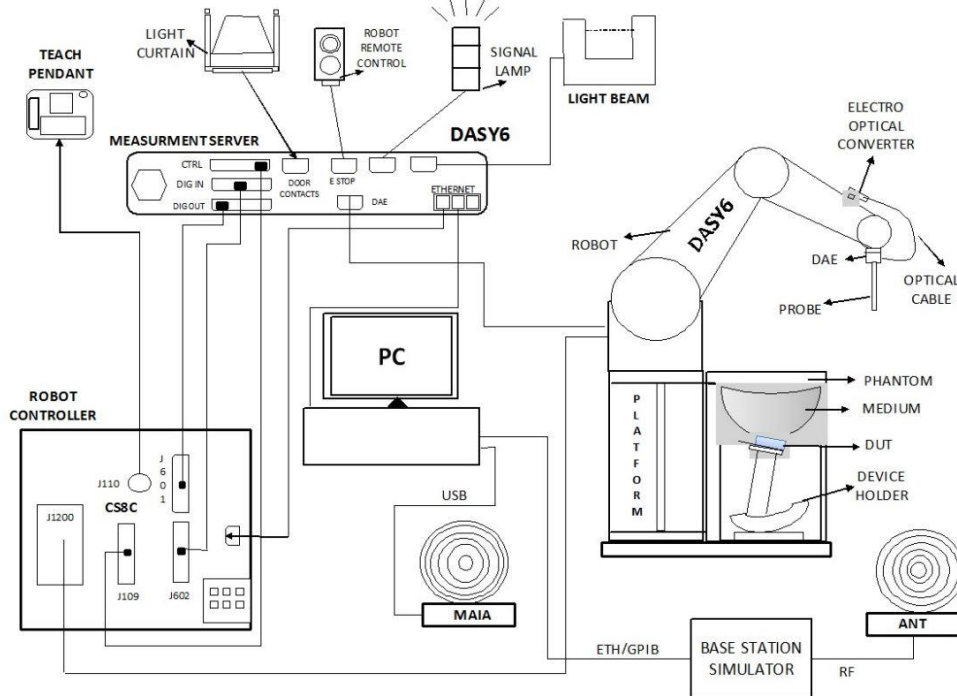
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. 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 Win7 or Win10 and the DASY5 or DASY6 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.

7.1 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.

<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	4 MHz – 10 GHz Linearity: ±0.2 dB (30 MHz – 10 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	

7.2 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.



Photo of DAE

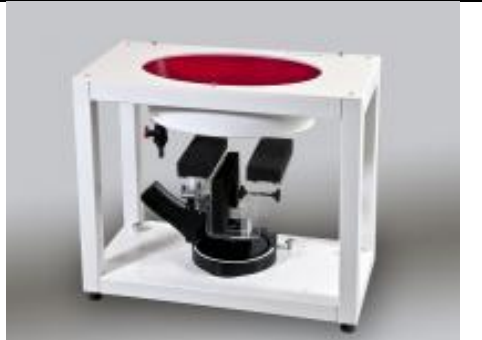
7.3 Phantom

<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 or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

7.4 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

8. 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

8.1 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 from 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

8.2 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.

8.3 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	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

8.4 Zoom Scan

Zoom scans are used to 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 whose 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 1 st two points closest to phantom surface	≤ 4 mm 3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$
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 <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> 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.			

8.5 Volume Scan Procedures

The volume scan is used to 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.

8.6 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.



9. Test Equipment List

Table with 6 columns: Manufacturer, Name of Equipment, Type/Model, Serial Number, Last Cal., Due Date. Rows include various equipment like System Validation Kits, Data Acquisition Electronics, Dosimetric E-Field Probes, SAM Twin Phantom, Thermo-Hygrometer, Phone Positioner, Radio Communication Analyzer, ENA Series Network Analyzer, Dielectric Probe Kit, Vector Signal Generator, Power Meter, Power Sensor, BLUETOOTH TESTER, Spectrum Analyzer, DIGITAC THERMOMETER, Power Divider, Attenuation1-3, POWER AMPLIFIER, and Dual Directional Coupler.

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
2. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
3. The justification data of dipole can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10. System Verification

10.1 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. 11.1. 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. 11.2.

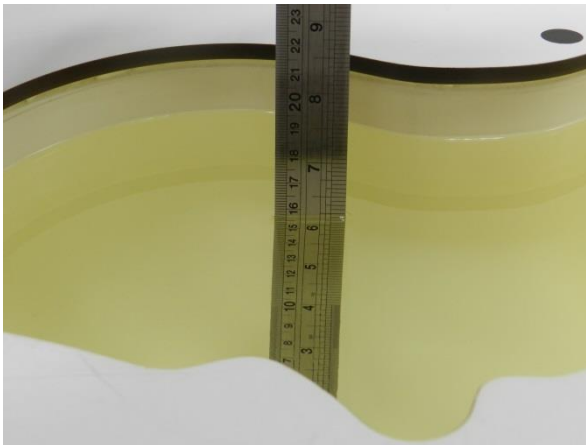


Fig 11.1 Photo of Liquid Height for Head SAR

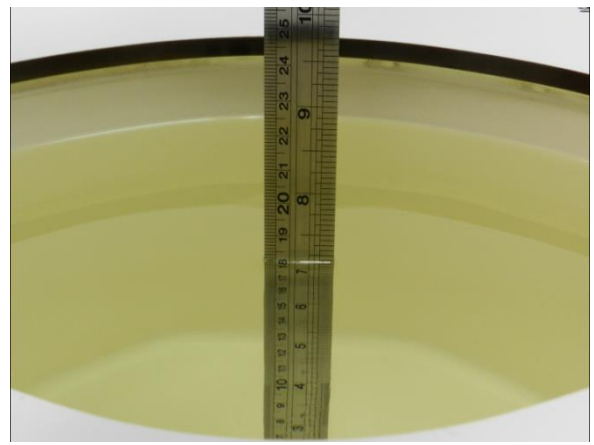


Fig 11.2 Photo of Liquid Height for Body SAR

10.2 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 (ϵ_r)
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
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

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. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	Head	22.6	0.905	42.7	0.89	41.90	1.69	1.91	±5	2024/8/4
835	Head	22.8	0.924	41.4	0.90	41.50	2.67	-0.24	±5	2024/8/6
1750	Head	22.9	1.35	40.1	1.37	40.10	-1.46	0.00	±5	2024/8/8
1900	Head	22.7	1.43	39.8	1.40	40.00	2.14	-0.50	±5	2024/8/10
2450	Head	22.6	1.86	38.4	1.80	39.20	3.33	-2.04	±5	2024/8/12
2600	Head	22.8	2.03	37.8	1.96	39.00	3.57	-3.08	±5	2024/8/14
3500	Head	22.9	2.88	38.5	2.91	37.90	-1.03	1.58	±5	2024/8/16
3700	Head	22.7	3.08	38.0	3.12	37.70	-1.28	0.80	±5	2024/8/18
3900	Head	22.8	3.28	37.6	3.32	37.50	-1.20	0.27	±5	2024/8/20
5250	Head	22.6	4.59	36.2	4.71	35.90	-2.55	0.84	±5	2024/8/22
5600	Head	22.9	5.00	35.6	5.07	35.50	-1.38	0.28	±5	2024/8/24
5750	Head	22.8	5.17	35.3	5.22	35.40	-0.96	-0.28	±5	2024/8/26
750	Head	22.7	0.900	41.192	0.89	41.90	1.12	-1.69	±5	2024/7/31
835	Head	22.6	0.902	41.240	0.90	41.50	0.22	-0.63	±5	2024/8/1
1750	Head	22.9	1.409	40.669	1.37	40.10	2.85	1.42	±5	2024/8/2
1900	Head	22.7	1.397	39.035	1.40	40.00	-0.21	-2.41	±5	2024/8/3
2600	Head	22.8	1.926	38.230	1.96	39.00	-1.73	-1.97	±5	2024/8/4
750	Head	22.6	0.888	42.260	0.89	41.90	-0.22	0.86	±5	2024/8/6
835	Head	22.6	0.912	41.936	0.90	41.50	1.33	1.05	±5	2024/8/7
1750	Head	22.5	1.317	40.225	1.37	40.10	-3.87	0.31	±5	2024/8/8
1900	Head	22.8	1.407	40.199	1.40	40.00	0.50	0.50	±5	2024/8/9
2600	Head	22.8	2.030	40.355	1.96	39.00	3.57	3.47	±5	2024/8/10
3300	Head	22.8	2.636	39.078	2.71	38.20	-2.73	2.30	±5	2024/8/12
3500	Head	22.6	2.810	38.714	2.91	37.90	-3.44	2.15	±5	2024/8/13
3700	Head	22.9	2.988	38.362	3.12	37.70	-4.23	1.76	±5	2024/8/14
3900	Head	22.8	3.175	38.058	3.32	37.50	-4.37	1.49	±5	2024/8/15
4100	Head	22.8	3.377	38.710	3.53	37.28	-4.33	3.84	±5	2024/8/16
2450	Head	22.7	1.744	39.267	1.80	39.20	-3.11	0.17	±5	2024/8/17
5250	Head	22.9	4.573	35.720	4.71	35.90	-2.91	-0.50	±5	2024/8/18
5600	Head	22.6	4.997	35.371	5.07	35.50	-1.44	-0.36	±5	2024/8/19
5750	Head	22.7	5.105	34.869	5.22	35.40	-2.20	-1.50	±5	2024/8/20
2600	Head	22.8	1.925	38.229	1.96	39.00	-1.79	-1.98	±5	2024/9/27
3500	Head	22.7	2.810	38.714	2.91	37.90	-3.44	2.15	±5	2024/9/27
3900	Head	22.9	3.175	38.058	3.32	37.50	-4.37	1.49	±5	2024/9/27
1750	Head	22.9	1.319	40.217	1.37	40.10	-3.72	0.29	±5	2024/9/27



10.3 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.

<1g SAR>

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 (%)
2024/8/4	750	Head	50	1087	7706	1649	0.432	8.58	8.64	0.70
2024/8/6	835	Head	50	4d091	7706	1649	0.508	9.45	10.16	7.51
2024/8/8	1750	Head	50	1090	7706	1649	1.97	37.00	39.4	6.49
2024/8/10	1900	Head	50	5d118	7706	1649	2.03	39.30	40.6	3.31
2024/8/12	2450	Head	50	1095	7706	1649	2.71	52.60	54.2	3.04
2024/8/14	2600	Head	50	1112	7706	1649	2.89	55.10	57.8	4.90
2024/8/16	3500	Head	50	1037	7706	1649	3.26	65.40	65.2	-0.31
2024/8/18	3700	Head	50	1008	7706	1649	3.47	67.20	69.4	3.27
2024/8/20	3900	Head	50	1048	7706	1649	3.65	69.10	73	5.64
2024/8/22	5250	Head	50	1113	7706	1649	4.14	81.50	82.8	1.60
2024/8/24	5600	Head	50	1113	7706	1649	4.41	82.60	88.2	6.78
2024/8/26	5750	Head	50	1113	7706	1649	3.86	80.80	77.2	-4.46
2024/7/31	750	Head	50	1087	3857	1650	0.436	8.58	8.72	1.63
2024/8/1	835	Head	50	4d091	3857	1650	0.461	9.45	9.22	-2.43
2024/8/2	1750	Head	50	1090	3857	1650	1.910	37.00	38.2	3.24
2024/8/3	1900	Head	50	5d118	3857	1650	2.020	39.30	40.4	2.80
2024/8/4	2600	Head	50	1112	3857	1650	2.630	55.10	52.6	-4.54
2024/8/6	750	Head	50	1087	3857	1650	0.419	8.58	8.38	-2.33
2024/8/7	835	Head	50	4d091	3857	1650	0.477	9.45	9.54	0.95
2024/8/8	1750	Head	50	1090	3857	1650	1.760	37.00	35.2	-4.86
2024/8/9	1900	Head	50	5d118	3857	1650	1.810	39.30	36.2	-7.89
2024/8/10	2600	Head	50	1112	3857	1650	2.690	55.10	53.8	-2.36
2024/8/12	3300	Head	50	1033	3857	1650	3.380	67.10	67.6	0.75
2024/8/13	3500	Head	50	1037	3857	1650	3.110	65.40	62.2	-4.89
2024/8/14	3700	Head	50	1008	3857	1650	3.160	67.20	63.2	-5.95
2024/8/15	3900	Head	50	1048	3857	1650	3.350	69.10	67	-3.04
2024/8/16	4100	Head	50	1048	3857	1650	3.470	67.00	69.4	3.58
2024/8/17	2450	Head	50	1095	3857	1650	2.670	52.60	53.4	1.52
2024/8/18	5250	Head	50	1113	3857	1650	4.170	81.50	83.4	2.33
2024/8/19	5600	Head	50	1113	3857	1650	4.420	82.60	88.4	7.02
2024/8/20	5750	Head	50	1113	3857	1650	4.080	80.80	81.6	0.99
2024/9/27	2600	Head	50	1112	3857	1303	2.790	55.10	55.8	1.27
2024/9/27	3500	Head	50	1037	3857	1303	3.110	65.40	62.2	-4.89
2024/9/27	3900	Head	50	1048	3857	1303	3.350	69.10	67	-3.04
2024/9/27	1750	Head	50	1090	3857	1303	1.870	37.00	37.4	1.08

<10g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2024/8/4	750	Head	50	1087	7706	1649	0.290	5.65	5.8	2.65
2024/8/6	835	Head	50	4d091	7706	1649	0.335	6.22	6.7	7.72
2024/8/8	1750	Head	50	1090	7706	1649	1.01	19.50	20.2	3.59
2024/8/10	1900	Head	50	5d118	7706	1649	1.02	20.40	20.4	0.00
2024/8/12	2450	Head	50	1095	7706	1649	1.32	24.70	26.4	6.88
2024/8/14	2600	Head	50	1112	7706	1649	1.31	24.80	26.2	5.65
2024/8/16	3500	Head	50	1037	7706	1649	1.29	24.70	25.8	4.45
2024/8/18	3700	Head	50	1008	7706	1649	1.31	24.40	26.2	7.38
2024/8/20	3900	Head	50	1048	7706	1649	1.28	24.10	25.6	6.22
2024/8/22	5250	Head	50	1113	7706	1649	1.20	23.30	24	3.00
2024/8/24	5600	Head	50	1113	7706	1649	1.27	23.70	25.4	7.17
2024/8/26	5750	Head	50	1113	7706	1649	1.12	23.00	22.4	-2.61
2024/7/31	750	Head	50	1087	3857	1650	0.293	5.65	5.86	3.72
2024/8/1	835	Head	50	4d091	3857	1650	0.307	6.22	6.14	-1.29
2024/8/2	1750	Head	50	1090	3857	1650	0.998	19.50	19.96	2.36
2024/8/3	1900	Head	50	5d118	3857	1650	1.070	20.40	21.4	4.90
2024/8/4	2600	Head	50	1112	3857	1650	1.200	24.80	24	-3.23
2024/8/6	750	Head	50	1087	3857	1650	0.295	5.65	5.9	4.42
2024/8/7	835	Head	50	4d091	3857	1650	0.313	6.22	6.26	0.64
2024/8/8	1750	Head	50	1090	3857	1650	0.975	19.50	19.5	0.00
2024/8/9	1900	Head	50	5d118	3857	1650	0.958	20.40	19.16	-6.08
2024/8/10	2600	Head	50	1112	3857	1650	1.240	24.80	24.8	0.00
2024/8/12	3300	Head	50	1033	3857	1650	1.350	25.70	27	5.06
2024/8/13	3500	Head	50	1037	3857	1650	1.160	24.70	23.2	-6.07
2024/8/14	3700	Head	50	1008	3857	1650	1.190	24.40	23.8	-2.46
2024/8/15	3900	Head	50	1048	3857	1650	1.210	24.10	24.2	0.41
2024/8/16	4100	Head	50	1048	3857	1650	1.220	23.30	24.4	4.72
2024/8/17	2450	Head	50	1095	3857	1650	1.260	24.70	25.2	2.02
2024/8/18	5250	Head	50	1113	3857	1650	1.220	23.30	24.4	4.72
2024/8/19	5600	Head	50	1113	3857	1650	1.200	23.70	24	1.27
2024/8/20	5750	Head	50	1113	3857	1650	1.180	23.00	23.6	2.61
2024/9/27	2600	Head	50	1112	3857	1303	1.280	24.80	25.6	3.23
2024/9/27	3500	Head	50	1037	3857	1303	1.160	24.70	23.2	-6.07
2024/9/27	3900	Head	50	1048	3857	1303	1.210	24.10	24.2	0.41
2024/9/27	1750	Head	50	1090	3857	1303	0.946	19.50	18.92	-2.97

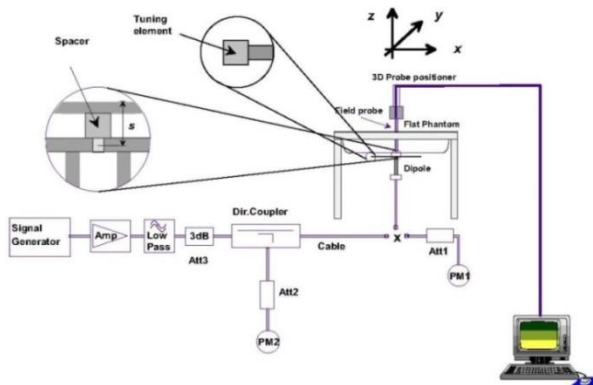


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

11. RF Exposure Positions

11.1 Ear and handset reference point

Figure 12.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M,” the left ear reference point (ERP) is marked “LE,” and the right ERP is marked “RE.” Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 12.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 12.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 12.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

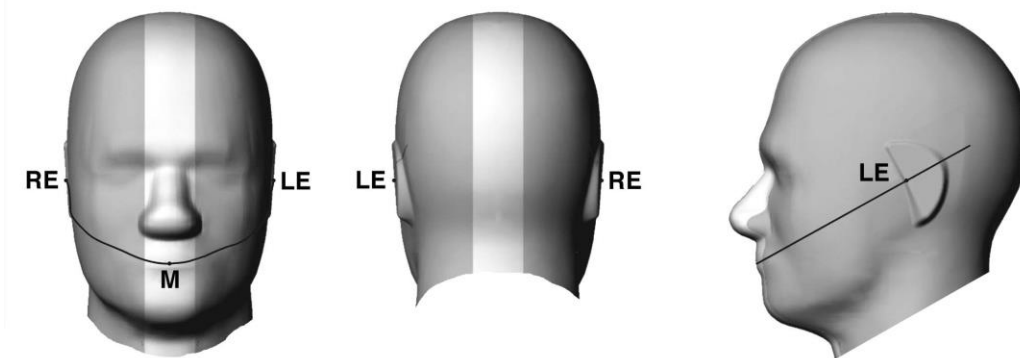


Fig 12.1.1 Front, back, and side views of SAM twin phantom

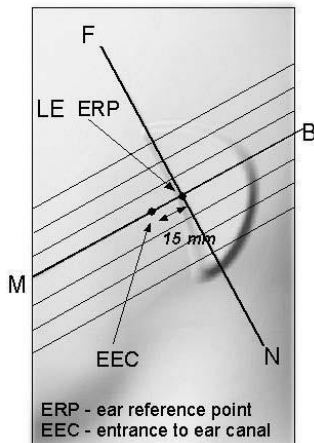


Fig 12.1.2 Close-up side view of phantom showing the ear region.

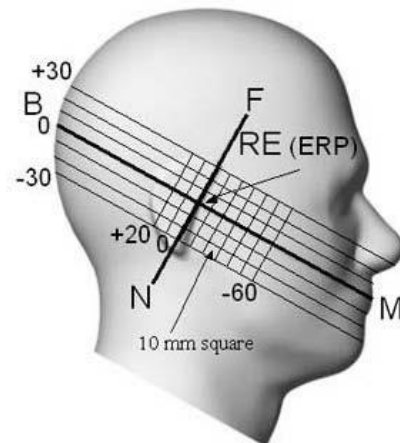


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 12.2.1 and Figure 12.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 12.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 12.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 12.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 12.2.3. The actual rotation angles should be documented in the test report.

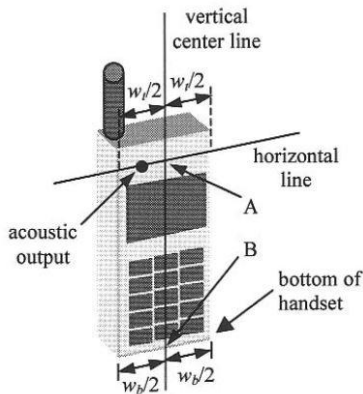


Fig 12.2.1 Handset vertical and horizontal reference lines—“fixed case”

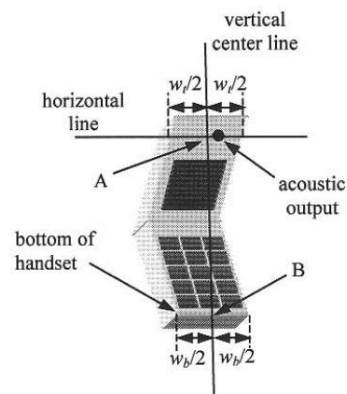


Fig 12.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

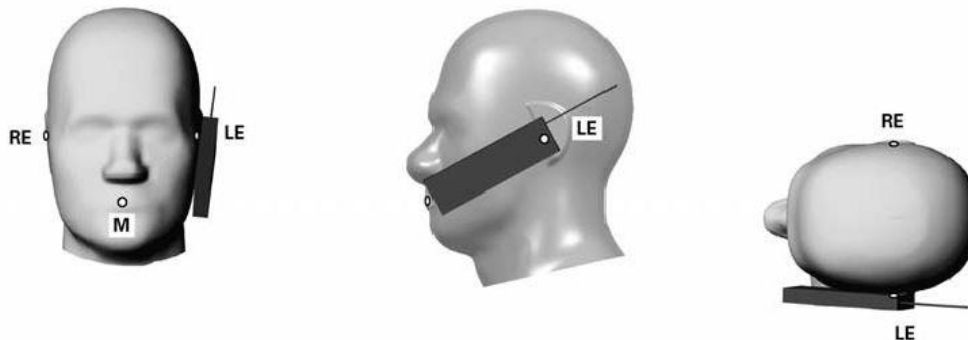


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 12.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

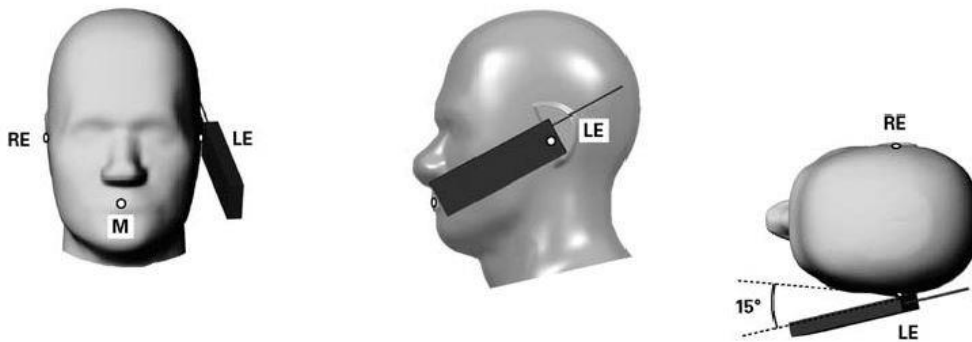


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 11.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

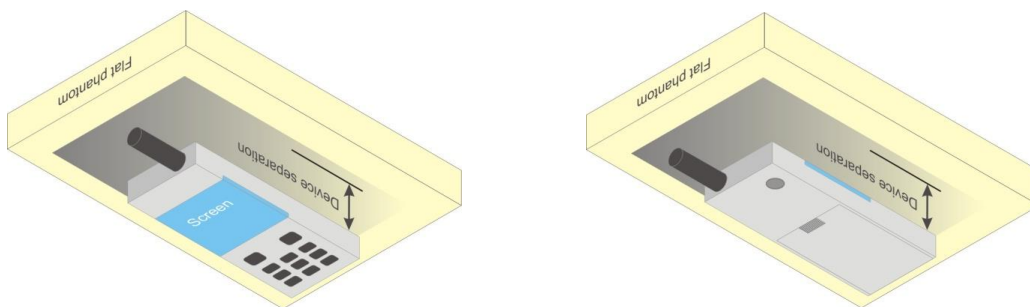


Fig 12.4 Body Worn Position

11.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, According to KDB648474 D04v01r03, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.6 The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

11.6 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets ($L \times W \geq 9$ cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

12. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<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 HSPA+ devices supporting 16 QAM in the uplink, power measurements procedure is according to the configurations in Table C.11.1.4 of 3GPP TS 34.121-1.
4. 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} (Note 1, 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: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

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 $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15, \beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCCH, 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 $\beta_c = 11/15$ and $\beta_d = 15/15$.

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 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	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_{ed1} : 47/15 β_{ed2} : 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	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. 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, TF0) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: 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 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

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: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - 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.		

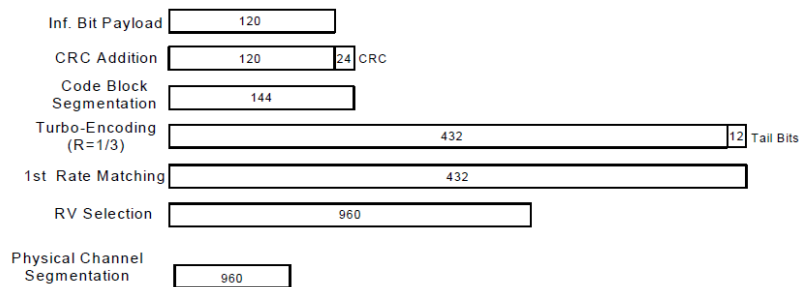


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

HSPA+ 3GPP release 7 (uplink category 7) 16QAM, Setup Configuration:

1. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - 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, C11.1.4, quoted from the TS 34.121-1 s5.2E
 - iii. Set Channel Parms
 - iv. Set Cell Power = -86 dBm
 - v. Set Channel Type = HSPA
 - vi. Set UE Target Power =21 dBm
 - vii. Power Ctrl Mode= All Up Bits
 - viii. Set Manual Uplink DPCH Bc/Bd = Manual
 - ix. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 - x. Set HSPA Conn DL Channel Levels
 - xi. Set HS-SCCH Configs
 - xii. Set RB Test Mode Setup
 - xiii. Set Common HSUPA Parameters
 - xiv. Set Serving Grant
 - xv. Confirm that E-TFCl is equal to the target E-TFCl of 105 for sub-test 1, and other subtest's E-TFCl
4. The transmitted maximum output power was recorded.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCl (Note 5)	E-TFCl (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{fs} = 30/15 * \beta_c$.

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

Setup Configuration

<WCDMA Conducted Power>

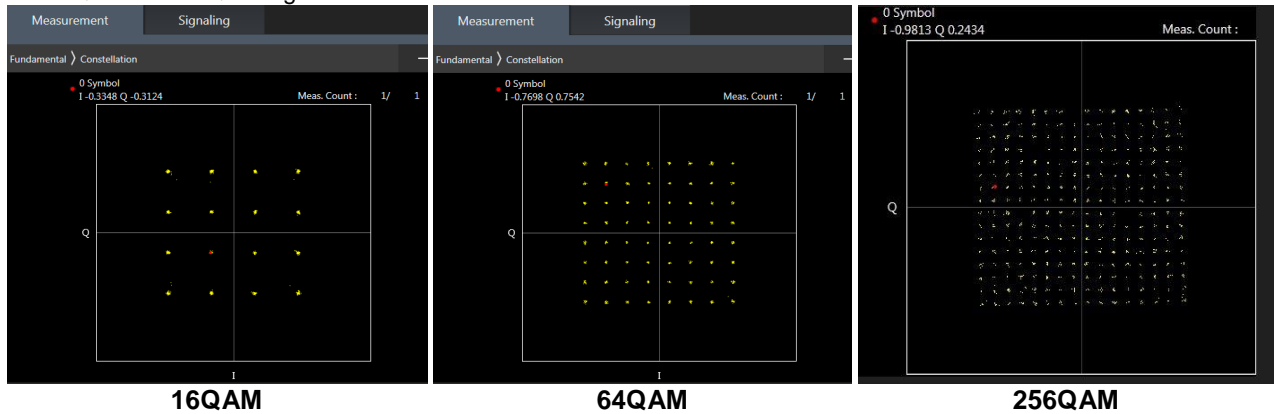
General Note:

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. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA/ HSPA+ is $\leq 1/4$ 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/ HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA/ HSPA+) are less than $1/4$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+.

<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/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ 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/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ 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 B4 / B5 / B12 / B17 / B26 / B38 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 B4 / B2 / B5 / B38 /B42(3550MHz-3600MHz)/B43 SAR test was covered by B66 / B25 / B26 / B41 / B48; 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 \leq 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
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<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.

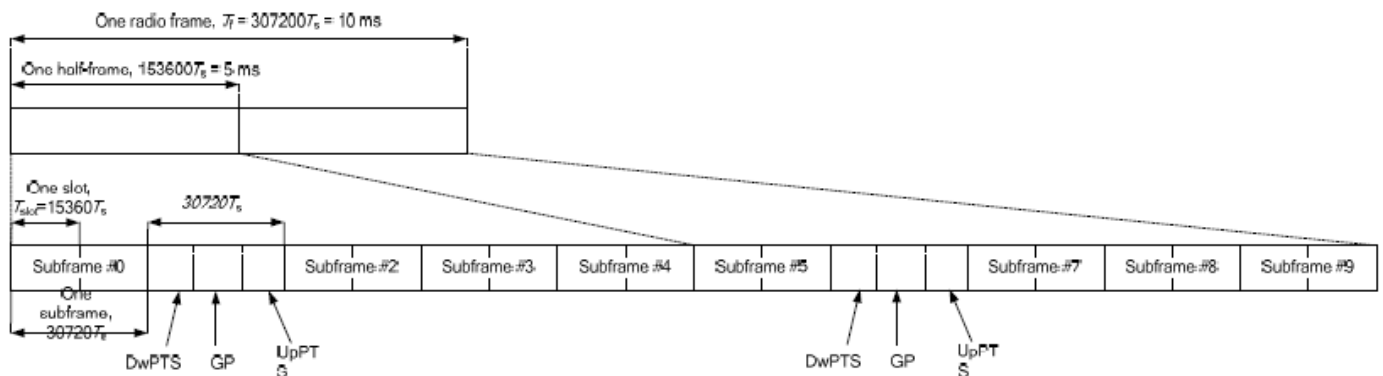


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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 · Ts	2192 · Ts	2560 · Ts	7680 · Ts	2192 · Ts	2560 · Ts
1	19760 · Ts			20480 · Ts		
2	21952 · Ts			23040 · Ts		
3	24144 · Ts			25600 · Ts		
4	26336 · Ts	4384 · Ts	5120 · Ts	7680 · Ts	4384 · Ts	5120 · Ts
5	6592 · Ts			20480 · Ts		
6	19760 · Ts			23040 · Ts		
7	21952 · Ts			12800 · Ts		
8	24144 · Ts			-		
9	13168 · Ts	-	-	-	-	-

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:

For LTE TDD Power class 2

- i. Uplink-downlink configuration: 1. In a half-frame consisted of 5 subframes, uplink operation is in 2 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: $(2+0.167)/5 = 43.3\%$
- iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(2+0.143)/5 = 42.9\%$
- v. For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $43.3\%/42.9\% = 1.009$ 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.

For LTE TDD Power class 3

- i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, 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.

The device can adjust uplink/downlink configuration automatically according to the transmitting power class level, as follows:

LTE TDD Band	Power Class level	support uplink/downlink configuration
LTE Band 41	> 23	1,2,3,4,5
	=23	0,1,2,3,4,5,6
	< 23	0,1,2,3,4,5,6



<LTE Carrier Aggregation>

The detailed LTE Carrier Aggregation conducted power table can refer to Appendix F.

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. The gray color table is covered by other combinations and no need to verify power.

2CC Downlink Carrier Aggregation			
Number	Combination	4X4 MIMO	Covered by
			Measurement Superset
1	CA_12A-66A		
2	CA_14A-66A		
3	CA_2A-12A		
4	CA_2A-14A		
5	CA_2A-2A		
6	CA_2A-4A		
7	CA_2A-5A		
8	CA_2A-66A		
9	CA_4A-12A		
10	CA_4A-4A		
11	CA_4A-5A		
12	CA_5A-66A		
13	CA_5B		
14	CA_66A-66A		
15	CA_2A-7A	7A	
16	CA_5A-7A	7A	
17	CA_7A-66A	7A	
18	CA_4A-7A	7A	
19	CA_7C	7A	
20	CA_7A-12A	7A	
21	CA_7A-7A	7A	
22	CA_5A-5A		
23	CA_13A-66A		
24	CA_41A-41A	41A	
25	CA_48C	48C	
26	CA_48A-48A	48A	
27	CA_4A-48A	48A	
28	CA_5A-48A	48A	
29	CA_13A-48A	48A	
30	CA_2A-71A		
31	CA_4A-71A		
32	CA_66A-71A		
33	CA_66B		
34	CA_66C		
35	CA_2A-13A		
36	CA_4A-13A		
37	CA_12B		
38	CA_41C	41C	
39	CA_48A-71A	48A	
40	CA_2C		
41	CA_2A-48A	48A	
42	CA_48A-66A	48A	

LTE Carrier Aggregation Conducted Power (Downlink)

- 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 two carrier aggregation. 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 inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band. For SCC DL RB size and offset will base on the PCC corresponding RB allocation.
- vi. 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.
- 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.

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

LTE 4x4 MIMO (Downlink)

This device supports downlink 4x4 MIMO operations for LTE Band 7/38/41/42/43/48 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

4X4 MIMO	Band
	LTE Band 7/38/41/42/43/48

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n14/n25/n66/n71/n38/n41/n48/n77/n78 is SA mode.
2. 5G NR n2/n5/n7/n25/n66/n38/n41/n71/n77/n78 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing 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
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. 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
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will 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, smaller bandwidth SAR testing is not required for this device
4. For 5G NR n41/n77 HPUE, 5G NR n41/n77 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
5. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
6. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
7. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
8. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
9. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	QPSK		≤ 1	0
	16 QAM		≤ 2	≤ 1
	64 QAM		≤ 2.5	
CP-OFDM	256 QAM		≤ 4.5	
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM		≤ 3.5	
	256 QAM		≤ 6.5	

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5		≤ 2.5
	256 QAM		≤ 4.5	
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM		≤ 3.5	
	256 QAM		≤ 6.5	

<EN-DC combination>

EN-DC combination	Antenna Tx	
	LTE TX	NRTX
DC_12A_n2A	ANT1	ANT4
DC_12A_n66A	ANT1	ANT4
DC_12A_n77A	ANT1	ANT6/2/5/7
DC_14A_n2A	ANT1	ANT4
DC_14A_n66A	ANT1	ANT4
DC_14A_n77A	ANT1	ANT6/2/5/7
DC_2A_n5A	ANT4	ANT1
DC_2A_n66A	ANT4	ANT1
DC_2A_n77A	ANT1	ANT6/2/5/7
DC_5A_n2A	ANT1	ANT4
DC_5A_n66A	ANT1	ANT4
DC_5A_n77A	ANT1	ANT6/2/5/7
DC_66A_n2A	ANT1	ANT4
DC_66A_n5A	ANT4	ANT1
DC_66A_n77A	ANT1	ANT6/2/5/7
DC_66A_n7A	ANT4	ANT2
DC_7A_n2A	ANT2	ANT4
DC_2A_n7A	ANT4	ANT2
DC_7A_n66A	ANT2	ANT1
DC_7A_n77A	ANT2	ANT6/2/5/7
DC_66A_n71A	ANT4	ANT1
DC_2A_n71A	ANT4	ANT1
DC_2A_n41A	ANT1	ANT2/4/5/7
DC_66A_n41A	ANT1	ANT2/4/5/7
DC_66A_n25A	ANT1	ANT4
DC_13A_n77A	ANT1	ANT6/2/5/7



DC_13A_n2A	ANT1	ANT4
DC_13A_n66A	ANT1	ANT4
DC_5A_n78A	ANT1	ANT6
DC_7A_n78A	ANT2	ANT6
DC_48A_n5A	ANT6	ANT1
DC_71A_n2A	ANT1	ANT4
DC_71A_n38A	ANT1	ANT2
DC_71A_n41A	ANT1	ANT2/4/5/7
DC_71A_n66A	ANT1	ANT4
DC_71A_n77A	ANT1	ANT6/2/5/7
DC_71A_n78A	ANT1	ANT6
DC_12A_n25A	ANT1	ANT4
DC_12A_n38A	ANT1	ANT2
DC_12A_n41A	ANT1	ANT2/4/5/7
DC_12A_n78A	ANT1	ANT6
DC_13A_n25A	ANT1	ANT4
DC_13A_n78A	ANT1	ANT6
DC_25A_n41A	ANT1	ANT2/4/5/7
DC_25A_n77A	ANT1	ANT6/2/5/7
DC_25A_n78A	ANT1	ANT6
DC_26A_n25A	ANT1	ANT4
DC_26A_n41A	ANT1	ANT2/4/5/7
DC_2A_n38A	ANT1	ANT2
DC_2A_n78A	ANT1	ANT6
DC_48A_n66A	ANT6	ANT1
DC_4A_n38A	ANT1	ANT2
DC_4A_n41A	ANT1	ANT2/4/5/7
DC_5A_n38A	ANT1	ANT2
DC_5A_n41A	ANT1	ANT2/4/5/7
DC_66A_n78A	ANT1	ANT6
DC_66A_n38A	ANT1	ANT2

<WLAN Conducted Power>

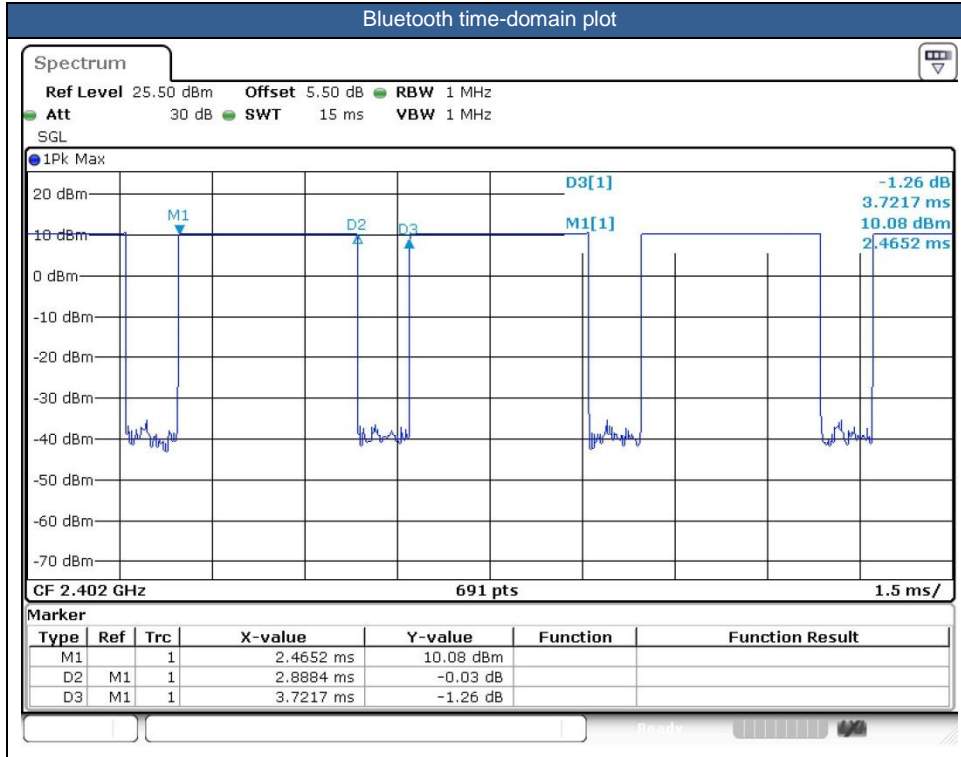
General Note:

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 77.61% as following figure, for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to 83.3% for Bluetooth reported SAR calculation





13. Antenna Location

The detailed antenna location information can refer to SAR Test Setup Photos.

14. 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 SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
 - d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - e. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. For TDD LTE SAR measurement of power class 3, 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 (W/kg) = 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 when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head and hotspot exposure condition.
6. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA Band II, LTE Band 2/4/25/66, 5G NR n2/n25/n66/n38/n41/n48/n77/n78, WLAN5.8GHz, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
7. Although the headset SAR is greater than 0.8 W/kg, the headset SAR verified the worst of the non-headset SAR and less than non-headset SAR, so there is no need to be tested other channels.
8. The EUT has two work states, flip open and flip close, SAR testing have been evaluated two states. For head mode, only flip open mode is performed SAR testing. When it is in flip close configuration since the diagonal dimension is < 160 mm, 10-g extremity SAR tests are not required. When it is in flip open configuration since the diagonal dimension is > 160 mm and < 200 mm. Therefore, 10-g extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.

**WCDMA 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. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA/ HSPA+ is $\leq \frac{1}{4}$ 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/ HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA/ HSPA+) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+.

LTE Note:

1. 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.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. 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.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ 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/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ 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.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 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.
7. LTE B4 / B2 / B5 / B38 /B42(3550MHz-3600MHz) / B43 SAR test was covered by B66 / B25 / B26 / B41 / B48; 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 \leq 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

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. SAR testing 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.
 - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - c. 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.
 - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ 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, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n5 /n7/n25/n66/n71/n38/n41/n77 the maximum bandwidth does not support three non-overlapping channels, 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.

WLAN/Bluetooth Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

DSI status description:

The device has the following DSI state which used at different exposure condition.

Exposure Condition	DSI	EUT Flip State	Trigger conditions
Head SAR_Standalone	DSI 4	Flip Open	Earpiece On
Head SAR_Simultaneous	DSI 6	Flip Open	Earpiece On+WLAN
Hotspot SAR	DSI 3	Flip Open/Flip Close	Hotspot on
Body worn &Extremity SAR_Standalone	DSI 1	Flip Open/Flip Close	Receiver off
Body worn &Extremity SAR_Simultaneous	DSI 2	Flip Open/Flip Close	Receiver off +WLAN



14.1 Head SAR

<Flip Open>

Table with columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB Offset, Mode, Test Position, Gap (mm), Antenna, Power State, Ch., Freq. (MHz), Sample, Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Duty Cycle %, Duty Cycle Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg). Rows include LTE Band 12, 13, 14, and FR1 n14-n71 across various test positions and configurations.



850MHz																					
07	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 4	4182	836.4	1	23.40	24.00	1.148	-	-	0.17	0.254	0.292
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 4	4182	836.4	1	23.40	24.00	1.148	-	-	0.06	0.140	0.161
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 4	4182	836.4	1	23.40	24.00	1.148	-	-	0.01	0.249	0.286
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 4	4182	836.4	1	23.40	24.00	1.148	-	-	-0.09	0.161	0.185
08	LTE Band 26 SA Standalone ENDC Standalone	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 4	26865	831.5	1	23.95	25.00	1.274	-	-	0.02	0.441	0.562
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 4	26865	831.5	2	23.95	25.00	1.274	-	-	0.01	0.435	0.554
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 4	26865	831.5	1	23.05	24.00	1.245	-	-	-0.17	0.356	0.443
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 4	26865	831.5	1	23.95	25.00	1.274	-	-	0.01	0.249	0.317
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 4	26865	831.5	1	23.05	24.00	1.245	-	-	-0.05	0.212	0.264
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 4	26865	831.5	1	23.95	25.00	1.274	-	-	0.03	0.398	0.507
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 4	26865	831.5	1	23.05	24.00	1.245	-	-	0.01	0.389	0.484
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 4	26865	831.5	1	23.95	25.00	1.274	-	-	0.01	0.232	0.295
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 4	26865	831.5	1	23.05	24.00	1.245	-	-	-0.17	0.235	0.292
	LTE Band 26 For ENDC Simultaneous	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 6	26865	831.5	1	23.07	24.00	1.239	-	-	0.01	0.347	0.430
	LTE Band 26 For ENDC Simultaneous	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 6	26865	831.5	1	23.07	24.00	1.239	-	-	0.03	0.310	0.384
09	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 4	167300	836.5	1	24.39	25.00	1.151	-	-	-0.01	0.472	0.543
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 4	167300	836.5	1	24.31	25.00	1.172	-	-	0.04	0.460	0.539
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 4	167300	836.5	1	24.39	25.00	1.151	-	-	0.06	0.253	0.291
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 4	167300	836.5	1	24.31	25.00	1.172	-	-	-0.01	0.235	0.275
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 4	167300	836.5	1	24.39	25.00	1.151	-	-	-0.15	0.290	0.334
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 4	167300	836.5	1	24.31	25.00	1.172	-	-	0.06	0.408	0.478
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 4	167300	836.5	1	24.39	25.00	1.151	-	-	0.07	0.268	0.308
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 4	167300	836.5	1	24.31	25.00	1.172	-	-	0.05	0.248	0.291
1750MHz																					
10	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 4	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.03	0.121	0.140
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 4	1413	1732.6	1	23.38	24.00	1.153	-	-	0.19	0.129	0.149
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 4	1413	1732.6	1	23.38	24.00	1.153	-	-	0.04	0.128	0.148
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 4	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.06	0.123	0.142
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 4	132322	1745	1	23.35	24.50	1.303	-	-	-0.07	0.162	0.211
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 4	132322	1745	1	22.38	23.50	1.294	-	-	0.06	0.091	0.118
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 4	132322	1745	1	23.35	24.50	1.303	-	-	0.02	0.177	0.231
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 4	132322	1745	1	22.38	23.50	1.294	-	-	-0.09	0.134	0.173
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 4	132322	1745	1	23.35	24.50	1.303	-	-	0.02	0.152	0.198
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 4	132322	1745	1	22.38	23.50	1.294	-	-	-0.08	0.113	0.146
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 4	132322	1745	1	23.35	24.50	1.303	-	-	0.08	0.163	0.212
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 4	132322	1745	1	22.38	23.50	1.294	-	-	0.13	0.148	0.192
11	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 4	132322	1745	1	23.81	24.50	1.172	-	-	0.04	0.427	0.501
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 4	132322	1745	1	22.76	23.50	1.186	-	-	-0.03	0.359	0.426
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 4	132322	1745	1	23.81	24.50	1.172	-	-	0.01	0.346	0.406
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 4	132322	1745	1	22.76	23.50	1.186	-	-	0.05	0.269	0.319
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 4	132322	1745	1	23.81	24.50	1.172	-	-	-0.02	0.288	0.338
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 4	132322	1745	1	22.76	23.50	1.186	-	-	0.08	0.248	0.294
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 4	132322	1745	1	23.81	24.50	1.172	-	-	-0.03	0.297	0.348
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 4	132322	1745	1	22.76	23.50	1.186	-	-	0.06	0.267	0.317
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHZ	Right Cheek	0mm	Ant 1	DSI 4	349000	1745	1	23.88	24.50	1.153	-	-	0.02	0.157	0.181
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHZ	Right Cheek	0mm	Ant 1	DSI 4	349000	1745	1	23.86	24.50	1.159	-	-	-0.06	0.168	0.195
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHZ	Right Tilted	0mm	Ant 1	DSI 4	349000	1745	1	23.88	24.50	1.153	-	-	-0.14	0.150	0.173
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHZ	Right Tilted	0mm	Ant 1	DSI 4	349000	1745	1	23.86	24.50	1.159	-	-	0.04	0.189	0.219
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHZ	Left Cheek	0mm	Ant 1	DSI 4	349000	1745	1	23.88	24.50	1.153	-	-	0.07	0.140	0.161
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHZ	Left Cheek	0mm	Ant 1	DSI 4	349000	1745	1	23.86	24.50	1.159	-	-	0.01	0.185	0.214
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHZ	Left Tilted	0mm	Ant 1	DSI 4	349000	1745	1	23.88	24.50	1.153	-	-	-0.06	0.158	0.182



FCC SAR Test Report

Report No. : FA462605

Table with columns for Test ID, Frequency, Modulation, Bandwidth, Power, etc. Includes rows for FR1 n66, WCDMA II, and LTE Band 25. Some cells are highlighted in yellow (e.g., 0.546, 0.088, 0.456, 0.480).



FCC SAR Test Report

Report No. : FA462605

2600MHz																					
16	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 4	21100	2535	1	22.21	23.50	1.346	-	-	0.08	0.203	0.273
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 4	21100	2535	2	22.21	23.50	1.346	-	-	0.02	0.192	0.258
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 4	21100	2535	1	21.53	22.50	1.250	-	-	-0.18	0.149	0.186
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 4	21100	2535	1	22.21	23.50	1.346	-	-	-0.03	0.060	0.081
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 4	21100	2535	1	21.53	22.50	1.250	-	-	0.03	0.048	0.060
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 4	21100	2535	1	22.21	23.50	1.346	-	-	-0.01	0.131	0.176
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 4	21100	2535	1	21.53	22.50	1.250	-	-	-0.15	0.069	0.086
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 4	21100	2535	1	22.21	23.50	1.346	-	-	-0.03	0.067	0.090
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 4	21100	2535	1	21.53	22.50	1.250	-	-	-0.15	0.067	0.084
17	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 4	40620	2593	1	23.14	24.00	1.219	62.9	1.006	0.15	0.115	0.141
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 4	40620	2593	1	22.26	23.00	1.186	62.9	1.006	0.11	0.058	0.069
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 4	40620	2593	1	23.14	24.00	1.219	62.9	1.006	-0.03	0.032	0.039
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 4	40620	2593	1	22.26	23.00	1.186	62.9	1.006	-0.08	0.026	0.031
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 4	40620	2593	1	23.14	24.00	1.219	62.9	1.006	0.09	0.075	0.092
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 4	40620	2593	1	22.26	23.00	1.186	62.9	1.006	-0.17	0.045	0.054
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 4	40620	2593	1	23.14	24.00	1.219	62.9	1.006	-0.06	0.042	0.052
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 4	40620	2593	1	22.26	23.00	1.186	62.9	1.006	-0.08	0.032	0.038
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 4	40620	2593	1	26.15	27.00	1.216	62.9	1.006	0.03	0.101	0.124
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 4	507000	2535	1	22.86	23.50	1.159	-	-	0.08	0.194	0.225
18	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 4	507000	2535	1	22.81	23.50	1.172	-	-	-0.04	0.203	0.238
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 4	507000	2535	1	22.86	23.50	1.159	-	-	-0.07	0.068	0.079
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 4	507000	2535	1	22.81	23.50	1.172	-	-	-0.08	0.071	0.083
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 4	507000	2535	1	22.86	23.50	1.159	-	-	0.05	0.157	0.182
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 4	507000	2535	1	22.81	23.50	1.172	-	-	0.17	0.126	0.148
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 4	507000	2535	1	22.86	23.50	1.159	-	-	-0.14	0.073	0.085
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 4	507000	2535	1	22.81	23.50	1.172	-	-	0.18	0.072	0.084
19	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 4	518598	2592.99	1	23.36	24.00	1.159	-	-	0.03	0.225	0.261
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 4	518598	2592.99	1	23.34	24.00	1.164	-	-	-0.04	0.160	0.186
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 4	518598	2592.99	1	23.36	24.00	1.159	-	-	0.02	0.054	0.063
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 4	518598	2592.99	1	23.34	24.00	1.164	-	-	-0.08	0.053	0.062
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 4	518598	2592.99	1	23.36	24.00	1.159	-	-	0.06	0.153	0.177
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 4	518598	2592.99	1	23.34	24.00	1.164	-	-	-0.13	0.086	0.100
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 4	518598	2592.99	1	23.36	24.00	1.159	-	-	-0.05	0.069	0.080
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 4	518598	2592.99	1	23.34	24.00	1.164	-	-	-0.13	0.058	0.068
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 4	518598	2592.99	1	26.34	27.00	1.164	50	1.000	-0.03	0.188	0.219
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 4	518598	2592.99	1	21.55	22.00	1.109	-	-	-0.01	0.057	0.063
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 4	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.03	0.049	0.055
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 4	518598	2592.99	1	21.55	22.00	1.109	-	-	0.08	0.005	0.006
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 4	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.07	0.014	0.016
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 4	518598	2592.99	1	21.55	22.00	1.109	-	-	0.02	0.046	0.051
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 4	518598	2592.99	1	21.53	22.00	1.114	-	-	0.05	0.024	0.027
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 4	518598	2592.99	1	21.55	22.00	1.109	-	-	-0.11	0.004	0.004
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 4	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.12	0.006	0.007
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 4	518598	2592.99	1	24.59	25.00	1.099	50	1.000	-0.16	0.041	0.045
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 4	518598	2592.99	1	22.93	24.00	1.279	-	-	-0.13	0.049	0.063
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 4	518598	2592.99	1	22.89	24.00	1.291	-	-	0.17	0.047	0.061
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 4	518598	2592.99	1	22.93	24.00	1.279	-	-	0.06	0.018	0.023
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 4	518598	2592.99	1	22.89	24.00	1.291	-	-	0.01	0.014	0.018
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 4	518598	2592.99	1	22.93	24.00	1.279	-	-	0.02	0.017	0.022
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 4	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.04	0.015	0.019
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 4	518598	2592.99	1	22.93	24.00	1.279	-	-	0.01	0.017	0.022
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 4	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.15	0.024	0.031
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 4	518598	2592.99	1	25.81	27.00	1.315	50	1.000	-0.02	0.028	0.037
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 4	518598	2592.99	1	23.96	25.00	1.271	-	-	-0.05	0.066	0.084
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 4	518598	2592.99	1	23.91	25.00	1.285	-	-	-0.13	0.045	0.058



FCC SAR Test Report

Report No. : FA462605

	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 4	518598	2592.99	1	23.96	25.00	1.271	-	-	0.08	0.032	0.041
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 4	518598	2592.99	1	23.91	25.00	1.285	-	-	0.16	0.026	0.033
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	518598	2592.99	1	23.96	25.00	1.271	-	-	0.01	0.130	0.165
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	518598	2592.99	1	23.91	25.00	1.285	-	-	-0.16	0.108	0.139
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	518598	2592.99	1	23.96	25.00	1.271	-	-	0.1	0.041	0.052
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	518598	2592.99	1	23.91	25.00	1.285	-	-	-0.04	0.033	0.042
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	518598	2592.99	1	26.97	28.00	1.268	50	1.000	0.05	0.115	0.146
3500MHz																					
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 4	42190	3460	1	22.98	24.00	1.265	62.9	1.006	0.01	0.242	0.308
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 4	42190	3460	1	21.97	23.00	1.268	62.9	1.006	-0.02	0.183	0.233
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 4	42190	3460	1	22.98	24.00	1.265	62.9	1.006	0.01	0.068	0.087
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 4	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.15	0.059	0.075
20	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 4	42190	3460	1	22.98	24.00	1.265	62.9	1.006	0.01	0.250	0.318
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 4	42190	3460	1	21.97	23.00	1.268	62.9	1.006	-0.09	0.195	0.249
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 4	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.09	0.097	0.123
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 4	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.11	0.068	0.087
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 4	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.09	0.226	0.305
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 4	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.02	0.173	0.223
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 4	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.01	0.156	0.211
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 4	55830	3609	1	21.92	23.00	1.282	62.9	1.006	0.19	0.152	0.196
21	LTE Band 48 SA Standalone ENDC Standalone	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 4	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.16	0.415	0.561
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 4	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.09	0.344	0.444
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 4	55830	3609	1	22.72	24.00	1.343	62.9	1.006	-0.16	0.148	0.200
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 4	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.12	0.121	0.156
	LTE Band 48 For ENDC Simultaneous	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 6	55830	3609	1	20.88	22.00	1.294	62.9	1.006	-0.07	0.272	0.354
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 4	641666	3624.99	1	23.23	24.00	1.194	-	-	-0.16	0.446	0.533
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 4	641666	3624.99	1	23.21	24.00	1.199	-	-	-0.13	0.314	0.377
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 4	641666	3624.99	1	23.23	24.00	1.194	-	-	0.03	0.266	0.318
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 4	641666	3624.99	1	23.21	24.00	1.199	-	-	0.16	0.256	0.307
22	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	1	23.23	24.00	1.194	-	-	0.08	1.020	1.218
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	2	23.23	24.00	1.194	-	-	0.02	0.996	1.189
	FR1 n48 SA Simultaneous	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 6	641666	3624.99	1	21.17	22.00	1.211	-	-	0.08	0.657	0.795
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	638000	3570	1	23.01	24.00	1.256	-	-	0.08	0.928	1.166
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	645332	3679.98	1	23.12	24.00	1.225	-	-	0.01	0.949	1.162
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	1	23.21	24.00	1.199	-	-	-0.15	0.703	0.843
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	638000	3570	1	22.98	24.00	1.265	-	-	0.03	0.662	0.837
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	645332	3679.98	1	23.02	24.00	1.253	-	-	-0.08	0.670	0.840
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	1	22.13	23.00	1.222	-	-	0.02	0.622	0.760
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 4	641666	3624.99	1	23.23	24.00	1.194	-	-	0.06	0.182	0.217
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 4	641666	3624.99	1	23.21	24.00	1.199	-	-	0.03	0.128	0.154
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 4	656000	3840	1	23.36	24.00	1.159	-	-	-0.02	0.470	0.545
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 4	656000	3840	1	23.28	24.00	1.180	-	-	-0.02	0.282	0.333
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 4	656000	3840	1	23.36	24.00	1.159	-	-	0.06	0.181	0.210
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 4	656000	3840	1	23.28	24.00	1.180	-	-	-0.09	0.135	0.159
23	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	656000	3840	1	23.36	24.00	1.159	-	-	0.02	0.933	1.081
	FR1 n77 SA Simultaneous ENDC Standalone	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4/6	656000	3840	1	21.21	22.00	1.199	-	-	-0.07	0.601	0.721
	FR1 n77 For ENDC Simultaneous	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 6	656000	3840	1	19.17	20.00	1.211	-	-	-0.04	0.388	0.470
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	656000	3840	1	23.28	24.00	1.180	-	-	0.14	0.874	1.032
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	656000	3840	1	23.22	24.00	1.197	-	-	0.02	0.833	0.997
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 4	656000	3840	1	23.36	24.00	1.159	-	-	0.03	0.179	0.207
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 4	656000	3840	1	23.28	24.00	1.180	-	-	0.1	0.142	0.168
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	656000	3840	1	26.36	27.00	1.159	50	1.000	-0.09	0.836	0.969



FCC SAR Test Report

Report No. : FA462605

Table with columns: Model, Power, Modulation, Channels, Frequency, Location, Distance, Antenna, DSI, E1, E2, E3, E4, E5, E6, E7, E8, E9, E10. Rows include various FR1 n77 configurations (Part96, SA Simultaneous ENDC Standalone, HPUE) with detailed test parameters and results.



FCC SAR Test Report

Report No. : FA462605

FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	656000	3840	1	22.68	24.00	1.355	-	-	-0.06	0.005	0.007
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	656000	3840	1	22.76	24.00	1.330	-	-	0.02	0.004	0.005
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	656000	3840	1	22.68	24.00	1.355	-	-	0.16	0.003	0.004
FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	656000	3840	1	25.81	27.00	1.315	50	1.000	0.01	0.003	0.004
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 4	633332	3499.98	1	23.08	24.00	1.236	-	-	0.02	0.092	0.114
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 4	633332	3499.98	1	23.06	24.00	1.242	-	-	0.13	0.064	0.079
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 4	633332	3499.98	1	23.08	24.00	1.236	-	-	0.12	0.028	0.035
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 4	633332	3499.98	1	23.06	24.00	1.242	-	-	0.01	0.043	0.053
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	633332	3499.98	1	23.08	24.00	1.236	-	-	0.01	0.063	0.078
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 4	633332	3499.98	1	23.06	24.00	1.242	-	-	0.19	0.043	0.053
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	633332	3499.98	1	23.08	24.00	1.236	-	-	-0.04	0.094	0.116
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	633332	3499.98	1	23.06	24.00	1.242	-	-	0.02	0.027	0.034
FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	633332	3499.98	1	26.06	27.00	1.242	50	1.000	-0.03	0.029	0.036
FR1 n77 Part96	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 4	641666	3624.99	1	22.47	23.50	1.268	-	-	-0.04	0.075	0.095

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
2450MHz																		
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	0.12	0.217	0.225	
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	-0.08	0.136	0.141	
24	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	0.03	0.286	0.296	
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Full Power	1	2412	2	19.90	20.00	1.023	98.75	1.013	0.02	0.268	0.278	
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	0.01	0.122	0.126	
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.01	0.029	0.037	
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.01	0.021	0.026	
25	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.05	0.041	0.052	
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.05	0.024	0.030	
5000MHz																		
	WLAN 5.3GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	Standalone	54	5270	1	16.95	18.50	1.429	96.18	1.040	0.09	0.262	0.389	
	WLAN 5.3GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3	Standalone	54	5270	1	16.95	18.50	1.429	96.18	1.040	-0.01	0.104	0.155	
26	WLAN 5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	54	5270	1	16.95	18.50	1.429	96.18	1.040	0.01	0.774	1.150	
	WLAN 5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	54	5270	2	16.95	18.50	1.429	96.18	1.040	0.08	0.762	1.132	
	WLAN 5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	62	5310	1	11.73	13.50	1.503	96.18	1.040	0.02	0.230	0.360	
	WLAN 5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3	Standalone	54	5270	1	16.95	18.50	1.429	96.18	1.040	-0.06	0.120	0.178	
	WLAN 5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Simultaneous	54	5270	1	14.48	16.00	1.419	92.49	1.081	-0.01	0.441	0.676	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	Standalone	110	5550	1	18.21	19.50	1.346	96.18	1.040	0.02	0.338	0.473	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3	Standalone	110	5550	1	18.21	19.50	1.346	96.18	1.040	0.02	0.109	0.153	
27	WLAN 5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	110	5550	1	18.21	19.50	1.346	96.18	1.040	0.03	0.814	1.139	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	110	5550	2	18.21	19.50	1.346	96.18	1.040	0.01	0.802	1.123	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	134	5670	1	18.17	19.50	1.358	96.18	1.040	0.02	0.655	0.925	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3	Standalone	110	5550	1	18.21	19.50	1.346	96.18	1.040	-0.08	0.113	0.158	
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	Simultaneous	138	5690	1	16.87	18.00	1.297	92.49	1.081	0.01	0.482	0.676	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	-0.02	0.473	0.501	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	0.01	0.139	0.147	
28	WLAN 5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	-0.05	0.649	0.688	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Full Power	151	5755	2	19.92	20.00	1.019	96.18	1.040	0.03	0.638	0.676	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Full Power	159	5795	1	19.47	20.00	1.130	96.18	1.040	0.01	0.407	0.478	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	0.02	0.131	0.139	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	Simultaneous	151	5755	1	19.00	19.50	1.122	96.18	1.040	-0.05	0.347	0.405	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Simultaneous	151	5755	1	19.00	19.50	1.122	96.18	1.040	0.03	0.467	0.545	



14.2 Hotspot SAR

<Flip Open>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
29	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	23095	707.5	1	24.10	25.00	1.230	-	-	-0.09	0.539	0.663
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI3	23095	707.5	1	23.18	24.00	1.208	-	-	-0.08	0.427	0.516
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	23095	707.5	1	24.10	25.00	1.230	-	-	0.08	0.604	0.743
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI3	23095	707.5	1	23.18	24.00	1.208	-	-	0.13	0.479	0.579
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	23095	707.5	1	24.10	25.00	1.230	-	-	0.03	0.600	0.738
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI3	23095	707.5	1	23.18	24.00	1.208	-	-	0.18	0.483	0.583
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	23095	707.5	1	24.10	25.00	1.230	-	-	-0.1	0.339	0.417
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI3	23095	707.5	1	23.18	24.00	1.208	-	-	0.07	0.265	0.320
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	23095	707.5	1	24.10	25.00	1.230	-	-	0.18	0.056	0.069
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DSI3	23095	707.5	1	23.18	24.00	1.208	-	-	-0.1	0.049	0.059
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	23230	782	1	24.11	25.00	1.227	-	-	0.05	0.400	0.491
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI3	23230	782	1	23.15	24.00	1.216	-	-	0.01	0.312	0.379
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	23230	782	1	24.11	25.00	1.227	-	-	-0.08	0.421	0.517
LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI3	23230	782	1	23.15	24.00	1.216	-	-	-0.15	0.353	0.429	
LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	23230	782	1	24.11	25.00	1.227	-	-	0.19	0.280	0.344	
LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI3	23230	782	1	23.15	24.00	1.216	-	-	0.07	0.224	0.272	
LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	23230	782	1	24.11	25.00	1.227	-	-	-0.18	0.294	0.361	
LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI3	23230	782	1	23.15	24.00	1.216	-	-	0.03	0.233	0.283	
LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	23230	782	1	24.11	25.00	1.227	-	-	-0.15	0.155	0.190	
LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DSI3	23230	782	1	23.15	24.00	1.216	-	-	-0.15	0.110	0.134	
LTE Band 14	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	23330	793	1	24.13	25.00	1.222	-	-	-0.08	0.401	0.490	
LTE Band 14	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI3	23330	793	1	23.12	24.00	1.225	-	-	0.11	0.319	0.391	
LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	23330	793	1	24.13	25.00	1.222	-	-	0.16	0.389	0.475	
LTE Band 14	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI3	23330	793	1	23.12	24.00	1.225	-	-	-0.08	0.310	0.380	
LTE Band 14	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	23330	793	1	24.13	25.00	1.222	-	-	-0.17	0.196	0.239	
LTE Band 14	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI3	23330	793	1	23.12	24.00	1.225	-	-	-0.08	0.156	0.191	
LTE Band 14	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	23330	793	1	24.13	25.00	1.222	-	-	-0.04	0.185	0.226	
LTE Band 14	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI3	23330	793	1	23.12	24.00	1.225	-	-	-0.08	0.146	0.179	
LTE Band 14	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	23330	793	1	24.13	25.00	1.222	-	-	0.17	0.098	0.120	
LTE Band 14	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DSI3	23330	793	1	23.12	24.00	1.225	-	-	0.18	0.076	0.093	
FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	158600	793	1	24.10	25.00	1.230	-	-	-0.12	0.392	0.482	
FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	158600	793	1	24.06	25.00	1.242	-	-	0.03	0.400	0.497	
FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	158600	793	1	24.10	25.00	1.230	-	-	-0.05	0.415	0.511	
FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	158600	793	1	24.06	25.00	1.242	-	-	-0.16	0.404	0.502	
FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	158600	793	1	24.10	25.00	1.230	-	-	-0.02	0.271	0.333	
FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	158600	793	1	24.06	25.00	1.242	-	-	0.15	0.249	0.309	
FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	158600	793	1	24.10	25.00	1.230	-	-	-0.09	0.173	0.213	
FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	158600	793	1	24.06	25.00	1.242	-	-	0.11	0.161	0.200	
FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	158600	793	1	24.10	25.00	1.230	-	-	-0.05	0.093	0.114	
FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	158600	793	1	24.06	25.00	1.242	-	-	-0.08	0.089	0.111	
LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	133297	680.5	1	23.71	25.00	1.346	-	-	-0.17	0.508	0.684	
LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	133297	680.5	1	22.81	24.00	1.315	-	-	-0.03	0.295	0.388	
LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	133297	680.5	1	23.71	25.00	1.346	-	-	-0.03	0.628	0.845	
LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	133297	680.5	1	22.81	24.00	1.315	-	-	0.14	0.477	0.627	
LTE Band 71	20M	QPSK	100	0	-	Back	10mm	Ant 1	DSI3	133297	680.5	1	22.79	24.00	1.321	-	-	0.11	0.470	0.621	
LTE Band 71	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	133297	680.5	1	23.71	25.00	1.346	-	-	-0.05	0.516	0.694	
LTE Band 71	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI3	133297	680.5	1	22.81	24.00	1.315	-	-	0.18	0.421	0.554	
LTE Band 71	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	133297	680.5	1	23.71	25.00	1.346	-	-	0.14	0.190	0.256	



Band	Power	Modulation	Channel	Type	Frequency	Orientation	Antenna	Model	Gain	Freq	Power	Gain	Power	Power	Power	Power	Power	Power	Power	
LTE Band 71	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DS13	133297	680.5	1	22.81	24.00	1.315	-	-	-0.17	0.148	0.195
LTE Band 71	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DS13	133297	680.5	1	23.71	25.00	1.346	-	-	0.17	0.057	0.077
LTE Band 71	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DS13	133297	680.5	1	22.81	24.00	1.315	-	-	-0.05	0.051	0.067
LTE Band 71 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	133297	680.5	1	22.81	24.00	1.315	-	-	-0.05	0.502	0.660
FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DS13	136100	680.5	1	24.23	25.00	1.194	-	-	0.02	0.600	0.716
FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DS13	136100	680.5	1	24.18	25.00	1.208	-	-	0.16	0.469	0.566
30 FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	136100	680.5	1	24.23	25.00	1.194	-	-	-0.09	0.733	0.875
FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	136100	680.5	1	24.18	25.00	1.208	-	-	0.07	0.688	0.831
FR1 n71	20M	QPSK	100	0	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	136100	680.5	1	23.36	24.00	1.159	-	-	0	0.548	0.635
FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DS13	136100	680.5	1	24.23	25.00	1.194	-	-	0.01	0.629	0.751
FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DS13	136100	680.5	1	24.18	25.00	1.208	-	-	-0.01	0.608	0.734
FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DS13	136100	680.5	1	24.23	25.00	1.194	-	-	-0.04	0.236	0.282
FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DS13	136100	680.5	1	24.18	25.00	1.208	-	-	-0.09	0.227	0.274
FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DS13	136100	680.5	1	24.23	25.00	1.194	-	-	-0.17	0.074	0.088
FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DS13	136100	680.5	1	24.18	25.00	1.208	-	-	-0.1	0.072	0.087
850MHz																				
WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DS13	4182	836.4	1	23.40	24.00	1.148	-	-	0.04	0.469	0.538
WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DS13	4182	836.4	1	23.40	24.00	1.148	-	-	-0.11	0.395	0.454
WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DS13	4182	836.4	1	23.40	24.00	1.148	-	-	-0.16	0.172	0.197
WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DS13	4182	836.4	1	23.40	24.00	1.148	-	-	-0.15	0.172	0.197
WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DS13	4182	836.4	1	23.40	24.00	1.148	-	-	-0.06	0.120	0.138
LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DS13	26865	831.5	1	23.95	25.00	1.274	-	-	0.04	0.535	0.681
LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DS13	26865	831.5	1	23.05	24.00	1.245	-	-	0.18	0.425	0.529
LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	26865	831.5	1	23.95	25.00	1.274	-	-	-0.14	0.670	0.853
LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DS13	26865	831.5	1	23.05	24.00	1.245	-	-	-0.05	0.523	0.651
LTE Band 26	15M	QPSK	75	0	-	Back	10mm	Ant 1	DS13	26865	831.5	1	23.02	24.00	1.253	-	-	0	0.197	0.247
LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DS13	26865	831.5	1	23.95	25.00	1.274	-	-	-0.13	0.243	0.309
LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DS13	26865	831.5	1	23.05	24.00	1.245	-	-	-0.01	0.195	0.243
LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 1	DS13	26865	831.5	1	23.95	25.00	1.274	-	-	-0.09	0.225	0.287
LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 1	DS13	26865	831.5	1	23.05	24.00	1.245	-	-	0.05	0.177	0.220
LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DS13	26865	831.5	1	23.95	25.00	1.274	-	-	0.02	0.163	0.208
LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 1	DS13	26865	831.5	1	23.05	24.00	1.245	-	-	-0.13	0.136	0.169
LTE Band 26 For ENDC	15M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	26865	831.5	1	21.37	22.50	1.297	-	-	0.09	0.401	0.520
FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DS13	167300	836.5	1	24.39	25.00	1.151	-	-	0.17	0.565	0.650
FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DS13	167300	836.5	1	24.31	25.00	1.172	-	-	0.06	0.650	0.762
FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	167300	836.5	1	24.39	25.00	1.151	-	-	-0.05	0.670	0.771
FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	167300	836.5	1	24.31	25.00	1.172	-	-	-0.04	0.649	0.761
FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DS13	167300	836.5	1	24.39	25.00	1.151	-	-	0.11	0.224	0.258
FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DS13	167300	836.5	1	24.31	25.00	1.172	-	-	-0.02	0.238	0.279
FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DS13	167300	836.5	1	24.39	25.00	1.151	-	-	0.1	0.198	0.228
FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DS13	167300	836.5	1	24.31	25.00	1.172	-	-	0.04	0.186	0.218
FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DS13	167300	836.5	1	24.39	25.00	1.151	-	-	0.13	0.167	0.192
FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DS13	167300	836.5	1	24.31	25.00	1.172	-	-	-0.18	0.144	0.169
FR1 n5 For ENDC	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DS13	167300	836.5	1	21.45	22.00	1.135	-	-	-0.07	0.352	0.400
1750MHz																				
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DS13	1413	1732.6	1	23.38	24.00	1.153	-	-	0.02	0.963	1.111
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DS13	1312	1712.4	1	23.28	24.00	1.180	-	-	0.14	0.858	1.013
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DS13	1513	1752.6	1	23.21	24.00	1.199	-	-	0.11	0.914	1.096
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DS13	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.05	0.819	0.945
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DS13	1312	1712.4	1	23.28	24.00	1.180	-	-	0.18	0.798	0.942
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DS13	1513	1752.6	1	23.21	24.00	1.199	-	-	0.14	0.900	1.080
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DS13	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.17	0.263	0.303
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DS13	1413	1732.6	1	23.38	24.00	1.153	-	-	0.17	0.073	0.084
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DS13	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.05	0.827	0.954
WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DS13	1312	1712.4	1	23.28	24.00	1.180	-	-	0.01	0.754	0.890



FCC SAR Test Report

Report No. : FA462605

WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	1513	1752.6	1	23.21	24.00	1.199	-	-	0.01	0.924	1.108
LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	-0.08	0.683	0.890
LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	132072	1720	1	21.81	23.00	1.315	-	-	0.13	0.667	0.877
LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	132572	1770	1	21.70	23.00	1.349	-	-	0.12	0.707	0.954
LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	0.03	0.645	0.844
LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	132072	1720	1	21.74	23.00	1.337	-	-	0.18	0.635	0.849
LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	132572	1770	1	21.78	23.00	1.324	-	-	0.16	0.617	0.817
LTE Band 66	20M	QPSK	100	0	-	Front	10mm	Ant 1	DSI3	132322	1745	1	21.81	23.00	1.315	-	-	-0.1	0.539	0.709
LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.07	0.672	0.876
LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132072	1720	1	21.81	23.00	1.315	-	-	0.18	0.634	0.834
LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132572	1770	1	21.70	23.00	1.349	-	-	-0.11	0.736	0.993
LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	-0.1	0.633	0.829
LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	132072	1720	1	21.74	23.00	1.337	-	-	0.01	0.611	0.817
LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	132572	1770	1	21.78	23.00	1.324	-	-	-0.15	0.609	0.807
LTE Band 66	20M	QPSK	100	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	21.81	23.00	1.315	-	-	0.19	0.621	0.817
LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.07	0.217	0.283
LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	-0.18	0.171	0.224
LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.03	0.064	0.083
LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	-0.15	0.051	0.067
LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	-0.15	0.815	1.062
LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132072	1720	1	21.81	23.00	1.315	-	-	0.11	0.712	0.936
LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132572	1770	1	21.70	23.00	1.349	-	-	0.04	0.886	1.195
LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	-0.08	0.751	0.983
LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132072	1720	1	21.74	23.00	1.337	-	-	-0.17	0.690	0.922
LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132572	1770	1	21.78	23.00	1.324	-	-	-0.08	0.722	0.956
LTE Band 66	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.81	23.00	1.315	-	-	-0.04	0.749	0.985
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	132572	1770	1	20.68	22.00	1.355	-	-	0.13	0.547	0.741
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132572	1770	1	20.68	22.00	1.355	-	-	-0.08	0.548	0.743
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	0.08	0.090	0.111
LTE Band 66 For ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	-0.17	0.084	0.105
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	-0.01	0.450	0.557
LTE Band 66 For ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	-0.03	0.428	0.536
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	0.14	0.000	0.000
LTE Band 66 For ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.11	0.000	0.000
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Right Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	-0.05	0.231	0.286
LTE Band 66 For ENDC	20M	QPSK	50	0	-	Right Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.18	0.229	0.287
LTE Band 66 For ENDC	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	0.14	0.365	0.452
LTE Band 66 For ENDC	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	-0.17	0.334	0.419
FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.06	0.940	1.074
FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	-0.01	0.761	0.880
FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	22.85	23.50	1.161	-	-	-0.09	0.561	0.652
FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.05	0.816	0.933
FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	0.02	0.838	0.969
FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.85	23.50	1.161	-	-	-0.13	0.802	0.931
FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.17	0.269	0.307
FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	0.06	0.239	0.276
FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0	0.068	0.078
FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	-0.04	0.085	0.098
FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.03	0.811	0.927
FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	-0.15	0.739	0.854
FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.85	23.50	1.161	-	-	0.11	0.654	0.760
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	20.92	21.50	1.143	-	-	-0.07	0.610	0.697



FCC SAR Test Report

Report No. : FA462605

FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	20.88	21.50	1.153	-	-	-0.04	0.537	0.619
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.17	0.095	0.110
FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.05	0.081	0.095
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	-0.01	0.452	0.523
FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	0.01	0.444	0.520
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.1	0.000	0.000
FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.17	0.000	0.000
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.04	0.269	0.311
FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.01	0.268	0.314
FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	-0.08	0.386	0.446
FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	0.05	0.353	0.414

1900MHz

WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.16	0.819	0.932
WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI3	9262	1852.4	1	20.91	21.50	1.146	-	-	0.05	0.688	0.788
WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI3	9538	1907.6	1	20.89	21.50	1.151	-	-	0.05	0.766	0.882
WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	-0.03	0.855	0.973
WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9262	1852.4	1	20.91	21.50	1.146	-	-	-0.15	0.795	0.911
WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9538	1907.6	1	20.89	21.50	1.151	-	-	0.02	0.866	0.997
WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.07	0.155	0.176
WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.16	0.049	0.056
WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.13	0.967	1.100
WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9262	1852.4	1	20.91	21.50	1.146	-	-	-0.18	0.896	1.026
31 WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9538	1907.6	1	20.89	21.50	1.151	-	-	0.07	0.991	1.140
LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.01	0.623	0.788
LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	-0.04	0.505	0.642
LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.18	0.672	0.850
LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	-0.17	0.662	0.845
LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26590	1905	1	20.35	21.50	1.303	-	-	-0.04	0.701	0.914
LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	-0.05	0.639	0.812
LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	0	0.625	0.798
LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	26590	1905	1	20.41	21.50	1.285	-	-	-0.13	0.614	0.789
LTE Band 25	20M	QPSK	100	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.41	21.50	1.285	-	-	-0.01	0.633	0.814
LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	-0.09	0.119	0.151
LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0.05	0.096	0.122
LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.02	0.050	0.063
LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	-0.13	0.039	0.050
LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.17	0.888	1.123
LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	0.06	0.839	1.071
32 LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26590	1905	1	20.35	21.50	1.303	-	-	0.11	0.922	1.202
LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26590	1905	2	20.35	21.50	1.303	-	-	0.02	0.911	1.187
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0	0.824	1.047
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	-0.04	0.851	1.086
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26590	1905	1	20.41	21.50	1.285	-	-	-0.15	0.765	0.983
LTE Band 25	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.41	21.50	1.285	-	-	0.11	0.811	1.042
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26590	1905	1	19.27	20.50	1.327	-	-	-0.01	0.547	0.726
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	0.06	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	-0.09	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	-0.07	0.447	0.554
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	-0.08	0.398	0.503
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	0.13	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	0.12	0.000	0.000



Table with columns for Band, Modulation, Power, etc. Includes rows for LTE Band 25 For ENDC and FR1 n25 For ENDC, with a highlighted value of 1.200 in the 33rd row.

2600MHz

Table with columns for Band, Modulation, Power, etc. Includes rows for LTE Band 7 and LTE Band 41.



Table with columns: Band, Power, Modulation, etc. Includes rows for LTE Band 41 and FR1 n7/n41 with various test parameters and results.



Table with columns: Band, Power, Modulation, Channels, Frequency, Position, Distance, Antenna, Device, Frequency, Power, SAR, etc. Includes rows for LTE Band 48 and FR1 n48/n77.



FCC SAR Test Report

Report No. : FA462605

Table with columns for device model (e.g., FR1 n77), power (100M), modulation (QPSK), frequency (DFT-SCS-30KHz), location (Top Side, Left Side, Right Side, Front, Back, Bottom Side), antenna (Ant 6), antenna type (DSI3), E1 (656000), E2 (3840), E3 (1), SAR values (23.36, 24.00, 1.159, etc.), and other metrics.



Table with columns for test parameters: FR1 n77, 100M, QPSK, 1, 1, DFT-SCS-30KHz, Front, 10mm, Ant 5, DSI3, 656000, 3840, 1, 19.37, 20.00, 1.156, -, -, 0.1, 0.067, 0.077, etc.



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.16	0.027	0.040
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.18	0.088	0.130
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.07	0.061	0.090
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	0.11	0.000	0.000
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.01	0.208	0.307
	Bluetooth	1Mbps	Front	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.06	0.019	0.024
	Bluetooth	1Mbps	Back	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.04	0.040	0.050
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.07	0.029	0.036
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.17	0.013	0.017
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.03	0.073	0.091
5000MHz																	
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.14	0.078	0.118
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.03	0.139	0.210
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.1	0.097	0.146
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.16	0.030	0.045
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	-0.06	0.205	0.310
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.13	0.096	0.148
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.01	0.156	0.240
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.11	0.099	0.152
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	0.19	0.035	0.054
40	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.06	0.218	0.335
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	Simultaneous	155	5775	2	15.47	17.00	1.422	92.49	1.081	0.02	0.201	0.309

<Flip Close>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	DS13	23095	707.5	1	24.10	25.00	1.230	-	-	0.08	0.389	0.479
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	DS13	23095	707.5	1	23.18	24.00	1.208	-	-	0.01	0.305	0.368
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	23095	707.5	1	24.10	25.00	1.230	-	-	-0.07	0.537	0.661
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	DS13	23095	707.5	1	23.18	24.00	1.208	-	-	0.03	0.451	0.545
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DS13	23095	707.5	1	24.10	25.00	1.230	-	-	-0.08	0.525	0.646
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DS13	23095	707.5	1	23.18	24.00	1.208	-	-	-0.08	0.440	0.531
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DS13	23095	707.5	1	24.10	25.00	1.230	-	-	0.1	0.252	0.310
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DS13	23095	707.5	1	23.18	24.00	1.208	-	-	-0.18	0.180	0.217
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DS13	23095	707.5	1	24.10	25.00	1.230	-	-	0.1	0.069	0.085
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DS13	23095	707.5	1	23.18	24.00	1.208	-	-	0.12	0.065	0.079
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 1	DS13	23230	782	1	24.11	25.00	1.227	-	-	0.08	0.334	0.410
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 1	DS13	23230	782	1	23.15	24.00	1.216	-	-	-0.17	0.237	0.288
41	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	23230	782	1	24.11	25.00	1.227	-	-	-0.03	0.619	0.760
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 1	DS13	23230	782	1	23.15	24.00	1.216	-	-	-0.03	0.492	0.598
	LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DS13	23230	782	1	24.11	25.00	1.227	-	-	0.14	0.578	0.709
	LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DS13	23230	782	1	23.15	24.00	1.216	-	-	0.11	0.450	0.547
	LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DS13	23230	782	1	24.11	25.00	1.227	-	-	-0.05	0.315	0.387
	LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DS13	23230	782	1	23.15	24.00	1.216	-	-	0.18	0.238	0.289
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DS13	23230	782	1	24.11	25.00	1.227	-	-	0.14	0.050	0.061
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DS13	23230	782	1	23.15	24.00	1.216	-	-	-0.17	0.041	0.050
	LTE Band 13 For ENDC	10M	QPSK	1	0	-	Back	10mm	Ant 1	DS13	23230	782	1	22.01	23.00	1.256	-	-	-0.19	0.457	0.574
	LTE Band 14	10M	QPSK	1	0	-	Front	10mm	Ant 1	DS13	23330	793	1	24.13	25.00	1.222	-	-	0.17	0.450	0.550
	LTE Band 14	10M	QPSK	25	0	-	Front	10mm	Ant 1	DS13	23330	793	1	23.12	24.00	1.225	-	-	-0.05	0.319	0.391



FCC SAR Test Report

Report No. : FA462605

Table with columns for Band, Power, Modulation, etc. Includes rows for LTE Band 14, FR1 n14, LTE Band 71, and WCDMA V. A summary row for 835MHz is also present.

46	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26865	831.5	1	23.95	25.00	1.274	-	-	0.07	0.940	1.197
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI3	26865	831.5	1	23.05	24.00	1.245	-	-	-0.16	0.762	0.948
	LTE Band 26	15M	QPSK	75	0	-	Back	10mm	Ant 1	DSI3	26865	831.5	1	23.02	24.00	1.253	-	-	-0.08	0.753	0.944
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	26865	831.5	1	23.95	25.00	1.274	-	-	-0.12	0.475	0.605
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI3	26865	831.5	1	23.05	24.00	1.245	-	-	0.07	0.378	0.470
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	26865	831.5	1	23.95	25.00	1.274	-	-	-0.02	0.410	0.522
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 1	DSI3	26865	831.5	1	23.05	24.00	1.245	-	-	-0.05	0.360	0.448
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26865	831.5	1	23.95	25.00	1.274	-	-	-0.13	0.133	0.169
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 1	DSI3	26865	831.5	1	23.05	24.00	1.245	-	-	0.08	0.098	0.122
	LTE Band 26 For ENDC	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26865	831.5	1	21.37	22.50	1.297	-	-	-0.02	0.541	0.702
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	167300	836.5	1	24.39	25.00	1.151	-	-	0.16	0.320	0.368
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	167300	836.5	1	24.31	25.00	1.172	-	-	0.01	0.386	0.452
47	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	1	24.39	25.00	1.151	-	-	-0.04	1.040	1.197
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	2	24.39	25.00	1.151	-	-	0.06	1.000	1.151
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	1	24.31	25.00	1.172	-	-	-0.16	1.000	1.172
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	1	23.69	24.00	1.074	-	-	0.1	1.020	1.095
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	167300	836.5	1	24.39	25.00	1.151	-	-	-0.04	0.348	0.400
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	167300	836.5	1	24.31	25.00	1.172	-	-	-0.01	0.274	0.321
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	167300	836.5	1	24.39	25.00	1.151	-	-	0	0.153	0.176
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	167300	836.5	1	24.31	25.00	1.172	-	-	-0.11	0.207	0.243
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	167300	836.5	1	24.39	25.00	1.151	-	-	-0.06	0.181	0.208
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	167300	836.5	1	24.31	25.00	1.172	-	-	-0.15	0.179	0.210
	FR1 n5 For ENDC	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	1	21.45	22.00	1.135	-	-	-0.12	0.537	0.610
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI3	1413	1732.6	1	23.38	24.00	1.153	-	-	0.08	0.530	0.611
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.09	0.749	0.864
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	1312	1712.4	1	23.28	24.00	1.180	-	-	0.01	0.713	0.842
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	1513	1752.6	1	23.21	24.00	1.199	-	-	0.03	0.704	0.844
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI3	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.08	0.234	0.270
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DSI3	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.08	0.098	0.113
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	1413	1732.6	1	23.38	24.00	1.153	-	-	0.1	0.880	1.015
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	1312	1712.4	1	23.28	24.00	1.180	-	-	-0.18	0.804	0.949
48	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	1513	1752.6	1	23.21	24.00	1.199	-	-	0.02	0.939	1.126
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.11	0.203	0.265
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	-0.05	0.159	0.208
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	-0.04	0.606	0.790
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	0.05	0.442	0.579
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.02	0.149	0.194
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	0.07	0.115	0.151
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	0.16	0.062	0.081
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	0.13	0.027	0.035
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.85	23.00	1.303	-	-	-0.18	0.679	0.885
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132072	1720	1	21.81	23.00	1.315	-	-	0.02	0.752	0.989
49	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132572	1770	1	21.70	23.00	1.349	-	-	0.05	0.893	1.205
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	132572	1770	2	21.70	23.00	1.349	-	-	0.02	0.882	1.190
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.83	23.00	1.309	-	-	0.16	0.662	0.867
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132072	1720	1	21.74	23.00	1.337	-	-	-0.03	0.617	0.825
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	132572	1770	1	21.78	23.00	1.324	-	-	0.07	0.679	0.899
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 1	DSI3	132322	1745	1	21.81	23.00	1.315	-	-	0	0.691	0.909
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	132322	1745	1	20.70	22.00	1.349	-	-	-0.03	0.492	0.664
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	-0.15	0.047	0.058
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.18	0.042	0.053
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	0.01	0.467	0.579
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.01	0.441	0.553



FCC SAR Test Report

Report No. : FA462605

	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	0.04	0.000	0.000
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.15	0.000	0.000
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Right Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	-0.01	0.257	0.318
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Right Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.03	0.250	0.313
	LTE Band 66 For ENDC	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI3	132322	1745	1	14.57	15.50	1.239	-	-	-0.1	0.156	0.193
	LTE Band 66 For ENDC	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI3	132322	1745	1	14.52	15.50	1.253	-	-	0.14	0.151	0.189
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	-0.15	0.267	0.305
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	-0.06	0.270	0.312
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	-0.14	0.748	0.855
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	0.09	0.758	0.876
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	22.85	23.50	1.161	-	-	-0.19	0.743	0.863
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.01	0.234	0.267
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	0.06	0.210	0.243
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.02	0.043	0.049
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	0.12	0.000	0.000
50	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.92	23.50	1.143	-	-	0.02	0.991	1.133
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.87	23.50	1.156	-	-	-0.16	0.864	0.999
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	1	22.85	23.50	1.161	-	-	-0.12	0.857	0.995
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	349000	1745	1	20.88	21.50	1.153	-	-	-0.07	0.489	0.564
	FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.08	0.051	0.059
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	0.01	0.049	0.057
	FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.03	0.462	0.534
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.09	0.467	0.547
	FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	-0.08	0.000	0.000
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.08	0.000	0.000
	FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.1	0.235	0.272
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	-0.18	0.209	0.245
	FR1 n66 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	349000	1745	1	14.37	15.00	1.156	-	-	0.1	0.152	0.176
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	349000	1745	1	14.31	15.00	1.172	-	-	0.12	0.129	0.151
1900MHz																					
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.19	0.162	0.184
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.07	0.901	1.025
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9262	1852.4	1	20.91	21.50	1.146	-	-	-0.18	0.816	0.935
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI3	9538	1907.6	1	20.89	21.50	1.151	-	-	0.03	0.865	0.995
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	-0.15	0.075	0.085
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	-0.15	0.105	0.119
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9400	1880	1	20.94	21.50	1.138	-	-	0.09	0.975	1.109
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9262	1852.4	1	20.91	21.50	1.146	-	-	0.11	0.809	0.927
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI3	9538	1907.6	1	20.89	21.50	1.151	-	-	-0.08	0.932	1.073
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.08	0.130	0.164
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0.01	0.102	0.130
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.03	0.695	0.879
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	-0.08	0.634	0.809
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26590	1905	1	20.35	21.50	1.303	-	-	-0.08	0.681	0.887
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0.1	0.582	0.739
	LTE Band 25	20M	QPSK	100	0	-	Back	10mm	Ant 1	DSI3	26340	1880	1	20.41	21.50	1.285	-	-	0.12	0.582	0.748
	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.08	0.090	0.114
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	-0.17	0.070	0.089
	LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	-0.03	0.052	0.066
	LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0.14	0.049	0.062
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.48	21.50	1.265	-	-	0.11	0.842	1.065



FCC SAR Test Report

Report No. : FA462605

LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	-0.05	0.791	1.010
LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI3	26590	1905	1	20.35	21.50	1.303	-	-	0.01	0.913	1.190
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.46	21.50	1.271	-	-	0.18	0.714	0.907
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26140	1860	1	20.44	21.50	1.276	-	-	0.14	0.639	0.816
LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI3	26590	1905	1	20.41	21.50	1.285	-	-	-0.17	0.880	1.131
LTE Band 25	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 1	DSI3	26340	1880	1	20.41	21.50	1.285	-	-	0.17	0.667	0.857
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI3	26590	1905	1	19.27	20.50	1.327	-	-	-0.04	0.527	0.700
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	0.08	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	-0.17	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	-0.05	0.458	0.567
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	-0.03	0.425	0.538
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	0.14	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	0.11	0.000	0.000
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Right Side	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	-0.06	0.317	0.393
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Right Side	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	-0.05	0.296	0.374
LTE Band 25 For ENDC	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI3	26340	1880	1	15.57	16.50	1.239	-	-	0.18	0.123	0.152
LTE Band 25 For ENDC	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI3	26340	1880	1	15.48	16.50	1.265	-	-	0.14	0.130	0.164
FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	376500	1882.5	1	20.90	21.50	1.148	-	-	0.05	0.137	0.157
FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI3	376500	1882.5	1	20.88	21.50	1.153	-	-	-0.11	0.148	0.171
FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	376500	1882.5	1	20.90	21.50	1.148	-	-	-0.12	0.730	0.838
FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	376500	1882.5	1	20.88	21.50	1.153	-	-	0.03	0.744	0.858
FR1 n25	40M	QPSK	216	0	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	376500	1882.5	1	20.81	21.50	1.172	-	-	-0.16	0.720	0.844
FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.90	21.50	1.148	-	-	-0.02	0.078	0.090
FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.88	21.50	1.153	-	-	0.15	0.079	0.091
FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.90	21.50	1.148	-	-	-0.09	0.025	0.029
FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.88	21.50	1.153	-	-	0.11	0.025	0.029
FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.90	21.50	1.148	-	-	0.09	0.954	1.095
FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.88	21.50	1.153	-	-	-0.05	0.716	0.826
FR1 n25	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	376500	1882.5	1	20.81	21.50	1.172	-	-	-0.08	0.677	0.794
FR1 n25 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	376500	1882.5	1	15.88	16.50	1.153	-	-	-0.18	0.000	0.000
FR1 n25 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI3	376500	1882.5	1	15.81	16.50	1.172	-	-	0.1	0.000	0.000
FR1 n25 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	376500	1882.5	1	15.88	16.50	1.153	-	-	0.12	0.449	0.518
FR1 n25 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI3	376500	1882.5	1	15.81	16.50	1.172	-	-	-0.09	0.471	0.552
FR1 n25 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.88	16.50	1.153	-	-	0.08	0.000	0.000
FR1 n25 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.81	16.50	1.172	-	-	0.01	0.000	0.000
FR1 n25 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.88	16.50	1.153	-	-	0.03	0.279	0.322
FR1 n25 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.81	16.50	1.172	-	-	-0.08	0.324	0.380
FR1 n25 For ENDC	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.88	16.50	1.153	-	-	-0.08	0.113	0.130
FR1 n25 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI3	376500	1882.5	1	15.81	16.50	1.172	-	-	0.1	0.127	0.149
2600MHz																				
LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI3	21100	2535	1	22.21	23.50	1.346	-	-	0.18	0.192	0.258
LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI3	21100	2535	1	21.53	22.50	1.250	-	-	0.14	0.152	0.190
LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI3	21100	2535	1	22.21	23.50	1.346	-	-	0.02	0.692	0.931
LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI3	20850	2510	1	22.10	23.50	1.380	-	-	-0.1	0.651	0.899
LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI3	21350	2560	1	22.17	23.50	1.358	-	-	0.01	0.638	0.867
LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI3	21100	2535	1	21.53	22.50	1.250	-	-	-0.17	0.549	0.686
LTE Band 7	20M	QPSK	100	0	-	Back	10mm	Ant 2	DSI3	21100	2535	1	21.47	22.50	1.268	-	-	0.07	0.622	0.788
LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	DSI3	21100	2535	1	22.21	23.50	1.346	-	-	0.17	0.119	0.160
LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	DSI3	21100	2535	1	21.53	22.50	1.250	-	-	-0.05	0.000	0.000
LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI3	21100	2535	1	22.21	23.50	1.346	-	-	0.09	0.736	0.991



Table with columns: Band, Power, Modulation, Channels, Frequency, Location, Antenna, etc. Includes rows for LTE Bands 7 and 41, and FR1 bands n7 and n41.



FCC SAR Test Report

Report No. : FA462605

FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI3	518598	2592.99	1	21.55	22.00	1.109	-	-	0	0.067	0.074
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI3	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.13	0.074	0.082
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI3	518598	2592.99	1	21.55	22.00	1.109	-	-	0.03	0.732	0.812
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI3	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.01	0.661	0.737
FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI3	518598	2592.99	1	21.51	22.00	1.119	-	-	0.06	0.705	0.789
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.55	22.00	1.109	-	-	0.05	0.001	0.001
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.53	22.00	1.114	-	-	0.02	0.001	0.001
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.55	22.00	1.109	-	-	-0.13	0.773	0.857
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.53	22.00	1.114	-	-	0.17	0.735	0.819
FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.51	22.00	1.119	-	-	0.03	0.709	0.794
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.55	22.00	1.109	-	-	0.06	0.030	0.033
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI3	518598	2592.99	1	21.53	22.00	1.114	-	-	0	0.035	0.039
FR1 n41 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI3	518598	2592.99	1	19.11	19.50	1.094	-	-	0.08	0.422	0.462
FR1 n41_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI3	518598	2592.99	1	22.15	22.50	1.084	50	1.000	0.01	0.417	0.452
FR1 n41 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	19.11	19.50	1.094	-	-	0.03	0.441	0.482
FR1 n41_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	22.15	22.50	1.084	50	1.000	-0.08	0.437	0.474
FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	1	24.59	25.00	1.099	50	1.000	0.06	0.753	0.828
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	0.08	0.135	0.173
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	0.01	0.106	0.137
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	0.03	0.683	0.874
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.08	0.716	0.925
FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	22.83	24.00	1.309	-	-	0.05	0.688	0.901
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	-0.08	0.162	0.207
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	0.1	0.201	0.260
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	-0.18	0.539	0.690
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	0.1	0.602	0.777
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	0.12	0.039	0.050
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	0.08	0.000	0.000
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.93	24.00	1.279	-	-	-0.17	0.089	0.114
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI3	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.03	0.112	0.145
FR1 n41 ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	20.88	22.00	1.294	-	1.000	0.12	0.467	0.604
FR1 n41_HPUE ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	23.76	25.00	1.330	50	1.000	0.08	0.457	0.608
FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI3	518598	2592.99	1	25.79	27.00	1.321	50	1.000	-0.15	0.711	0.939
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI3	518598	2592.99	1	20.39	21.50	1.291	-	-	-0.1	0.099	0.128
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI3	518598	2592.99	1	20.37	21.50	1.297	-	-	0.18	0.078	0.101
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99	1	20.39	21.50	1.291	-	-	-0.02	0.918	1.185
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99	1	20.37	21.50	1.297	-	-	-0.17	0.812	1.053
FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99	1	20.31	21.50	1.315	-	-	-0.04	0.747	0.982
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.39	21.50	1.291	-	-	-0.05	0.265	0.342
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.37	21.50	1.297	-	-	0	0.203	0.263
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.39	21.50	1.291	-	-	-0.01	0.017	0.022
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.37	21.50	1.297	-	-	-0.09	0.021	0.027
FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.39	21.50	1.291	-	-	0.05	0.029	0.037
FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 7	DSI3	518598	2592.99	1	20.37	21.50	1.297	-	-	0.02	0.049	0.064
FR1 n41 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99		17.45	18.50	1.274	-	1.000	-0.05	0.452	0.576
FR1 n41_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99		20.34	21.50	1.306	-	1.000	0.18	0.447	0.584
FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	518598	2592.99	1	23.34	24.50	1.306	50	1.000	-0.04	0.898	1.173

3500MHz

LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI3	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.02	0.110	0.140
LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI3	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.1	0.100	0.128
LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.05	0.415	0.528
LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI3	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.04	0.397	0.506
LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI3	42190	3460	1	22.98	24.00	1.265	62.9	1.006	0.08	0.418	0.532
LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 6	DSI3	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.13	0.367	0.468
LTE Band 42	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI3	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.18	0.048	0.061
LTE Band 42	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI3	42190	3460	1	21.97	23.00	1.268	62.9	1.006	-0.11	0.035	0.045



FCC SAR Test Report

Report No. : FA462605

LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI3	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.16	0.356	0.453
LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI3	42190	3460	1	21.97	23.00	1.268	62.9	1.006	-0.15	0.342	0.436
LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI3	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.01	0.156	0.211
LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI3	55830	3609	1	21.92	23.00	1.282	62.9	1.006	0.06	0.129	0.166
LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	55830	3609	1	22.72	24.00	1.343	62.9	1.006	-0.09	0.528	0.713
LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	55340	3560	1	22.66	24.00	1.361	62.9	1.006	-0.1	0.513	0.703
LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	56150	3641	1	22.63	24.00	1.371	62.9	1.006	0.07	0.506	0.698
LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	56640	3690	1	22.45	24.00	1.429	62.9	1.006	0.18	0.486	0.699
LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI3	55830	3609	1	21.92	23.00	1.282	62.9	1.006	0.02	0.419	0.541
LTE Band 48	20M	QPSK	100	0	-	Back	10mm	Ant 6	DSI3	55830	3609	1	21.88	23.00	1.294	62.9	1.006	-0.1	0.465	0.605
LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI3	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.01	0.562	0.759
LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI3	55340	3560	1	22.66	24.00	1.361	62.9	1.006	0.01	0.532	0.729
LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI3	56150	3641	1	22.63	24.00	1.371	62.9	1.006	-0.15	0.548	0.756
LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI3	56640	3690	1	22.45	24.00	1.429	62.9	1.006	0.19	0.521	0.749
LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 6	DSI3	55830	3609	1	21.92	23.00	1.282	62.9	1.006	0.12	0.428	0.552
LTE Band 48	20M	QPSK	100	0	-	Left Side	10mm	Ant 6	DSI3	55830	3609	1	21.88	23.00	1.294	62.9	1.006	0.07	0.529	0.689
LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI3	55830	3609	1	22.72	24.00	1.343	62.9	1.006	-0.16	0.066	0.089
LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI3	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.12	0.057	0.074
LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI3	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.07	0.431	0.582
LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI3	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.02	0.361	0.466
LTE Band 48 For ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI3	55830	3609	1	21.79	23.00	1.321	62.9	1.006	-0.07	0.445	0.592
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	641666	3624.99	1	22.56	23.00	1.107	-	-	0.08	0.242	0.268
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.00	1.117	-	-	0.01	0.251	0.280
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	641666	3624.99	1	22.56	23.00	1.107	-	-	-0.06	0.825	0.913
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	638000	3570	1	22.42	23.00	1.143	-	-	0.08	0.786	0.898
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	645332	3679.98	1	22.50	23.00	1.122	-	-	0.01	0.794	0.891
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.00	1.117	-	-	0.03	0.758	0.847
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	638000	3570	1	22.49	23.00	1.125	-	-	0.03	0.713	0.802
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	645332	3679.98	1	22.51	23.00	1.119	-	-	-0.08	0.722	0.808
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	641666	3624.99	1	22.48	23.00	1.127	-	-	-0.08	0.664	0.748
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.56	23.00	1.107	-	-	-0.08	0.816	0.903
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	638000	3570	1	22.42	23.00	1.143	-	-	-0.08	0.784	0.896
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	645332	3679.98	1	22.50	23.00	1.122	-	-	0.1	0.788	0.884
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.00	1.117	-	-	0.1	0.813	0.908
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	638000	3570	1	22.49	23.00	1.125	-	-	-0.18	0.779	0.876
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	645332	3679.98	1	22.51	23.00	1.119	-	-	0.1	0.781	0.874
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.48	23.00	1.127	-	-	-0.18	0.748	0.843
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.56	23.00	1.107	-	-	0.1	0.102	0.113
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.00	1.117	-	-	0.12	0.140	0.156
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.56	23.00	1.107	-	-	0.08	0.748	0.828
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	638000	3570	1	22.42	23.00	1.143	-	-	0.12	0.714	0.816
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	645332	3679.98	1	22.50	23.00	1.122	-	-	0.08	0.723	0.811
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.00	1.117	-	-	-0.17	0.756	0.844
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	638000	3570	1	22.49	23.00	1.125	-	-	-0.17	0.724	0.814
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	645332	3679.98	1	22.51	23.00	1.119	-	-	-0.03	0.718	0.804
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.48	23.00	1.127	-	-	-0.03	0.578	0.652
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	656000	3840	1	23.36	24.00	1.159	-	-	-0.13	0.347	0.402
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	656000	3840	1	23.28	24.00	1.180	-	-	0.06	0.342	0.404
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	656000	3840	1	23.22	24.00	1.197	-	-	-0.03	0.264	0.316
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	656000	3840	1	23.36	24.00	1.159	-	-	-0.03	0.650	0.753
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	656000	3840	1	23.28	24.00	1.180	-	-	0.01	0.655	0.773
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	23.36	24.00	1.159	-	-	-0.05	0.923	1.070
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	23.28	24.00	1.180	-	-	-0.07	0.865	1.021
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	23.22	24.00	1.197	-	-	0.05	0.582	0.697
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	656000	3840	1	23.36	24.00	1.159	-	-	-0.11	0.107	0.124
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	656000	3840	1	23.28	24.00	1.180	-	-	-0.12	0.133	0.157



FCC SAR Test Report

Report No. : FA462605

FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	656000	3840	1	23.36	24.00	1.159	-	-	0.03	0.655	0.759
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	656000	3840	1	23.28	24.00	1.180	-	-	-0.16	0.524	0.618
FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	26.36	27.00	1.159	50	1.000	0.15	0.868	1.006
FR1 n77 Part96	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	641666	3624.99	1	22.52	23.50	1.253	-	-	0.1	0.857	1.074
FR1 n77 For ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	656000	3840	1	20.17	21.00	1.211	-	-	0.01	0.317	0.384
FR1 n77_HPUE For ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	656000	3840	1	23.20	24.00	1.202	50	1.000	-0.06	0.327	0.393
FR1 n77 For ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	20.21	21.00	1.199	-	-	0.04	0.477	0.572
FR1 n77_HPUE For ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	1	23.27	24.00	1.183	50	1.000	-0.05	0.468	0.554
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.06	0.233	0.276
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI3	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.04	0.266	0.318
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.09	0.780	0.923
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.09	0.787	0.940
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	633332	3499.98	1	23.10	24.00	1.230	-	-	-0.17	0.782	0.962
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.1	0.621	0.735
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.23	24.00	1.194	-	-	0.18	0.652	0.778
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.04	0.055	0.065
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.05	0.052	0.062
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.17	0.896	1.060
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.13	0.754	0.900
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.10	24.00	1.230	-	-	-0.17	0.841	1.035
FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI3	633332	3499.98	1	26.25	27.00	1.189	50	1.000	-0.01	0.859	1.021
FR1 n77 For ENDC	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	633332	3499.98	1	20.11	21.00	1.227	-	-	0.03	0.401	0.492
FR1 n77_HPUE For ENDC	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI3	633332	3499.98	1	23.21	24.00	1.199	50	1.000	0.16	0.389	0.467
FR1 n77 For ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	633332	3499.98	1	20.18	21.00	1.208	-	-	-0.04	0.337	0.407
FR1 n77_HPUE For ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	633332	3499.98	1	23.27	24.00	1.183	50	1.000	0.14	0.341	0.403
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI3	656000	3840	1	18.59	20.00	1.384	-	-	-0.05	0.125	0.173
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI3	656000	3840	1	18.55	20.00	1.396	-	-	-0.13	0.121	0.169
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	656000	3840	1	18.59	20.00	1.384	-	-	0.08	0.507	0.701
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	656000	3840	1	18.55	20.00	1.396	-	-	-0.09	0.512	0.715
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI3	656000	3840	1	18.59	20.00	1.384	-	-	0.16	0.052	0.072
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI3	656000	3840	1	18.55	20.00	1.396	-	-	0.01	0.054	0.075
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI3	656000	3840	1	18.59	20.00	1.384	-	-	-0.16	0.351	0.486
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI3	656000	3840	1	18.55	20.00	1.396	-	-	0.1	0.348	0.486
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	DSI3	656000	3840	1	18.59	20.00	1.384	-	-	-0.04	0.128	0.177
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	DSI3	656000	3840	1	18.55	20.00	1.396	-	-	-0.01	0.113	0.158
FR1 n77 ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	656000	3840	1	17.15	18.50	1.365	-	-	0.14	0.372	0.508
FR1 n77_HPUE ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	656000	3840	1	20.35	21.50	1.303	50	1.000	-0.17	0.388	0.506
FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	656000	3840	1	21.72	23.00	1.343	50	1.000	0	0.502	0.674
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI3	633332	3499.98	1	18.54	20.00	1.400	-	-	-0.11	0.159	0.223
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI3	633332	3499.98	1	18.52	20.00	1.406	-	-	-0.06	0.122	0.172
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	633332	3499.98	1	18.54	20.00	1.400	-	-	-0.06	0.520	0.728
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	633332	3499.98	1	18.52	20.00	1.406	-	-	-0.15	0.479	0.673
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.54	20.00	1.400	-	-	0.03	0.064	0.090
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.52	20.00	1.406	-	-	-0.13	0.040	0.056
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.54	20.00	1.400	-	-	0.16	0.324	0.453
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.52	20.00	1.406	-	-	-0.15	0.275	0.387
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.54	20.00	1.400	-	-	-0.02	0.194	0.272
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	DSI3	633332	3499.98	1	18.52	20.00	1.406	-	-	-0.09	0.133	0.187
FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	633332	3499.98	1	17.17	18.50	1.358	-	-	0.01	0.372	0.505
FR1 n77_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	633332	3499.98	1	20.45	21.50	1.274	50	1.000	0.1	0.381	0.485
FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	633332	3499.98	1	21.79	23.00	1.321	50	1.000	0.14	0.496	0.655
FR1 n77 Part96	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI3	641666	3624.99	1	18.47	20.00	1.422	-	-	0.03	0.483	0.687
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI3	656000	3840	1	19.37	20.00	1.156	-	-	-0.06	0.050	0.058
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI3	656000	3840	1	19.34	20.00	1.164	-	-	-0.17	0.058	0.068



Table with columns: Model, Power, Modulation, Channel Spacing, Bandwidth, Frequency, Polarization, Distance, Antenna Size, Antenna Type, Exposure Duration, Max SAR, etc. Row 52 is highlighted.



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.18	0.000	0.000
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.13	0.099	0.146
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	-0.13	0.053	0.078
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	0	0.000	0.000
53	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	Simultaneous	1	2412	1	15.87	17.50	1.455	98.75	1.013	0.04	0.263	0.388
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	Simultaneous	1	2412	2	15.87	17.50	1.455	98.75	1.013	0.02	0.245	0.361
	Bluetooth	1Mbps	Front	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.07	0.008	0.010
	Bluetooth	1Mbps	Back	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.08	0.053	0.067
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.12	0.006	0.008
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	-0.03	0.004	0.005
54	Bluetooth	1Mbps	Top Side	10mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.05	0.093	0.117
5000MHz																	
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	-0.15	0.137	0.207
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	-0.09	0.167	0.252
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.05	0.183	0.276
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.13	0.000	0.000
55	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	Simultaneous	46	5230	1	12.88	14.50	1.452	96.18	1.040	0.01	0.213	0.322
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	Simultaneous	46	5230	2	12.88	14.50	1.452	96.18	1.040	0.06	0.201	0.304
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.12	0.130	0.200
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	0.15	0.172	0.264
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.05	0.090	0.138
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	-0.07	0.089	0.137
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	Simultaneous	155	5775	1	15.47	17.00	1.422	92.49	1.081	0.1	0.193	0.297



14.3 Body-Worn SAR

<Flip Close >

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 12	10M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	23095	707.5	1	24.10	25.00	1.230	-	-	0.14	0.325	0.400
	LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 1	DS11	23095	707.5	1	23.18	24.00	1.208	-	-	-0.17	0.256	0.309
56	LTE Band 12	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	23095	707.5	1	24.10	25.00	1.230	-	-	-0.09	0.407	0.501
	LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 1	DS11	23095	707.5	1	23.18	24.00	1.208	-	-	0.17	0.331	0.400
	LTE Band 13	10M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	23230	782	1	24.11	25.00	1.227	-	-	0.01	0.409	0.502
	LTE Band 13	10M	QPSK	25	0	-	Front	15mm	Ant 1	DS11	23230	782	1	23.15	24.00	1.216	-	-	0.1	0.349	0.424
57	LTE Band 13 SA Standalone For ENDC Standalone	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	23230	782	1	24.11	25.00	1.227	-	-	-0.02	0.618	0.759
	LTE Band 13	10M	QPSK	25	0	-	Back	15mm	Ant 1	DS11	23230	782	1	23.15	24.00	1.216	-	-	-0.17	0.519	0.631
	LTE Band 13 For ENDC Simultaneous	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	23230	782	1	22.01	23.00	1.256	-	-	-0.02	0.401	0.504
	LTE Band 14	10M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	23330	793	1	24.13	25.00	1.222	-	-	-0.01	0.305	0.373
	LTE Band 14	10M	QPSK	25	0	-	Front	15mm	Ant 1	DS11	23330	793	1	23.12	24.00	1.225	-	-	-0.08	0.237	0.290
58	LTE Band 14 SA Standalone For ENDC Standalone	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	23330	793	1	24.13	25.00	1.222	-	-	-0.03	0.661	0.808
	LTE Band 14	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	23330	793	2	24.13	25.00	1.222	-	-	0.02	0.642	0.784
	LTE Band 14	10M	QPSK	25	0	-	Back	15mm	Ant 1	DS11	23330	793	1	23.12	24.00	1.225	-	-	0.05	0.548	0.671
	LTE Band 14	10M	QPSK	50	0	-	Back	15mm	Ant 1	DS11	23330	793	1	23.02	24.00	1.253	-	-	0.06	0.548	0.687
	LTE Band 14 For ENDC Simultaneous	10M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	23330	793	1	22.27	23.00	1.183	-	-	-0.1	0.427	0.505
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	158600	793	1	24.10	25.00	1.230	-	-	-0.08	0.303	0.373
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	158600	793	1	24.06	25.00	1.242	-	-	0.13	0.271	0.336
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	158600	793	1	24.10	25.00	1.230	-	-	0.12	0.633	0.779
59	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	158600	793	1	24.06	25.00	1.242	-	-	-0.07	0.636	0.790
	LTE Band 71	20M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	133297	680.5	1	23.71	25.00	1.346	-	-	0.16	0.235	0.316
	LTE Band 71	20M	QPSK	50	0	-	Front	15mm	Ant 1	DS11	133297	680.5	1	22.81	24.00	1.315	-	-	-0.1	0.197	0.259
60	LTE Band 71 SA Standalone For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	133297	680.5	1	23.71	25.00	1.346	-	-	-0.07	0.470	0.633
	LTE Band 71	20M	QPSK	50	0	-	Back	15mm	Ant 1	DS11	133297	680.5	1	22.81	24.00	1.315	-	-	0.07	0.369	0.485
	LTE Band 71 For ENDC Simultaneous	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	133297	680.5	1	22.81	24.00	1.315	-	-	-0.01	0.382	0.502
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	136100	680.5	1	24.23	25.00	1.194	-	-	-0.1	0.265	0.316
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	136100	680.5	1	24.18	25.00	1.208	-	-	0.01	0.266	0.321
61	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	136100	680.5	1	24.23	25.00	1.194	-	-	0.02	0.499	0.596
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	136100	680.5	1	24.18	25.00	1.208	-	-	-0.15	0.456	0.551
850MHz																					
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 1	DS11	4182	836.4	1	23.40	24.00	1.148	-	-	0.07	0.194	0.223
62	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	DS11	4182	836.4	1	23.40	24.00	1.148	-	-	0.04	0.437	0.502
	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	26865	831.5	1	23.95	25.00	1.274	-	-	0.03	0.211	0.269
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 1	DS11	26865	831.5	1	23.05	24.00	1.245	-	-	-0.15	0.179	0.223
63	LTE Band 26 SA Standalone For ENDC Standalone	15M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	26865	831.5	1	23.95	25.00	1.274	-	-	-0.04	0.651	0.829
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 1	DS11	26865	831.5	1	23.05	24.00	1.245	-	-	-0.15	0.520	0.647
	LTE Band 26	15M	QPSK	75	0	-	Back	15mm	Ant 1	DS11	26865	831.5	1	23.02	24.00	1.253	-	-	0.06	0.547	0.685
	LTE Band 26 For ENDC Simultaneous	15M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	26865	831.5	1	22.01	23.00	1.256	-	-	0.11	0.414	0.520
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	167300	836.5	1	24.39	25.00	1.151	-	-	-0.08	0.253	0.291
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	167300	836.5	1	24.31	25.00	1.172	-	-	-0.17	0.309	0.362
64	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	167300	836.5	1	24.39	25.00	1.151	-	-	0.07	0.779	0.896
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	167300	836.5	2	24.39	25.00	1.151	-	-	0.05	0.758	0.872
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	167300	836.5	1	24.31	25.00	1.172	-	-	-0.08	0.762	0.893
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	167300	836.5	1	23.69	24.00	1.074	-	-	0.03	0.743	0.798



FCC SAR Test Report

Report No. : FA462605

	FR1 n5 For ENDC Standalone	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	167300	836.5	1	23.81	24.50	1.172	-	-	-0.09	0.657	0.770
	FR1 n5 For ENDC Simultaneous	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS12	167300	836.5	1	21.88	22.50	1.153	-	-	0.17	0.427	0.493
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 1	DS11	1413	1732.6	1	23.38	24.00	1.153	-	-	-0.08	0.224	0.258
65	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	DS11	1413	1732.6	1	23.38	24.00	1.153	-	-	0.06	0.569	0.656
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	132322	1745	1	23.35	24.50	1.303	-	-	0.18	0.191	0.249
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 1	DS11	132322	1745	1	22.38	23.50	1.294	-	-	-0.04	0.153	0.198
	LTE Band 66 SA Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	132322	1745	1	23.35	24.50	1.303	-	-	-0.02	0.524	0.683
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 1	DS11	132322	1745	1	22.38	23.50	1.294	-	-	-0.08	0.429	0.555
	LTE Band 66 For ENDC Simultaneous	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	132322	1745	1	22.48	23.50	1.265	-	-	-0.01	0.257	0.325
	LTE Band 66 For ENDC Standalone	20M	QPSK	1	0	-	Front	15mm	Ant 4	DS11	132322	1745	1	18.04	19.00	1.247	-	-	0.01	0.067	0.084
	LTE Band 66 For ENDC Standalone	20M	QPSK	50	0	-	Front	15mm	Ant 4	DS11	132322	1745	1	17.97	19.00	1.268	-	-	0.1	0.062	0.079
66	LTE Band 66 For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS11	132322	1745	1	18.04	19.00	1.247	-	-	-0.17	0.577	0.720
	LTE Band 66 For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS11	132322	1745	2	18.04	19.00	1.247	-	-	0.02	0.559	0.697
	LTE Band 66 For ENDC Standalone	20M	QPSK	50	0	-	Back	15mm	Ant 4	DS11	132322	1745	1	17.97	19.00	1.268	-	-	0.04	0.548	0.695
	LTE Band 66 For ENDC Simultane	20M	QPSK	1	0	-	Front	15mm	Ant 4	DS12	132322	1745	1	16.54	17.50	1.247	-	-	-0.15	0.049	0.061
	LTE Band 66 For ENDC Simultaneous	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS12	132322	1745	1	16.54	17.50	1.247	-	-	-0.01	0.412	0.514
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	349000	1745	1	23.88	24.50	1.153	-	-	-0.16	0.203	0.234
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	349000	1745	1	23.86	24.50	1.159	-	-	-0.02	0.201	0.233
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	349000	1745	1	23.88	24.50	1.153	-	-	0.15	0.500	0.577
	FR1 n66 SA Standalone For ENDC Standalone	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	349000	1745	1	23.86	24.50	1.159	-	-	-0.08	0.531	0.615
	FR1 n66 For ENDC Simultaneous	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 1	DS12	349000	1745	1	22.92	23.50	1.143	-	-	-0.07	0.437	0.499
	FR1 n66 For ENDC Standalone	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 4	DS11	349000	1745	1	18.12	18.50	1.091	-	-	-0.08	0.071	0.077
	FR1 n66 For ENDC Standalone	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 4	DS11	349000	1745	1	18.07	18.50	1.104	-	-	-0.17	0.062	0.068
67	FR1 n66 For ENDC Standalone	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 4	DS11	349000	1745	1	18.12	18.50	1.091	-	-	-0.02	0.642	0.701
	FR1 n66 For ENDC Standalone	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 4	DS11	349000	1745	1	18.07	18.50	1.104	-	-	-0.08	0.612	0.676
	FR1 n66 For ENDC Simultaneous	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 4	DS12	349000	1745	1	16.51	17.00	1.119	-	-	-0.08	0.054	0.060
	FR1 n66 For ENDC Simultaneous	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 4	DS12	349000	1745	1	16.51	17.00	1.119	-	-	-0.02	0.451	0.505
1900MHz																					
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 1	DS11	9400	1880	1	21.43	22.00	1.140	-	-	0.05	0.097	0.111
68	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	DS11	9400	1880	1	21.43	22.00	1.140	-	-	0.13	0.475	0.542
	LTE Band 25	20M	QPSK	1	0	-	Front	15mm	Ant 1	DS11	26340	1880	1	21.53	22.50	1.250	-	-	0.16	0.101	0.126
	LTE Band 25	20M	QPSK	50	0	-	Front	15mm	Ant 1	DS11	26340	1880	1	21.51	22.50	1.256	-	-	0.13	0.081	0.102
	LTE Band 25 SA Standalone For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS11	26340	1880	1	21.53	22.50	1.250	-	-	0.09	0.497	0.621
	LTE Band 25	20M	QPSK	50	0	-	Back	15mm	Ant 1	DS11	26340	1880	1	21.51	22.50	1.256	-	-	-0.03	0.433	0.544
	LTE Band 25 For ENDC Simultaneous	20M	QPSK	1	0	-	Back	15mm	Ant 1	DS12	26340	1880	1	20.48	21.50	1.265	-	-	-0.13	0.401	0.507
	LTE Band 25 For ENDC Standalone	20M	QPSK	1	0	-	Front	15mm	Ant 4	DS11	26340	1880	1	19.55	20.50	1.245	-	-	-0.04	0.062	0.077
	LTE Band 25 For ENDC Standalone	20M	QPSK	50	0	-	Front	15mm	Ant 4	DS11	26340	1880	1	19.47	20.50	1.268	-	-	-0.08	0.071	0.090
69	LTE Band 25 For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS11	26340	1880	1	19.55	20.50	1.245	-	-	-0.04	0.584	0.727
	LTE Band 25 For ENDC Standalone	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS11	26340	1880	2	19.55	20.50	1.245	-	-	0.01	0.566	0.704
	LTE Band 25 For ENDC Standalone	20M	QPSK	50	0	-	Back	15mm	Ant 4	DS11	26340	1880	1	19.47	20.50	1.268	-	-	0.17	0.571	0.724
	LTE Band 25 For ENDC Simultaneous	20M	QPSK	50	0	-	Front	15mm	Ant 4	DS12	26340	1880	1	18.05	19.00	1.245	-	-	-0.08	0.051	0.063
	LTE Band 25 For ENDC Simultaneous	20M	QPSK	1	0	-	Back	15mm	Ant 4	DS12	26340	1880	1	18.12	19.00	1.225	-	-	-0.04	0.417	0.511
	FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	376500	1882.5	1	21.92	22.50	1.143	-	-	-0.04	0.118	0.135
	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 1	DS11	376500	1882.5	1	21.81	22.50	1.172	-	-	-0.05	0.127	0.149
	FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	376500	1882.5	1	21.92	22.50	1.143	-	-	0	0.584	0.667



FCC SAR Test Report

Report No. : FA462605

	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 1	DS11	376500	1882.5	1	21.81	22.50	1.172	-	-	0.13	0.600	0.703
	FR1 n25 For ENDC Standalone	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 4	DS11	376500	1882.5	1	19.47	20.00	1.130	-	-	-0.01	0.052	0.059
	FR1 n25 For ENDC Standalone	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 4	DS11	376500	1882.5	1	19.42	20.00	1.143	-	-	-0.08	0.071	0.081
	FR1 n25 For ENDC Standalone	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 4	DS11	376500	1882.5	1	19.47	20.00	1.130	-	-	0.05	0.588	0.664
70	FR1 n25 For ENDC Standalone	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 4	DS11	376500	1882.5	1	19.42	20.00	1.143	-	-	0.06	0.621	0.710
	FR1 n25 For ENDC Simultaneous	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 4	DS12	376500	1882.5	1	17.87	18.50	1.156	-	-	-0.04	0.047	0.054
	FR1 n25 For ENDC Simultaneous	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 4	DS12	376500	1882.5	1	17.87	18.50	1.156	-	-	-0.07	0.437	0.505
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 2	DS11	21100	2535	1	22.21	23.50	1.346	-	-	0	0.110	0.148
	LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 2	DS11	21100	2535	1	21.53	22.50	1.250	-	-	-0.04	0.087	0.109
71	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 2	DS11	21100	2535	1	22.21	23.50	1.346	-	-	0.07	0.363	0.489
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 2	DS11	21100	2535	1	21.53	22.50	1.250	-	-	-0.15	0.300	0.375
	LTE Band 41	20M	QPSK	1	0	-	Front	15mm	Ant 2	DS11	40620	2593	1	23.14	24.00	1.219	62.9	1.006	-0.02	0.064	0.078
	LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 2	DS11	40620	2593	1	22.26	23.00	1.186	62.9	1.006	0.1	0.067	0.080
	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 2	DS11	40620	2593	1	23.14	24.00	1.219	62.9	1.006	0.07	0.294	0.361
	LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 2	DS11	40620	2593	1	22.26	23.00	1.186	62.9	1.006	0.04	0.236	0.282
72	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	15mm	Ant 2	DS11	40620	2593		26.15	27.00	1.216	42.9	1.009	0.09	0.395	0.485
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DS11	507000	2535	1	22.86	23.50	1.159	-	-	-0.18	0.110	0.127
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DS11	507000	2535	1	22.81	23.50	1.172	-	-	-0.11	0.116	0.136
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DS11	507000	2535	1	22.86	23.50	1.159	-	-	-0.16	0.395	0.458
73	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DS11	507000	2535	1	22.81	23.50	1.172	-	-	0.09	0.421	0.493
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	518598	2592.99	1	22.94	23.50	1.138	-	-	-0.06	0.122	0.139
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	518598	2592.99	1	22.91	23.50	1.146	-	-	-0.14	0.118	0.135
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	518598	2592.99	1	22.94	23.50	1.138	-	-	-0.19	0.433	0.493
74	FR1 n41 SA Standalone For ENDC Standalone	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	518598	2592.99	1	22.91	23.50	1.146	-	-	0.01	0.585	0.670
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	518598	2592.99	2	22.91	23.50	1.146	-	-	0.03	0.569	0.652
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	518598	2592.99	1	25.88	26.50	1.153	50	1.000	0.01	0.566	0.653
	FR1 n41 For ENDC Simultaneous	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS12	518598	2592.99	1	21.31	22.00	1.172	-	-	0.08	0.437	0.512
	FR1 n41_HPUE For ENDC Simultaneous	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS12	518598	2592.99	1	24.35	25.00	1.161	50	1.000	-0.07	0.422	0.490
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 4	DS11	518598	2592.99	1	21.55	22.00	1.109	-	-	0.02	0.000	0.000
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 4	DS11	518598	2592.99	1	21.53	22.00	1.114	-	-	0.12	0.040	0.045
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	DS11	518598	2592.99	1	21.55	22.00	1.109	-	-	0.05	0.263	0.292
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 4	DS11	518598	2592.99	1	21.53	22.00	1.114	-	-	-0.16	0.176	0.196
	FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	DS11	518598	2592.99	1	24.59	25.00	1.099	50	1.000	-0.12	0.248	0.273
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	518598	2592.99	1	22.93	24.00	1.279	-	-	-0.02	0.072	0.092
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.05	0.056	0.072
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	518598	2592.99	1	22.93	24.00	1.279	-	-	0.01	0.388	0.496
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	518598	2592.99	1	22.89	24.00	1.291	-	-	-0.13	0.289	0.373
	FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	518598	2592.99	1	25.81	27.00	1.315	50	1.000	0.08	0.368	0.484
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	518598	2592.99	1	20.39	21.50	1.291	-	-	0.01	0.054	0.070
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	518598	2592.99	1	20.37	21.50	1.297	-	-	-0.16	0.039	0.051
	FR1 n41 SA Standalone For ENDC Standalone	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	518598	2592.99	1	20.39	21.50	1.291	-	-	-0.07	0.476	0.615
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	518598	2592.99	1	20.37	21.50	1.297	-	-	0.1	0.393	0.510
	FR1 n41 For ENDC Simultane	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	518598	2592.99	1	17.45	18.50	1.274		1.000	0.08	0.239	0.304
	FR1 n41_HPUE For ENDC Simultane	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	518598	2592.99	1	20.34	21.50	1.306	50	1.000	0.01	0.230	0.300
	FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	518598	2592.99	1	23.34	24.50	1.306	50	1.000	-0.01	0.459	0.600
3500MHz																					
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 6	DS11	42190	3460	1	22.98	24.00	1.265	62.9	1.006	-0.11	0.076	0.097
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 6	DS11	42190	3460	1	21.97	23.00	1.268	62.9	1.006	-0.06	0.063	0.080
75	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DS11	42190	3460	1	22.98	24.00	1.265	62.9	1.006	0.01	0.246	0.313
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 6	DS11	42190	3460	1	21.97	23.00	1.268	62.9	1.006	0.03	0.204	0.260



FCC SAR Test Report

Report No. : FA462605

	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 6	DS11	55830	3609	1	22.72	24.00	1.343	62.9	1.006	0.16	0.138	0.186
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 6	DS11	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.15	0.120	0.155
76	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DS11	55830	3609	1	22.72	24.00	1.343	62.9	1.006	-0.03	0.355	0.480
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DS11	55830	3609	1	21.92	23.00	1.282	62.9	1.006	-0.09	0.299	0.386
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	641666	3624.99	1	23.23	24.00	1.194	-	-	0.1	0.201	0.240
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	641666	3624.99	1	23.21	24.00	1.199	-	-	-0.09	0.224	0.269
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	641666	3624.99	1	23.23	24.00	1.194	-	-	0.07	0.539	0.644
77	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	641666	3624.99	1	23.21	24.00	1.199	-	-	-0.07	0.565	0.678
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	641666	3624.99	2	23.21	24.00	1.199	-	-	0.02	0.548	0.657
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	656000	3840	1	23.36	24.00	1.159	-	-	-0.16	0.248	0.287
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	656000	3840	1	23.28	24.00	1.180	-	-	-0.18	0.223	0.263
	FR1 n77 SA Standalone For ENDC Standalone	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	656000	3840	1	23.36	24.00	1.159	-	-	-0.04	0.537	0.622
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	656000	3840	1	23.28	24.00	1.180	-	-	-0.07	0.503	0.594
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	656000	3840	1	26.36	27.00	1.159	50	1.000	0.11	0.498	0.577
	FR1 n77 Part96	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	641666	3624.99	1	22.52	23.50	1.253	-	-	0.03	0.406	0.509
	FR1 n77 For ENDC Simultaneous	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS12	656000	3840	1	22.42	23.00	1.143	-	-	0.04	0.412	0.471
	FR1 n77_HPUE For ENDC Simultaneous	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS12	656000	3840	1	25.42	26.00	1.143	50	1.000	0.17	0.401	0.458
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.1	0.105	0.124
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DS11	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.01	0.131	0.156
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	633332	3499.98	1	23.27	24.00	1.183	-	-	-0.09	0.317	0.375
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	633332	3499.98	1	23.23	24.00	1.194	-	-	-0.02	0.351	0.419
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DS11	633332	3499.98	1	26.20	27.00	1.202	50	1.000	-0.06	0.341	0.410
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	656000	3840	1	18.59	20.00	1.384	-	-	-0.01	0.123	0.170
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	656000	3840	1	18.55	20.00	1.396	-	-	-0.11	0.098	0.137
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	656000	3840	1	18.59	20.00	1.384	-	-	0.14	0.239	0.331
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	656000	3840	1	18.55	20.00	1.396	-	-	0.03	0.245	0.342
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	656000	3840	1	21.72	23.00	1.343	50	1.000	0.1	0.243	0.326
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	633332	3499.98	1	18.54	20.00	1.400	-	-	-0.06	0.093	0.130
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	DS11	633332	3499.98	1	18.52	20.00	1.406	-	-	0.02	0.102	0.143
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	633332	3499.98	1	18.54	20.00	1.400	-	-	-0.16	0.251	0.351
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	633332	3499.98	1	18.52	20.00	1.406	-	-	0.05	0.188	0.264
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	633332	3499.98	1	21.79	23.00	1.321	50	1.000	-0.03	0.244	0.322
	FR1 n77 Part96	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DS11	641666	3624.99	1	18.47	20.00	1.422	-	-	0.09	0.217	0.309
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	656000	3840	1	19.37	20.00	1.156	-	-	-0.15	0.043	0.050
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	656000	3840	1	19.34	20.00	1.164	-	-	0.16	0.047	0.055
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	656000	3840	1	19.37	20.00	1.156	-	-	0.05	0.070	0.081
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	656000	3840	1	19.34	20.00	1.164	-	-	-0.06	0.081	0.094
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	656000	3840	1	22.08	23.00	1.236	50	1.000	-0.13	0.074	0.091
	FR1 n77 Part96	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	641666	3624.99	1	19.08	20.00	1.236	-	-	-0.06	0.073	0.090
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	633332	3499.98	1	18.34	19.00	1.164	-	-	-0.11	0.038	0.044
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DS11	633332	3499.98	1	18.31	19.00	1.172	-	-	0.19	0.038	0.045
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	633332	3499.98	1	18.34	19.00	1.164	-	-	-0.14	0.047	0.055
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	633332	3499.98	1	18.31	19.00	1.172	-	-	-0.18	0.079	0.093
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DS11	633332	3499.98	1	21.16	22.00	1.213	50	1.000	-0.06	0.069	0.084
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	656000	3840	1	20.76	22.00	1.330	-	-	0.16	0.063	0.084
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	656000	3840	1	20.75	22.00	1.334	-	-	0.01	0.022	0.029
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	656000	3840	1	20.76	22.00	1.330	-	-	-0.06	0.189	0.251
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	656000	3840	1	20.75	22.00	1.334	-	-	0.13	0.168	0.224
	FR1 n77 For ENDC Simultane	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	656000	3840	1	17.25	18.50	1.334	-	1.000	-0.08	0.101	0.135
	FR1 n77_HPUE For ENDC Simultane	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	656000	3840	1	20.23	21.50	1.340	50	1.000	0.1	0.096	0.129
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	656000	3840	1	23.77	25.00	1.327	50	1.000	0.12	0.177	0.235
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	633332	3499.98	1	20.94	22.00	1.276	-	-	0.08	0.045	0.057
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DS11	633332	3499.98	1	20.93	22.00	1.279	-	-	0.19	0.054	0.069
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	633332	3499.98	1	20.94	22.00	1.276	-	-	-0.06	0.469	0.599



FCC SAR Test Report

Report No. : FA462605

78	FR1 n77 SA Standalone For ENDC Standalone	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	633332	3499.98	1	20.93	22.00	1.279	-	-	-0.12	0.496	0.635
	FR1 n77 For ENDC Simultane	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	633332	3499.98	1	17.25	18.50	1.334		1.000	0.03	0.254	0.339
	FR1 n77_HPUE For ENDC Simultane	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS12	633332	3499.98	1	20.15	21.50	1.365	50	1.000	-0.08	0.247	0.337
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	633332	3499.98	1	23.91	25.00	1.285	50	1.000	-0.03	0.479	0.616
	FR1 n77 Part96	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DS11	641666	3624.99	1	20.86	22.00	1.300	-	-	0.03	0.468	0.608

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
2450MHz																		
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	0.08	0.039	0.040	
79	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 3	Full Power	1	2412	1	19.90	20.00	1.023	98.75	1.013	-0.07	0.160	0.166	
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 3	Full Power	1	2412	2	19.90	20.00	1.023	98.75	1.013	0.02	0.148	0.153	
	Bluetooth	1Mbps	Front	15mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.08	0.008	0.010	
80	Bluetooth	1Mbps	Back	15mm	Ant 3	Full Power	39	2441	1	10.30	11.00	1.175	77.61	1.073	0.17	0.029	0.037	
5000MHz																		
	WLAN 5.3GHz	802.11a 6Mbps	Front	15mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	-0.08	0.302	0.397	
81	WLAN 5.3GHz	802.11a 6Mbps	Back	15mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	-0.01	0.363	0.477	
	WLAN 5.3GHz	802.11a 6Mbps	Back	15mm	Ant 3	Full Power	60	5300	2	18.87	20.00	1.297	98.62	1.014	0.02	0.355	0.467	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	0.03	0.253	0.291	
82	WLAN 5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	-0.04	0.322	0.370	
	WLAN 5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 3	Full Power	110	5550	2	19.57	20.00	1.104	96.18	1.040	0.02	0.318	0.365	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	0.01	0.233	0.247	
83	WLAN 5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 3	Full Power	151	5755	1	19.92	20.00	1.019	96.18	1.040	-0.08	0.347	0.368	
	WLAN 5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 3	Full Power	151	5755	2	19.92	20.00	1.019	96.18	1.040	0.02	0.332	0.352	



14.4 Product specific 10g SAR

<Flip Open>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1750MHz																					
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 1	DS11	132322	1745	1	23.35	24.50	1.303	-	-	-0.08	2.010	2.619
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 1	DS11	132072	1720	1	23.30	24.50	1.318	-	-	0.17	1.970	2.597
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 1	DS11	132572	1770	1	23.21	24.50	1.346	-	-	0.18	1.910	2.571
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 1	DS11	132322	1745	1	22.38	23.50	1.294	-	-	-0.04	1.800	2.330
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 1	DS11	132072	1720	1	22.34	23.50	1.306	-	-	-0.08	1.780	2.325
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 1	DS11	132572	1770	1	22.11	23.50	1.377	-	-	-0.13	1.710	2.355
	LTE Band 66	20M	QPSK	100	0	-	Front	0mm	Ant 1	DS11	132322	1745	1	22.36	23.50	1.300	-	-	-0.13	1.660	2.158
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DS11	132322	1745	1	23.35	24.50	1.303	-	-	0.06	2.360	3.075
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DS11	132072	1720	1	23.30	24.50	1.318	-	-	-0.03	2.190	2.887
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DS11	132572	1770	1	23.21	24.50	1.346	-	-	-0.03	2.490	3.351
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	DS11	132322	1745	1	22.38	23.50	1.294	-	-	0.08	1.970	2.550
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	DS11	132072	1720	1	22.34	23.50	1.306	-	-	-0.07	1.760	2.299
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	DS11	132572	1770	1	22.11	23.50	1.377	-	-	0.05	2.040	2.810
	LTE Band 66	20M	QPSK	100	0	-	Back	0mm	Ant 1	DS11	132322	1745	1	22.36	23.50	1.300	-	-	-0.11	2.070	2.691
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	132322	1745	1	23.35	24.50	1.303	-	-	-0.12	2.310	3.010
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	132072	1720	1	23.30	24.50	1.318	-	-	0.03	2.040	2.689
84	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	132572	1770	1	23.21	24.50	1.346	-	-	0.08	2.520	3.392
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	132572	1770	2	23.21	24.50	1.346	-	-	0.02	2.490	3.351
	LTE Band 66 For ENDC Standalone	20M	QPSK	1	0	-	Back	0mm	Ant 1	DS11	132572	1770	1	1770	22.41	23.50	1.285		1.000	1.78	2.288
	LTE Band 66 For ENDC Simultane	20M	QPSK	1	0	-	Back	0mm	Ant 1	DS12	132572	1770	1	1770	20.47	21.50	1.268		1.000	1.10	1.394
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	132322	1745	1	22.38	23.50	1.294	-	-	-0.16	2.020	2.614
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	132072	1720	1	22.34	23.50	1.306	-	-	-0.02	1.940	2.534
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	132572	1770	1	22.11	23.50	1.377	-	-	0.15	2.050	2.823
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 1	DS11	132322	1745	1	22.36	23.50	1.300	-	-	-0.09	2.130	2.769
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 1	DS11	349000	1745	1	23.88	24.50	1.153	-	-	-0.02	2.130	2.457
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 1	DS11	349000	1745	1	23.86	24.50	1.159	-	-	0.1	2.320	2.688
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant 1	DS11	349000	1745	1	23.12	23.50	1.091	-	-	0.04	1.770	1.932
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	349000	1745	1	23.88	24.50	1.153	-	-	0.13	2.290	2.641
85	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	349000	1745	1	23.86	24.50	1.159	-	-	-0.16	2.350	2.723
	FR1 n66 For ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	349000	1745	1	22.92	23.50	1.143	-	-	-0.07	2.17	2.480
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	349000	1745	1	23.12	23.50	1.091	-	-	-0.18	1.870	2.041
1900MHz																					
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DS11	9400	1880	1	21.43	22.00	1.140	-	-	0.06	2.500	2.851
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DS11	9262	1852.4	1	21.41	22.00	1.146	-	-	0	2.440	2.795
86	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DS11	9538	1907.6	1	21.39	22.00	1.151	-	-	-0.04	2.630	3.027
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DS11	9538	1907.6	2	21.39	22.00	1.151	-	-	0.02	2.590	2.981
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	26340	1880	1	21.53	22.50	1.250	-	-	0.12	2.290	2.863
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	26140	1860	1	21.49	22.50	1.262	-	-	-0.16	2.210	2.789
87	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	26590	1905	1	21.44	22.50	1.276	-	-	0.06	2.350	3.000
	LTE Band 25 For ENDC	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DS11	26590	1905	1	20.41	21.50	1.285	-	-	-0.05	1.82	2.339
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	26340	1880	1	21.51	22.50	1.256	-	-	-0.12	1.890	2.374
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	26140	1860	1	21.47	22.50	1.268	-	-	0.07	1.800	2.282
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 1	DS11	26590	1905	1	21.38	22.50	1.294	-	-	-0.02	1.930	2.498
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 1	DS11	26340	1880	1	21.33	22.50	1.309	-	-	-0.05	1.860	2.435
	FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 1	DS11	376500	1882.5	1	21.92	22.50	1.143	-	-	-0.17	1.570	1.794
	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 1	DS11	376500	1882.5	1	21.81	22.50	1.172	-	-	-0.08	1.690	1.981
	FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	376500	1882.5	1	21.92	22.50	1.143	-	-	-0.08	2.070	2.366
	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	376500	1882.5	1	21.81	22.50	1.172	-	-	0.17	2.130	2.497
	FR1 n25	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 1	DS11	376500	1882.5	1	21.86	22.50	1.159	-	-	0.18	1.810	2.097



FCC SAR Test Report

Report No. : FA462605

	FR1 n25	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 1	DS11	376500	1882.5	1	21.92	22.50	1.143	-	-	-0.04	2.220	2.537
88	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 1	DS11	376500	1882.5	1	21.81	22.50	1.172	-	-	0.03	2.310	2.708
	FR1 n25	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 1	DS11	376500	1882.5	1	21.86	22.50	1.159	-	-	-0.08	1.830	2.121
2600MHz																					
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	518598	2592.99	1	20.39	21.50	1.291	-	-	0.14	2.330	3.009
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	518598	2592.99	1	20.37	21.50	1.297	-	-	0.11	1.780	2.309
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	518598	2592.99	1	20.31	21.50	1.315	-	-	-0.05	1.800	2.367
89	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DS11	518598	2592.99	1	20.39	21.50	1.291	-	-	0.18	2.430	3.138
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DS11	518598	2592.99	2	20.39	21.50	1.291	-	-	0.02	2.380	3.073
	FR1 n41 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS12	518598	2592.99	1	17.45	18.50	1.274	-	-	-0.02	1.07	1.363
	FR1 n41_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS12	518598	2592.99	1	20.34	21.50	1.306	-	-	-0.01	1.00	1.306
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DS11	518598	2592.99	1	20.37	21.50	1.297	-	-	0.14	2.340	3.035
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DS11	518598	2592.99	1	20.31	21.50	1.315	-	-	-0.17	2.290	3.012
	FR1 n41_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DS11	518598	2592.99	1	23.34	24.50	1.306	50	1.000	0.03	2.380	3.109
3500MHz																					
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	641666	3624.99	1	23.23	24.00	1.194	-	-	0.07	1.870	2.233
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	638000	3570	1	23.01	24.00	1.256	-	-	-0.09	1.690	2.123
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	645332	3679.98	1	23.12	24.00	1.225	-	-	0.11	1.820	2.229
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	641666	3624.99	1	23.21	24.00	1.199	-	-	0.03	1.930	2.315
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	638000	3570	1	22.98	24.00	1.265	-	-	-0.05	1.580	1.998
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	645332	3679.98	1	23.02	24.00	1.253	-	-	-0.08	1.660	2.080
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Side	0mm	Ant 6	DS11	641666	3624.99	1	22.13	23.00	1.222	-	-	0.18	1.580	1.930
90	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	641666	3624.99	1	23.23	24.00	1.194	-	-	0.16	2.920	3.486
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	641666	3624.99	2	23.23	24.00	1.194	-	-	0.02	2.890	3.451
	FR1 n48 WIFI Simultaneous	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS12	641666	3624.99	1	19.76	20.50	1.186	-	-	-0.04	1.350	1.601
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	638000	3570	1	23.01	24.00	1.256	-	-	0.16	2.420	3.040
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	645332	3679.98	1	23.12	24.00	1.225	-	-	0.05	2.480	3.037
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	641666	3624.99	1	23.21	24.00	1.199	-	-	-0.1	2.620	3.143
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	638000	3570	1	22.98	24.00	1.265	-	-	0.05	2.400	3.035
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	645332	3679.98	1	23.02	24.00	1.253	-	-	-0.03	2.170	2.719
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DS11	641666	3624.99	1	22.13	23.00	1.222	-	-	0.07	2.050	2.505
91	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	633332	3499.98	1	20.94	22.00	1.276	-	-	-0.08	2.270	2.898
	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS12	633332	3499.98	1	17.25	18.50	1.334	-	-	-0.01	1.12	1.494
	FR1 n77_HPUE ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS12	633332	3499.98	1	20.15	21.50	1.365	50	1.000	0.02	1.07	1.460
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	633332	3499.98	1	20.93	22.00	1.279	-	-	0.16	2.110	2.699
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	633332	3499.98	1	20.87	22.00	1.297	-	-	-0.03	2.100	2.724
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	633332	3499.98	1	23.93	25.00	1.279	50	1.000	0.03	2.180	2.789
	FR1 n77 Part 96	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DS11	641666	3624.99	1	20.89	22.00	1.291	-	-	0.03	2.060	2.660

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
5000MHz																	
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	-0.06	0.286	0.376
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	0.02	0.627	0.825
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	-0.16	0.523	0.688
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	0.05	0.069	0.091
92	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 3	Full Power	60	5300	1	18.87	20.00	1.297	98.62	1.014	-0.03	0.893	1.175
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 3	Full Power	60	5300	2	18.87	20.00	1.297	98.62	1.014	0.02	0.869	1.143
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	0.17	0.357	0.410
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	-0.15	0.936	1.075
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	0.16	0.442	0.508
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	0.05	0.139	0.160
93	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3	Full Power	110	5550	1	19.57	20.00	1.104	96.18	1.040	-0.03	1.530	1.757
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3	Full Power	110	5550	2	19.57	20.00	1.104	96.18	1.040	0.01	1.480	1.699



	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3	Full Power	134	5670	1	19.57	20.00	1.104	96.18	1.040	0.03	1.380	1.585		
94	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 3	Full Power	149	5745	1	20.91	22.50	1.442	98.62	1.014	0.03	1.020	1.492		
	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 3	Full Power	149	5745	2	20.91	22.50	1.442	98.62	1.014	0.02	0.995	1.455		

14.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	23.23	24.00	1.194	-	-	0.08	1.020	1	1.218
2nd	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 4	641666	3624.99	23.23	24.00	1.194	-	-	0.01	0.998	1.022	1.192
1st	WLAN5.5GHz	20M	QPSK	1	0	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	110	5550	18.21	19.50	1.346	96.18	1.040	0.03	0.814	1	1.139
2nd	WLAN5.5GHz	20M	QPSK	1	0	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	Standalone	110	5550	18.21	19.50	1.346	96.18	1.040	0.08	0.806	1.010	1.128
1st	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	376500	1882.5	20.88	21.50	1.153	-	-	0.06	1.040	1	1.200
2nd	FR1 n25	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	376500	1882.5	20.88	21.50	1.153	-	-	0.01	0.996	1.044	1.149
1st	FR1 n41 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	21.55	22.00	1.109	-	-	0.03	0.969	1	1.075
2nd	FR1 n41 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 4	DSI3	518598	2592.99	21.55	22.00	1.109	-	-	0.08	0.957	1.013	1.061
1st	FR1 n77 flip Close	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	633332	3499.98	20.47	21.50	1.268	-	-	0.12	0.971	1	1.231
2nd	FR1 n77 flip Close	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI3	633332	3499.98	20.47	21.50	1.268	-	-	0.05	0.965	1.010	1.223
1st	FR1 n77 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	23.36	24.00	1.159	-	-	-0.18	0.963	1	1.116
2nd	FR1 n77 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI3	656000	3840	23.36	24.00	1.159	-	-	0.02	0.957	1.006	1.109
1st	FR1 n14 flip Close	10M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	158600	793	24.10	25.00	1.230	-	-	-0.01	0.871	1	1.072
2nd	FR1 n14 flip Close	10M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	158600	793	24.10	25.00	1.230	-	-	0.03	0.856	1.018	1.053
1st	FR1 n5 flip Close	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	24.39	25.00	1.151	-	-	-0.04	1.040	1	1.197
2nd	FR1 n5 flip Close	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI3	167300	836.5	24.39	25.00	1.151	-	-	0.03	0.996	1.044	1.146
1st	FR1 n66 flip Close	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	22.92	23.50	1.143	-	-	0.02	0.991	1	1.133
2nd	FR1 n66 flip Close	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 1	DSI3	349000	1745	22.92	23.50	1.143	-	-	0.09	0.974	1.017	1.113

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 66 flip Open	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DSI1	132572	1770	23.21	24.50	1.346	0.08	2.520	1	3.392
2nd	LTE Band 66 flip Open	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 1	DSI1	132572	1770	23.21	24.50	1.346	0.01	2.440	1.033	3.284
1st	WCDMA II flip Open	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DSI1	9538	1907.6	21.39	22.00	1.151	-0.04	2.630	1	3.027
2nd	WCDMA II flip Open	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 1	DSI1	9538	1907.6	21.39	22.00	1.151	0.08	2.510	1.048	2.889
1st	FR1 n41 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI1	518598	2592.99	20.39	21.50	1.291	0.18	2.430	1	3.138
2nd	FR1 n41 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI1	518598	2592.99	20.39	21.50	1.291	0.01	2.340	1.038	3.021
1st	FR1 n48 flip Open	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DSI1	641666	3624.99	23.23	24.00	1.194	0.16	2.920	1	3.486
2nd	FR1 n48 flip Open	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DSI1	641666	3624.99	23.23	24.00	1.194	0.09	2.840	1.028	3.391
1st	FR1 n77 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI1	633332	3499.98	20.94	22.00	1.276	-0.08	2.270	1	2.898
2nd	FR1 n77 flip Open	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI1	633332	3499.98	20.94	22.00	1.276	0.06	2.150	1.056	2.744

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8W/kg$.
- 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.
- Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
- The ratio is the difference in percentage between original and repeated *measured SAR*.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.



14.6 TDD LTE and NR Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for LTE Band 41/5G NR n41/n77. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

<Flip Open>

LTE B41-Linearity Data for Hotspot Ant 2			FR1 n77 Part270-Linearity Data for Hotspot Ant 6 For ENDC		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	0.689	0.879	Reported 1g SAR (W/kg)	0.590	0.574
Duty Cycle	63.30%	43.30%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	159.00	217.01	Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.940		Linearity SAR (W/kg)	0.589	
% deviation from expected linearity		-6.53%	% deviation from expected linearity		-2.48%
FR1 n41-Linearity Data for Hotspot Ant 2			FR1 n41-Linearity Data for Hotspot Ant 2 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	26.50	Maximum Tune up Power (dBm)	20.50	23.50
Reported 1g SAR (W/kg)	1.046	1.025	Reported 1g SAR (W/kg)	0.561	0.548
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	223.87	223.34	Frame Averaged (mW)	112.20	111.94
Linearity SAR (W/kg)	1.044		Linearity SAR (W/kg)	0.560	
% deviation from expected linearity		-1.77%	% deviation from expected linearity		-2.09%
FR1 n41-Linearity Data for Hotspot Ant 4			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 6 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00	Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	1.075	1.035	Reported 1g SAR (W/kg)	0.449	0.427
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11	Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	1.072		Linearity SAR (W/kg)	0.448	
% deviation from expected linearity		-3.49%	% deviation from expected linearity		-4.67%
FR1 n41-Linearity Data for Hotspot Ant 5			FR1 n77 Part27Q-Linearity Data for Extremity Ant 7		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.931	0.920	Reported 10g SAR (W/kg)	2.898	2.789
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.929		Linearity SAR (W/kg)	2.891	
% deviation from expected linearity		-0.95%	% deviation from expected linearity		-3.53%
FR1 n41-Linearity Data for Hotspot Ant 7			FR1 n41-Linearity Data for Extremity Ant 7		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50	Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)	1.223	1.200	Reported 10g SAR (W/kg)	3.138	3.109
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92	Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	1.220		Linearity SAR (W/kg)	3.131	
% deviation from expected linearity		-1.65%	% deviation from expected linearity		-0.69%



FR1 n77 Part270-Linearity Data for Hotspot Ant 6			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 6		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	1.116	1.096	Reported 1g SAR (W/kg)	1.033	1.026
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	1.113		Linearity SAR (W/kg)	1.031	
% deviation from expected linearity		-1.56%	% deviation from expected linearity		-0.44%
FR1 n77 Part270-Linearity Data for Hotspot Ant 2			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 2		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00	Maximum Tune up Power (dBm)	20.00	23.00
Reported 1g SAR (W/kg)	0.883	0.841	Reported 1g SAR (W/kg)	0.715	0.663
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	100.00	99.76	Frame Averaged (mW)	100.00	99.76
Linearity SAR (W/kg)	0.881		Linearity SAR (W/kg)	0.713	
% deviation from expected linearity		-4.53%	% deviation from expected linearity		-7.05%
FR1 n77 Part270-Linearity Data for Hotspot Ant 5			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 5		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00	Maximum Tune up Power (dBm)	19.00	22.00
Reported 1g SAR (W/kg)	0.297	0.282	Reported 1g SAR (W/kg)	0.377	0.363
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	100.00	99.76	Frame Averaged (mW)	79.43	79.24
Linearity SAR (W/kg)	0.296		Linearity SAR (W/kg)	0.376	
% deviation from expected linearity		-4.83%	% deviation from expected linearity		-3.48%
FR1 n77 Part270-Linearity Data for Hotspot Ant 7			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 7		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50	Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)	0.336	0.319	Reported 1g SAR (W/kg)	1.150	1.131
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92	Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	0.335		Linearity SAR (W/kg)	1.147	
% deviation from expected linearity		-4.83%	% deviation from expected linearity		-1.42%

FR1 n41-Linearity Data for Hotspot Ant 4 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	19.50	22.50
Reported 1g SAR (W/kg)	0.603	0.593
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR (W/kg)	0.602	
% deviation from expected linearity		-1.42%
FR1 n41-Linearity Data for Hotspot Ant 5 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.579	0.588
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.578	
% deviation from expected linearity		1.80%
FR1 n41-Linearity Data for Hotspot Ant 7 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.588	0.597
Duty Cycle	100.00%	50.00%



Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.587	
% deviation from expected linearity		1.77%

FR1 n77 Part27Q-Linearity Data for Extremity Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 10g SAR (W/kg)	1.494	1.460
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	1.490	
% deviation from expected linearity		-2.04%

FR1 n77 Part27O-Linearity Data for Hotspot Ant 7 For ENDC			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50	Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.183	0.190	Reported 1g SAR (W/kg)	0.587	0.587
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63	Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.183		Linearity SAR (W/kg)	0.586	
% deviation from expected linearity		4.07%	% deviation from expected linearity		0.24%
FR1 n77 Part27O-Linearity Data for Hotspot Ant 2 For ENDC			FR1 n77 Part27Q-Linearity Data for Hotspot Ant 2 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50	Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.589	0.569	Reported 1g SAR (W/kg)	0.482	0.467
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63	Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.588		Linearity SAR (W/kg)	0.481	
% deviation from expected linearity		-3.17%	% deviation from expected linearity		-2.88%



<Flip Close>

LTE B41-Linearity Data for Hotspot Ant 2			FR1 n77 Part270-Linearity Data for Hotspot Ant 6		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.597	0.768	Reported 1g SAR (W/kg)	1.070	1.006
Duty Cycle	63.30%	43.30%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	159.00	217.01	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.815		Linearity SAR (W/kg)	1.067	
% deviation from expected linearity		-5.75%	% deviation from expected linearity		-5.76%
FR1 n41-Linearity Data for Hotspot Ant 2			FR1 n77 Part270-Linearity Data for Hotspot Ant 6 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	26.50	Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	1.022	1.010	Reported 1g SAR (W/kg)	0.572	0.554
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	223.87	223.34	Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	1.020		Linearity SAR (W/kg)	0.571	
% deviation from expected linearity		-0.94%	% deviation from expected linearity		-2.92%
FR1 n41-Linearity Data for Hotspot Ant 2 For ENDC			FR1 n77 Part270-Linearity Data for Hotspot Ant 2		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.50	23.50	Maximum Tune up Power (dBm)	20.00	23.00
Reported 1g SAR (W/kg)	0.537	0.525	Reported 1g SAR (W/kg)	0.715	0.674
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	112.20	111.94	Frame Averaged (mW)	100.00	99.76
Linearity SAR (W/kg)	0.536		Linearity SAR (W/kg)	0.713	
% deviation from expected linearity		-2.00%	% deviation from expected linearity		-5.51%
FR1 n41-Linearity Data for Hotspot Ant 4			FR1 n77 Part270-Linearity Data for Hotspot Ant 5		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00	Maximum Tune up Power (dBm)	20.00	23.00
Reported 1g SAR (W/kg)	0.857	0.828	Reported 1g SAR (W/kg)	0.286	0.282
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11	Frame Averaged (mW)	100.00	99.76
Linearity SAR (W/kg)	0.855		Linearity SAR (W/kg)	0.285	
% deviation from expected linearity		-3.15%	% deviation from expected linearity		-1.16%
FR1 n41-Linearity Data for Hotspot Ant 5			FR1 n77 Part270-Linearity Data for Hotspot Ant 7		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)	0.925	0.939	Reported 1g SAR (W/kg)	0.419	0.394
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	0.923		Linearity SAR (W/kg)	0.418	
% deviation from expected linearity		1.75%	% deviation from expected linearity		-5.74%
FR1 n41-Linearity Data for Hotspot Ant 7					
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)			
Maximum Tune up Power (dBm)	21.50	24.50			
Reported 1g SAR (W/kg)	1.185	1.173			
Duty Cycle	100.00%	50.00%			
Frame Averaged (mW)	141.25	140.92			
Linearity SAR (W/kg)	1.182				
% deviation from expected linearity		-0.78%			



FR1 n77 Part27Q-Linearity Data for Hotspot Ant 6			LTE B41-Linearity Data for Body worn Ant 2		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	1.060	1.021	Reported 1g SAR (W/kg)	0.361	0.485
Duty Cycle	100.00%	50.00%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	159.00	217.01
Linearity SAR (W/kg)	1.057		Linearity SAR (W/kg)	0.493	
% deviation from expected linearity		-3.45%	% deviation from expected linearity		-1.56%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 6 For ENDC			FR1 n41-Linearity Data for Body worn Ant 2		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00	Maximum Tune up Power (dBm)	23.50	26.50
Reported 1g SAR (W/kg)	0.492	0.467	Reported 1g SAR (W/kg)	0.670	0.653
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59	Frame Averaged (mW)	223.87	223.34
Linearity SAR (W/kg)	0.491		Linearity SAR (W/kg)	0.668	
% deviation from expected linearity		-4.86%	% deviation from expected linearity		-2.31%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 2			FR1 n41-Linearity Data for Body worn Ant 2 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.728	0.655	Reported 1g SAR (W/kg)	0.512	0.490
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	100.00	99.76	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.726		Linearity SAR (W/kg)	0.511	
% deviation from expected linearity		-9.81%	% deviation from expected linearity		-4.07%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 5			FR1 n41-Linearity Data for Body worn Ant 4		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	19.00	22.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.319	0.317	Reported 1g SAR (W/kg)	0.292	0.273
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	79.43	79.24	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.318		Linearity SAR (W/kg)	0.291	
% deviation from expected linearity		-0.39%	% deviation from expected linearity		-6.28%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 7			FR1 n41-Linearity Data for Body worn Ant 5		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	1.231	1.181	Reported 1g SAR (W/kg)	0.496	0.484
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	1.228		Linearity SAR (W/kg)	0.495	
% deviation from expected linearity		-3.83%	% deviation from expected linearity		-2.19%
			FR1 n41-Linearity Data for Body worn Ant 7		
				FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)			Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)			Reported 1g SAR (W/kg)	0.615	0.600
Duty Cycle			Duty Cycle	100.00%	50.00%
Frame Averaged (mW)			Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)			Linearity SAR (W/kg)	0.614	
% deviation from expected linearity			% deviation from expected linearity		-2.21%



FR1 n77 Part270-Linearity Data for Body worn Ant 6			FR1 n77 Part27Q-Linearity Data for Body worn Ant 6		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.622	0.577	Reported 1g SAR (W/kg)	0.419	0.410
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.621		Linearity SAR (W/kg)	0.418	
% deviation from expected linearity		-7.01%	% deviation from expected linearity		-1.92%
FR1 n77 Part270-Linearity Data for Body worn Ant 6 For ENDC			FR1 n77 Part27Q-Linearity Data for Body worn Ant 2		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00	Maximum Tune up Power (dBm)	20.00	23.00
Reported 1g SAR (W/kg)	0.471	0.458	Reported 1g SAR (W/kg)	0.351	0.322
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05	Frame Averaged (mW)	100.00	99.76
Linearity SAR (W/kg)	0.470		Linearity SAR (W/kg)	0.350	
% deviation from expected linearity		-2.53%	% deviation from expected linearity		-8.04%
FR1 n77 Part270-Linearity Data for Body worn Ant 2			FR1 n77 Part27Q-Linearity Data for Body worn Ant 5		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00	Maximum Tune up Power (dBm)	19.00	22.00
Reported 1g SAR (W/kg)	0.342	0.326	Reported 1g SAR (W/kg)	0.093	0.084
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	100.00	99.76	Frame Averaged (mW)	79.43	79.24
Linearity SAR (W/kg)	0.341		Linearity SAR (W/kg)	0.093	
% deviation from expected linearity		-4.45%	% deviation from expected linearity		-9.46%
FR1 n77 Part270-Linearity Data for Body worn Ant 5			FR1 n77 Part27Q-Linearity Data for Body worn Ant 7		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)		FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.094	0.091	Reported 1g SAR (W/kg)	0.635	0.616
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	100.00	99.76	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.094		Linearity SAR (W/kg)	0.633	
% deviation from expected linearity		-2.96%	% deviation from expected linearity		-2.76%
FR1 n77 Part270-Linearity Data for Body worn Ant 7					
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)			
Maximum Tune up Power (dBm)	22.00	25.00			
Reported 1g SAR (W/kg)	0.251	0.235			
Duty Cycle	100.00%	50.00%			
Frame Averaged (mW)	158.49	158.11			
Linearity SAR (W/kg)	0.250				
% deviation from expected linearity		-6.15%			

FR1 n41-Linearity Data for Hotspot Ant 4 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	19.50	22.50
Reported 1g SAR (W/kg)	0.482	0.474
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR (W/kg)	0.481	
% deviation from expected linearity		-1.43%
FR1 n41-Linearity Data for Hotspot Ant 5 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.604	0.608



Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.603	
% deviation from expected linearity		0.90%
FR1 n41-Linearity Data for Hotspot Ant 7 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.576	0.584
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.575	
% deviation from expected linearity		1.63%
FR1 n77 Part27O-Linearity Data for Hotspot Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.218	0.212
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.217	
% deviation from expected linearity		-2.52%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.601	0.583
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.600	
% deviation from expected linearity		-2.76%
FR1 n77 Part27O-Linearity Data for Hotspot Ant 2 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.508	0.506
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.507	
% deviation from expected linearity		-0.16%
FR1 n77 Part27Q-Linearity Data for Hotspot Ant 2 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.505	0.485
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.504	
% deviation from expected linearity		-3.73%
FR1 n77 Part27Q-Linearity Data for Body worn Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.339	0.337
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.338	
% deviation from expected linearity		-0.35%
FR1 n41-Linearity Data for Body worn Ant 7 For ENDC		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.304	0.300
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.303	
% deviation from expected linearity		-1.08%
FR1 n77 Part27O-Linearity Data for Body worn Ant 7 For ENDC		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.135	0.129
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.135	
% deviation from expected linearity		-4.22%

15. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	5G Feature Phone			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes

General Note:

1. WWAN above includes 5G NR bands and EN-DC combination.
2. EUT will choose each WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
4. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
5. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
6. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
7. According to the EUT characteristic, WLAN 5GHz and Bluetooth can't transmit simultaneously.
8. According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can't transmit simultaneously.
9. According to the EUT characteristic, WLAN 2.4GHz and Bluetooth can't transmit simultaneously.
10. For standalone WWAN, always choose the highest SAR among the selected WWAN band within the selected antenna to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
11. For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE bands within the selected antenna per each test position and also the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands and each 5GNR band.
12. The maximum SAR summation is calculated based on the same configuration and test position.
13. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, 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 $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - v) The SPLSR calculated results please refer to section 15.5.



15.1 Head Exposure Conditions

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WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4
		WWAN	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All Bands Ant1	Right Cheek	0.562	0.225	0.473	0.037	0.79	1.04	0.60
	Right Tilted	0.317	0.141	0.155	0.026	0.46	0.47	0.34
	Left Cheek	0.563	0.296	0.676	0.052	0.86	1.24	0.62
	Left Tilted	0.314	0.126	0.178	0.030	0.44	0.49	0.34
WWAN All Bands Ant2	Right Cheek	0.273	0.225	0.473	0.037	0.50	0.75	0.31
	Right Tilted	0.083	0.141	0.155	0.026	0.22	0.24	0.11
	Left Cheek	0.182	0.296	0.676	0.052	0.48	0.86	0.23
	Left Tilted	0.090	0.126	0.178	0.030	0.22	0.27	0.12
WWAN All Bands Ant4	Right Cheek	0.546	0.225	0.473	0.037	0.77	1.02	0.58
	Right Tilted	0.488	0.141	0.155	0.026	0.63	0.64	0.51
	Left Cheek	0.395	0.296	0.676	0.052	0.69	1.07	0.45
	Left Tilted	0.444	0.126	0.178	0.030	0.57	0.62	0.47
WWAN All Bands Ant5	Right Cheek	0.063	0.225	0.473	0.037	0.29	0.54	0.10
	Right Tilted	0.023	0.141	0.155	0.026	0.16	0.18	0.05
	Left Cheek	0.022	0.296	0.676	0.052	0.32	0.70	0.07
	Left Tilted	0.031	0.126	0.178	0.030	0.16	0.21	0.06
WWAN All Bands Ant6	Right Cheek	0.545	0.225	0.473	0.037	0.77	1.02	0.58
	Right Tilted	0.318	0.141	0.155	0.026	0.46	0.47	0.34
	Left Cheek	0.795	0.296	0.676	0.052	1.09	1.47	0.85
	Left Tilted	0.217	0.126	0.178	0.030	0.34	0.40	0.25
WWAN All Bands Ant7	Right Cheek	0.114	0.225	0.473	0.037	0.339	0.59	0.15
	Right Tilted	0.053	0.141	0.155	0.026	0.194	0.21	0.08
	Left Cheek	0.165	0.296	0.676	0.052	0.461	0.84	0.22
	Left Tilted	0.116	0.126	0.178	0.030	0.242	0.29	0.15

For ENDC Standalone

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band7 Ant2	FR1 n66 Ant1	Right Cheek	0.273	0.195	0.47
		Right Tilted	0.081	0.219	0.30
		Left Cheek	0.176	0.214	0.39
		Left Tilted	0.090	0.217	0.31
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 All Bands(n38,41) Ant2	Right Cheek	0.562	0.261	0.82
		Right Tilted	0.317	0.063	0.38
		Left Cheek	0.507	0.177	0.68
		Left Tilted	0.295	0.080	0.38
LTE band12 Ant1	FR1 n66 Ant4	Right Cheek	0.278	0.546	0.82
		Right Tilted	0.156	0.488	0.64
		Left Cheek	0.333	0.395	0.73
		Left Tilted	0.149	0.430	0.58
LTE band12 Ant1	FR1 n77 Ant6	Right Cheek	0.278	0.545	0.82
		Right Tilted	0.156	0.210	0.37
		Left Cheek	0.333	0.721	1.05
		Left Tilted	0.149	0.207	0.36
LTE band14 Ant1	FR1 n2 Ant4	Right Cheek	0.398	0.480	0.88
		Right Tilted	0.246	0.425	0.67
		Left Cheek	0.367	0.333	0.70
		Left Tilted	0.261	0.444	0.71



LTE band14 Ant1	FR1 n66 Ant4	Right Cheek	0.398	0.546	0.94
		Right Tilted	0.246	0.488	0.73
		Left Cheek	0.367	0.395	0.76
		Left Tilted	0.261	0.430	0.69
LTE band14 Ant1	FR1 n77 Ant6	Right Cheek	0.398	0.545	0.94
		Right Tilted	0.246	0.210	0.46
		Left Cheek	0.367	0.721	1.09
		Left Tilted	0.261	0.207	0.47
LTE band2 Ant4	FR1 n5 Ant1	Right Cheek	0.437	0.543	0.98
		Right Tilted	0.456	0.291	0.75
		Left Cheek	0.288	0.478	0.77
		Left Tilted	0.443	0.308	0.75
LTE band2 Ant4	FR1 n66 Ant1	Right Cheek	0.437	0.195	0.63
		Right Tilted	0.456	0.219	0.68
		Left Cheek	0.288	0.214	0.50
		Left Tilted	0.443	0.217	0.66
LTE band5 Ant1	FR1 n66 Ant4	Right Cheek	0.562	0.546	1.11
		Right Tilted	0.317	0.488	0.81
		Left Cheek	0.507	0.395	0.90
		Left Tilted	0.295	0.430	0.73
LTE band5 Ant1	FR1 n77 Ant6	Right Cheek	0.562	0.545	1.11
		Right Tilted	0.317	0.210	0.53
		Left Cheek	0.507	0.721	1.23
		Left Tilted	0.295	0.207	0.50
LTE band66 Ant4	FR1 n5 Ant1	Right Cheek	0.501	0.543	1.04
		Right Tilted	0.406	0.291	0.70
		Left Cheek	0.338	0.478	0.82
		Left Tilted	0.348	0.308	0.66
LTE band66 Ant1	FR1 n77 Ant6	Right Cheek	0.211	0.545	0.76
		Right Tilted	0.231	0.210	0.44
		Left Cheek	0.198	0.721	0.92
		Left Tilted	0.212	0.207	0.42
LTE band66 Ant4	FR1 n7 Ant2	Right Cheek	0.501	0.238	0.74
		Right Tilted	0.406	0.083	0.49
		Left Cheek	0.338	0.182	0.52
		Left Tilted	0.348	0.085	0.43
LTE band7 Ant2	FR1 n2 Ant4	Right Cheek	0.273	0.480	0.75
		Right Tilted	0.081	0.425	0.51
		Left Cheek	0.176	0.333	0.51
		Left Tilted	0.090	0.444	0.53
LTE band2 Ant4	FR1 n7 Ant2	Right Cheek	0.437	0.238	0.68
		Right Tilted	0.456	0.083	0.54
		Left Cheek	0.288	0.182	0.47
		Left Tilted	0.443	0.085	0.53
LTE band66 Ant4	FR1 n71 Ant1	Right Cheek	0.501	0.281	0.78
		Right Tilted	0.406	0.066	0.47
		Left Cheek	0.338	0.201	0.54
		Left Tilted	0.348	0.092	0.44
LTE band2 Ant4	FR1 n71 Ant1	Right Cheek	0.437	0.281	0.72
		Right Tilted	0.456	0.066	0.52
		Left Cheek	0.288	0.201	0.49
		Left Tilted	0.443	0.092	0.54
LTE band66 Ant1	FR1 n25 Ant4	Right Cheek	0.211	0.480	0.69
		Right Tilted	0.231	0.425	0.66
		Left Cheek	0.198	0.333	0.53
		Left Tilted	0.212	0.444	0.66



LTE band13 Ant1	FR1 n77 Ant6	Right Cheek	0.330	0.545	0.88
		Right Tilted	0.211	0.210	0.42
		Left Cheek	0.302	0.721	1.02
		Left Tilted	0.212	0.207	0.42
LTE band13 Ant1	FR1 n66 Ant4	Right Cheek	0.330	0.546	0.88
		Right Tilted	0.211	0.488	0.70
		Left Cheek	0.302	0.395	0.70
		Left Tilted	0.212	0.430	0.64
LTE band48 Ant6	FR1 n5 Ant1	Right Cheek	0.305	0.543	0.85
		Right Tilted	0.211	0.291	0.50
		Left Cheek	0.561	0.478	1.04
		Left Tilted	0.200	0.308	0.51
LTE band71 Ant1	FR1 n2 Ant4	Right Cheek	0.281	0.480	0.76
		Right Tilted	0.066	0.425	0.49
		Left Cheek	0.201	0.333	0.53
		Left Tilted	0.092	0.444	0.54
LTE band71 Ant1	FR1 n66 Ant4	Right Cheek	0.281	0.546	0.83
		Right Tilted	0.066	0.488	0.55
		Left Cheek	0.201	0.395	0.60
		Left Tilted	0.092	0.430	0.52
LTE band71 Ant1	FR1 n77 Ant6	Right Cheek	0.281	0.545	0.83
		Right Tilted	0.066	0.210	0.28
		Left Cheek	0.201	0.721	0.92
		Left Tilted	0.092	0.207	0.30
LTE band12 Ant1	FR1 n25 Ant4	Right Cheek	0.278	0.480	0.76
		Right Tilted	0.156	0.425	0.58
		Left Cheek	0.333	0.333	0.67
		Left Tilted	0.149	0.444	0.59
LTE band25 Ant1	FR1 n77 Ant6	Right Cheek	0.092	0.545	0.64
		Right Tilted	0.082	0.210	0.29
		Left Cheek	0.100	0.721	0.82
		Left Tilted	0.089	0.207	0.30
LTE band26 Ant1	FR1 n25 Ant4	Right Cheek	0.562	0.480	1.04
		Right Tilted	0.317	0.425	0.74
		Left Cheek	0.507	0.333	0.84
		Left Tilted	0.295	0.444	0.74
LTE band48 Ant6	FR1 n66 Ant1	Right Cheek	0.305	0.195	0.50
		Right Tilted	0.211	0.219	0.43
		Left Cheek	0.561	0.214	0.78
		Left Tilted	0.200	0.217	0.42
LTE band7 Ant2	FR1 n77 Ant6	Right Cheek	0.273	0.545	0.82
		Right Tilted	0.081	0.210	0.29
		Left Cheek	0.176	0.721	0.90
		Left Tilted	0.090	0.207	0.30
LTE band13 Ant1	FR1 n25 Ant4	Right Cheek	0.330	0.480	0.81
		Right Tilted	0.211	0.425	0.64
		Left Cheek	0.302	0.333	0.64
		Left Tilted	0.212	0.444	0.66



WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Right Cheek	0.562	0.063	0.63
		Right Tilted	0.317	0.016	0.33
		Left Cheek	0.507	0.051	0.56
		Left Tilted	0.295	0.007	0.30
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Right Cheek	0.562	0.063	0.63
		Right Tilted	0.317	0.023	0.34
		Left Cheek	0.507	0.022	0.53
		Left Tilted	0.295	0.031	0.33
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant7	Right Cheek	0.562	0.084	0.65
		Right Tilted	0.317	0.041	0.36
		Left Cheek	0.507	0.165	0.67
		Left Tilted	0.295	0.052	0.35
LTE band12 Ant1	FR1 n77 Ant2	Right Cheek	0.278	0.039	0.32
		Right Tilted	0.156	0.021	0.18
		Left Cheek	0.333	0.062	0.40
		Left Tilted	0.149	0.015	0.16
LTE band12 Ant1	FR1 n77 Ant5	Right Cheek	0.278	0.037	0.32
		Right Tilted	0.156	0.022	0.18
		Left Cheek	0.333	0.015	0.35
		Left Tilted	0.149	0.014	0.16
LTE band12 Ant1	FR1 n77 Ant7	Right Cheek	0.278	0.114	0.39
		Right Tilted	0.156	0.035	0.19
		Left Cheek	0.333	0.078	0.41
		Left Tilted	0.149	0.116	0.27
LTE band14 Ant1	FR1 n77 Ant2	Right Cheek	0.398	0.039	0.44
		Right Tilted	0.246	0.021	0.27
		Left Cheek	0.367	0.062	0.43
		Left Tilted	0.261	0.015	0.28
LTE band14 Ant1	FR1 n77 Ant5	Right Cheek	0.398	0.037	0.44
		Right Tilted	0.246	0.022	0.27
		Left Cheek	0.367	0.015	0.38
		Left Tilted	0.261	0.014	0.28
LTE band14 Ant1	FR1 n77 Ant7	Right Cheek	0.398	0.114	0.51
		Right Tilted	0.246	0.035	0.28
		Left Cheek	0.367	0.078	0.45
		Left Tilted	0.261	0.116	0.38
LTE band5 Ant1	FR1 n77 Ant2	Right Cheek	0.562	0.039	0.60
		Right Tilted	0.317	0.021	0.34
		Left Cheek	0.507	0.062	0.57
		Left Tilted	0.295	0.015	0.31
LTE band5 Ant1	FR1 n77 Ant5	Right Cheek	0.562	0.037	0.60
		Right Tilted	0.317	0.022	0.34
		Left Cheek	0.507	0.015	0.52
		Left Tilted	0.295	0.014	0.31
LTE band5 Ant1	FR1 n77 Ant7	Right Cheek	0.562	0.114	0.68
		Right Tilted	0.317	0.035	0.35
		Left Cheek	0.507	0.078	0.59
		Left Tilted	0.295	0.116	0.41
LTE band66 Ant1	FR1 n77 Ant2	Right Cheek	0.211	0.039	0.25
		Right Tilted	0.231	0.021	0.25
		Left Cheek	0.198	0.062	0.26
		Left Tilted	0.212	0.015	0.23
LTE band66 Ant1	FR1 n77 Ant5	Right Cheek	0.211	0.037	0.25



		Right Tilted	0.231	0.022	0.25
		Left Cheek	0.198	0.015	0.21
		Left Tilted	0.212	0.014	0.23
LTE band66 Ant1	FR1 n77 Ant7	Right Cheek	0.211	0.114	0.33
		Right Tilted	0.231	0.035	0.27
		Left Cheek	0.198	0.078	0.28
		Left Tilted	0.212	0.116	0.33
LTE band7 Ant2	FR1 n77 Ant2	Right Cheek	0.273	0.039	0.31
		Right Tilted	0.081	0.021	0.10
		Left Cheek	0.176	0.062	0.24
		Left Tilted	0.090	0.015	0.11
LTE band7 Ant2	FR1 n77 Ant5	Right Cheek	0.273	0.037	0.31
		Right Tilted	0.081	0.022	0.10
		Left Cheek	0.176	0.015	0.19
		Left Tilted	0.090	0.014	0.10
LTE band7 Ant2	FR1 n77 Ant7	Right Cheek	0.273	0.114	0.39
		Right Tilted	0.081	0.035	0.12
		Left Cheek	0.176	0.078	0.25
		Left Tilted	0.090	0.116	0.21
LTE band13 Ant1	FR1 n77 Ant2	Right Cheek	0.330	0.039	0.37
		Right Tilted	0.211	0.021	0.23
		Left Cheek	0.302	0.062	0.36
		Left Tilted	0.212	0.015	0.23
LTE band13 Ant1	FR1 n77 Ant5	Right Cheek	0.330	0.037	0.37
		Right Tilted	0.211	0.022	0.23
		Left Cheek	0.302	0.015	0.32
		Left Tilted	0.212	0.014	0.23
LTE band13 Ant1	FR1 n77 Ant7	Right Cheek	0.330	0.114	0.44
		Right Tilted	0.211	0.035	0.25
		Left Cheek	0.302	0.078	0.38
		Left Tilted	0.212	0.116	0.33
LTE band71 Ant1	FR1 n77 Ant2	Right Cheek	0.281	0.039	0.32
		Right Tilted	0.066	0.021	0.09
		Left Cheek	0.201	0.062	0.26
		Left Tilted	0.092	0.015	0.11
LTE band71 Ant1	FR1 n77 Ant5	Right Cheek	0.281	0.037	0.32
		Right Tilted	0.066	0.022	0.09
		Left Cheek	0.201	0.015	0.22
		Left Tilted	0.092	0.014	0.11
LTE band71 Ant1	FR1 n77 Ant7	Right Cheek	0.281	0.114	0.40
		Right Tilted	0.066	0.035	0.10
		Left Cheek	0.201	0.078	0.28
		Left Tilted	0.092	0.116	0.21
LTE band25 Ant1	FR1 n77 Ant2	Right Cheek	0.092	0.039	0.13
		Right Tilted	0.082	0.021	0.10
		Left Cheek	0.100	0.062	0.16
		Left Tilted	0.089	0.015	0.10
LTE band25 Ant1	FR1 n77 Ant5	Right Cheek	0.092	0.037	0.13
		Right Tilted	0.082	0.022	0.10
		Left Cheek	0.100	0.015	0.12
		Left Tilted	0.089	0.014	0.10
LTE band25 Ant1	FR1 n77 Ant7	Right Cheek	0.092	0.114	0.21
		Right Tilted	0.082	0.035	0.12
		Left Cheek	0.100	0.078	0.18
		Left Tilted	0.089	0.116	0.21



For ENDC simultaneous

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band7 Ant2	FR1 n66 Ant1	Right Cheek	0.273	0.195	0.225	0.473	0.037	0.69	0.94	0.51
		Right Tilted	0.081	0.219	0.141	0.155	0.026	0.44	0.46	0.33
		Left Cheek	0.176	0.214	0.296	0.676	0.052	0.69	1.07	0.44
		Left Tilted	0.090	0.217	0.126	0.178	0.030	0.43	0.49	0.34
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 All Bands(n38,41) Ant2	Right Cheek	0.430	0.261	0.225	0.473	0.037	0.92	1.16	0.73
		Right Tilted	0.317	0.063	0.141	0.155	0.026	0.52	0.54	0.41
		Left Cheek	0.384	0.177	0.296	0.676	0.052	0.86	1.24	0.61
		Left Tilted	0.295	0.080	0.126	0.178	0.030	0.50	0.55	0.41
LTE band12 Ant1	FR1 n66 Ant4	Right Cheek	0.278	0.546	0.225	0.473	0.037	1.05	1.30	0.86
		Right Tilted	0.156	0.488	0.141	0.155	0.026	0.79	0.80	0.67
		Left Cheek	0.333	0.395	0.296	0.676	0.052	1.02	1.40	0.78
		Left Tilted	0.149	0.430	0.126	0.178	0.030	0.71	0.76	0.61
LTE band12 Ant1	FR1 n77 Ant6	Right Cheek	0.278	0.545	0.225	0.473	0.037	1.05	1.30	0.86
		Right Tilted	0.156	0.210	0.141	0.155	0.026	0.51	0.52	0.39
		Left Cheek	0.333	0.470	0.296	0.676	0.052	1.10	1.48	0.86
		Left Tilted	0.149	0.207	0.126	0.178	0.030	0.48	0.53	0.39
LTE band14 Ant1	FR1 n2 Ant4	Right Cheek	0.398	0.480	0.225	0.473	0.037	1.10	1.35	0.92
		Right Tilted	0.246	0.425	0.141	0.155	0.026	0.81	0.83	0.70
		Left Cheek	0.367	0.333	0.296	0.676	0.052	1.00	1.38	0.75
		Left Tilted	0.261	0.444	0.126	0.178	0.030	0.83	0.88	0.74
LTE band14 Ant1	FR1 n66 Ant4	Right Cheek	0.398	0.546	0.225	0.473	0.037	1.17	1.42	0.98
		Right Tilted	0.246	0.488	0.141	0.155	0.026	0.88	0.89	0.76
		Left Cheek	0.367	0.395	0.296	0.676	0.052	1.06	1.44	0.81
		Left Tilted	0.261	0.430	0.126	0.178	0.030	0.82	0.87	0.72
LTE band14 Ant1	FR1 n77 Ant6	Right Cheek	0.398	0.545	0.225	0.473	0.037	1.17	1.42	0.98
		Right Tilted	0.246	0.210	0.141	0.155	0.026	0.60	0.61	0.48
		Left Cheek	0.367	0.470	0.296	0.676	0.052	1.13	1.51	0.89
		Left Tilted	0.261	0.207	0.126	0.178	0.030	0.59	0.65	0.50
LTE band2 Ant4	FR1 n5 Ant1	Right Cheek	0.437	0.543	0.225	0.473	0.037	1.21	1.45	1.02
		Right Tilted	0.456	0.291	0.141	0.155	0.026	0.89	0.90	0.77
		Left Cheek	0.288	0.478	0.296	0.676	0.052	1.06	1.44	0.82
		Left Tilted	0.443	0.308	0.126	0.178	0.030	0.88	0.93	0.78
LTE band2 Ant4	FR1 n66 Ant1	Right Cheek	0.437	0.195	0.225	0.473	0.037	0.86	1.11	0.67
		Right Tilted	0.456	0.219	0.141	0.155	0.026	0.82	0.83	0.70
		Left Cheek	0.288	0.214	0.296	0.676	0.052	0.80	1.18	0.55
		Left Tilted	0.443	0.217	0.126	0.178	0.030	0.79	0.84	0.69
LTE band5 Ant1	FR1 n66 Ant4	Right Cheek	0.430	0.546	0.225	0.473	0.037	1.20	1.45	1.01
		Right Tilted	0.317	0.488	0.141	0.155	0.026	0.95	0.96	0.83
		Left Cheek	0.384	0.395	0.296	0.676	0.052	1.08	1.46	0.83
		Left Tilted	0.295	0.430	0.126	0.178	0.030	0.85	0.90	0.76
LTE band5 Ant1	FR1 n77 Ant6	Right Cheek	0.430	0.545	0.225	0.473	0.037	1.20	1.45	1.01
		Right Tilted	0.317	0.210	0.141	0.155	0.026	0.67	0.68	0.55
		Left Cheek	0.384	0.470	0.296	0.676	0.052	1.15	1.53	0.91
		Left Tilted	0.295	0.207	0.126	0.178	0.030	0.63	0.68	0.53
LTE band66 Ant4	FR1 n5 Ant1	Right Cheek	0.501	0.543	0.225	0.473	0.037	1.27	1.52	1.08
		Right Tilted	0.406	0.291	0.141	0.155	0.026	0.84	0.85	0.72
		Left Cheek	0.338	0.478	0.296	0.676	0.052	1.11	1.49	0.87
		Left Tilted	0.348	0.308	0.126	0.178	0.030	0.78	0.83	0.69
LTE band66 Ant1	FR1 n77 Ant6	Right Cheek	0.211	0.545	0.225	0.473	0.037	0.98	1.23	0.79
		Right Tilted	0.231	0.210	0.141	0.155	0.026	0.58	0.60	0.47
		Left Cheek	0.198	0.470	0.296	0.676	0.052	0.96	1.34	0.72



FCC SAR Test Report

Report No. : FA462605

		Left Tilted	0.212	0.207	0.126	0.178	0.030	0.55	0.60	0.45
LTE band66 Ant4	FR1 n7 Ant2	Right Cheek	0.501	0.238	0.225	0.473	0.037	0.96	1.21	0.78
		Right Tilted	0.406	0.083	0.141	0.155	0.026	0.63	0.64	0.52
		Left Cheek	0.338	0.182	0.296	0.676	0.052	0.82	1.20	0.57
		Left Tilted	0.348	0.085	0.126	0.178	0.030	0.56	0.61	0.46
LTE band7 Ant2	FR1 n2 Ant4	Right Cheek	0.273	0.480	0.225	0.473	0.037	0.98	1.23	0.79
		Right Tilted	0.081	0.425	0.141	0.155	0.026	0.65	0.66	0.53
		Left Cheek	0.176	0.333	0.296	0.676	0.052	0.81	1.19	0.56
		Left Tilted	0.090	0.444	0.126	0.178	0.030	0.66	0.71	0.56
LTE band2 Ant4	FR1 n7 Ant2	Right Cheek	0.437	0.238	0.225	0.473	0.037	0.90	1.15	0.71
		Right Tilted	0.456	0.083	0.141	0.155	0.026	0.68	0.69	0.57
		Left Cheek	0.288	0.182	0.296	0.676	0.052	0.77	1.15	0.52
		Left Tilted	0.443	0.085	0.126	0.178	0.030	0.65	0.71	0.56
LTE band66 Ant4	FR1 n71 Ant1	Right Cheek	0.501	0.281	0.225	0.473	0.037	1.01	1.26	0.82
		Right Tilted	0.406	0.066	0.141	0.155	0.026	0.61	0.63	0.50
		Left Cheek	0.338	0.201	0.296	0.676	0.052	0.84	1.22	0.59
		Left Tilted	0.348	0.092	0.126	0.178	0.030	0.57	0.62	0.47
LTE band2 Ant4	FR1 n71 Ant1	Right Cheek	0.437	0.281	0.225	0.473	0.037	0.94	1.19	0.76
		Right Tilted	0.456	0.066	0.141	0.155	0.026	0.66	0.68	0.55
		Left Cheek	0.288	0.201	0.296	0.676	0.052	0.79	1.17	0.54
		Left Tilted	0.443	0.092	0.126	0.178	0.030	0.66	0.71	0.57
LTE band66 Ant1	FR1 n25 Ant4	Right Cheek	0.211	0.480	0.225	0.473	0.037	0.92	1.16	0.73
		Right Tilted	0.231	0.425	0.141	0.155	0.026	0.80	0.81	0.68
		Left Cheek	0.198	0.333	0.296	0.676	0.052	0.83	1.21	0.58
		Left Tilted	0.212	0.444	0.126	0.178	0.030	0.78	0.83	0.69
LTE band13 Ant1	FR1 n77 Ant6	Right Cheek	0.330	0.545	0.225	0.473	0.037	1.10	1.35	0.91
		Right Tilted	0.211	0.210	0.141	0.155	0.026	0.56	0.58	0.45
		Left Cheek	0.302	0.470	0.296	0.676	0.052	1.07	1.45	0.82
		Left Tilted	0.212	0.207	0.126	0.178	0.030	0.55	0.60	0.45
LTE band13 Ant1	FR1 n66 Ant4	Right Cheek	0.330	0.546	0.225	0.473	0.037	1.10	1.35	0.91
		Right Tilted	0.211	0.488	0.141	0.155	0.026	0.84	0.85	0.73
		Left Cheek	0.302	0.395	0.296	0.676	0.052	0.99	1.37	0.75
		Left Tilted	0.212	0.430	0.126	0.178	0.030	0.77	0.82	0.67
LTE band48 Ant6	FR1 n5 Ant1	Right Cheek	0.305	0.543	0.225	0.473	0.037	1.07	1.32	0.89
		Right Tilted	0.211	0.291	0.141	0.155	0.026	0.64	0.66	0.53
		Left Cheek	0.354	0.478	0.296	0.676	0.052	1.13	1.51	0.88
		Left Tilted	0.200	0.308	0.126	0.178	0.030	0.63	0.69	0.54
LTE band71 Ant1	FR1 n2 Ant4	Right Cheek	0.281	0.480	0.225	0.473	0.037	0.99	1.23	0.80
		Right Tilted	0.066	0.425	0.141	0.155	0.026	0.63	0.65	0.52
		Left Cheek	0.201	0.333	0.296	0.676	0.052	0.83	1.21	0.59
		Left Tilted	0.092	0.444	0.126	0.178	0.030	0.66	0.71	0.57
LTE band71 Ant1	FR1 n66 Ant4	Right Cheek	0.281	0.546	0.225	0.473	0.037	1.05	1.30	0.86
		Right Tilted	0.066	0.488	0.141	0.155	0.026	0.70	0.71	0.58
		Left Cheek	0.201	0.395	0.296	0.676	0.052	0.89	1.27	0.65
		Left Tilted	0.092	0.430	0.126	0.178	0.030	0.65	0.70	0.55
LTE band71 Ant1	FR1 n77 Ant6	Right Cheek	0.281	0.545	0.225	0.473	0.037	1.05	1.30	0.86
		Right Tilted	0.066	0.210	0.141	0.155	0.026	0.42	0.43	0.30
		Left Cheek	0.201	0.470	0.296	0.676	0.052	0.97	1.35	0.72
		Left Tilted	0.092	0.207	0.126	0.178	0.030	0.43	0.48	0.33
LTE band12 Ant1	FR1 n25 Ant4	Right Cheek	0.278	0.480	0.225	0.473	0.037	0.98	1.23	0.80
		Right Tilted	0.156	0.425	0.141	0.155	0.026	0.72	0.74	0.61
		Left Cheek	0.333	0.333	0.296	0.676	0.052	0.96	1.34	0.72
		Left Tilted	0.149	0.444	0.126	0.178	0.030	0.72	0.77	0.62
LTE band25 Ant1	FR1 n77 Ant6	Right Cheek	0.092	0.545	0.225	0.473	0.037	0.86	1.11	0.67
		Right Tilted	0.082	0.210	0.141	0.155	0.026	0.43	0.45	0.32
		Left Cheek	0.100	0.470	0.296	0.676	0.052	0.87	1.25	0.62



		Left Tilted	0.089	0.207	0.126	0.178	0.030	0.42	0.47	0.33
LTE band26 Ant1	FR1 n25 Ant4	Right Cheek	0.430	0.480	0.225	0.473	0.037	1.14	1.38	0.95
		Right Tilted	0.317	0.425	0.141	0.155	0.026	0.88	0.90	0.77
		Left Cheek	0.384	0.333	0.296	0.676	0.052	1.01	1.39	0.77
		Left Tilted	0.295	0.444	0.126	0.178	0.030	0.87	0.92	0.77
LTE band48 Ant6	FR1 n66 Ant1	Right Cheek	0.305	0.195	0.225	0.473	0.037	0.73	0.97	0.54
		Right Tilted	0.211	0.219	0.141	0.155	0.026	0.57	0.59	0.46
		Left Cheek	0.354	0.214	0.296	0.676	0.052	0.86	1.24	0.62
		Left Tilted	0.200	0.217	0.126	0.178	0.030	0.54	0.60	0.45
LTE band7 Ant2	FR1 n77 Ant6	Right Cheek	0.273	0.545	0.225	0.473	0.037	1.04	1.29	0.86
		Right Tilted	0.081	0.210	0.141	0.155	0.026	0.43	0.45	0.32
		Left Cheek	0.176	0.470	0.296	0.676	0.052	0.94	1.32	0.70
		Left Tilted	0.090	0.207	0.126	0.178	0.030	0.42	0.48	0.33
LTE band13 Ant1	FR1 n25 Ant4	Right Cheek	0.330	0.480	0.225	0.473	0.037	1.04	1.28	0.85
		Right Tilted	0.211	0.425	0.141	0.155	0.026	0.78	0.79	0.66
		Left Cheek	0.302	0.333	0.296	0.676	0.052	0.93	1.31	0.69
		Left Tilted	0.212	0.444	0.126	0.178	0.030	0.78	0.83	0.69

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Right Cheek	0.562	0.063	0.225	0.473	0.037	0.85	1.10	0.66
		Right Tilted	0.317	0.016	0.141	0.155	0.026	0.47	0.49	0.36
		Left Cheek	0.507	0.051	0.296	0.676	0.052	0.85	1.23	0.61
		Left Tilted	0.295	0.007	0.126	0.178	0.030	0.43	0.48	0.33
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Right Cheek	0.562	0.063	0.225	0.473	0.037	0.85	1.10	0.66
		Right Tilted	0.317	0.023	0.141	0.155	0.026	0.48	0.50	0.37
		Left Cheek	0.507	0.022	0.296	0.676	0.052	0.83	1.21	0.58
		Left Tilted	0.295	0.031	0.126	0.178	0.030	0.45	0.50	0.36
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant7	Right Cheek	0.562	0.084	0.225	0.473	0.037	0.87	1.12	0.68
		Right Tilted	0.317	0.041	0.141	0.155	0.026	0.50	0.51	0.38
		Left Cheek	0.507	0.165	0.296	0.676	0.052	0.97	1.35	0.72
		Left Tilted	0.295	0.052	0.126	0.178	0.030	0.47	0.53	0.38
LTE band12 Ant1	FR1 n77 Ant2	Right Cheek	0.278	0.039	0.225	0.473	0.037	0.54	0.79	0.35
		Right Tilted	0.156	0.021	0.141	0.155	0.026	0.32	0.33	0.20
		Left Cheek	0.333	0.062	0.296	0.676	0.052	0.69	1.07	0.45
		Left Tilted	0.149	0.015	0.126	0.178	0.030	0.29	0.34	0.19
LTE band12 Ant1	FR1 n77 Ant5	Right Cheek	0.278	0.037	0.225	0.473	0.037	0.54	0.79	0.35
		Right Tilted	0.156	0.022	0.141	0.155	0.026	0.32	0.33	0.20
		Left Cheek	0.333	0.015	0.296	0.676	0.052	0.64	1.02	0.40
		Left Tilted	0.149	0.014	0.126	0.178	0.030	0.29	0.34	0.19
LTE band12 Ant1	FR1 n77 Ant7	Right Cheek	0.278	0.114	0.225	0.473	0.037	0.62	0.87	0.43
		Right Tilted	0.156	0.035	0.141	0.155	0.026	0.33	0.35	0.22
		Left Cheek	0.333	0.078	0.296	0.676	0.052	0.71	1.09	0.46
		Left Tilted	0.149	0.116	0.126	0.178	0.030	0.39	0.44	0.30
LTE band14 Ant1	FR1 n77 Ant2	Right Cheek	0.398	0.039	0.225	0.473	0.037	0.66	0.91	0.47
		Right Tilted	0.246	0.021	0.141	0.155	0.026	0.41	0.42	0.29
		Left Cheek	0.367	0.062	0.296	0.676	0.052	0.73	1.11	0.48
		Left Tilted	0.261	0.015	0.126	0.178	0.030	0.40	0.45	0.31
LTE band14 Ant1	FR1 n77 Ant5	Right Cheek	0.398	0.037	0.225	0.473	0.037	0.66	0.91	0.47
		Right Tilted	0.246	0.022	0.141	0.155	0.026	0.41	0.42	0.29
		Left Cheek	0.367	0.015	0.296	0.676	0.052	0.68	1.06	0.43
		Left Tilted	0.261	0.014	0.126	0.178	0.030	0.40	0.45	0.31
LTE band14 Ant1	FR1 n77 Ant7	Right Cheek	0.398	0.114	0.225	0.473	0.037	0.74	0.99	0.55
		Right Tilted	0.246	0.035	0.141	0.155	0.026	0.42	0.44	0.31



		Left Cheek	0.367	0.078	0.296	0.676	0.052	0.74	1.12	0.50
		Left Tilted	0.261	0.116	0.126	0.178	0.030	0.50	0.56	0.41
LTE band5 Ant1	FR1 n77 Ant2	Right Cheek	0.562	0.039	0.225	0.473	0.037	0.83	1.07	0.64
		Right Tilted	0.317	0.021	0.141	0.155	0.026	0.48	0.49	0.36
LTE band5 Ant1	FR1 n77 Ant5	Left Cheek	0.507	0.062	0.296	0.676	0.052	0.87	1.25	0.62
		Left Tilted	0.295	0.015	0.126	0.178	0.030	0.44	0.49	0.34
LTE band5 Ant1	FR1 n77 Ant7	Right Cheek	0.562	0.037	0.225	0.473	0.037	0.82	1.07	0.64
		Right Tilted	0.317	0.022	0.141	0.155	0.026	0.48	0.49	0.37
LTE band5 Ant1	FR1 n77 Ant2	Left Cheek	0.507	0.015	0.296	0.676	0.052	0.82	1.20	0.57
		Left Tilted	0.295	0.014	0.126	0.178	0.030	0.44	0.49	0.34
LTE band5 Ant1	FR1 n77 Ant5	Right Cheek	0.562	0.114	0.225	0.473	0.037	0.90	1.15	0.71
		Right Tilted	0.317	0.035	0.141	0.155	0.026	0.49	0.51	0.38
LTE band5 Ant1	FR1 n77 Ant7	Left Cheek	0.507	0.078	0.296	0.676	0.052	0.88	1.26	0.64
		Left Tilted	0.295	0.116	0.126	0.178	0.030	0.54	0.59	0.44
LTE band66 Ant1	FR1 n77 Ant2	Right Cheek	0.211	0.039	0.225	0.473	0.037	0.48	0.72	0.29
		Right Tilted	0.231	0.021	0.141	0.155	0.026	0.39	0.41	0.28
LTE band66 Ant1	FR1 n77 Ant5	Left Cheek	0.198	0.062	0.296	0.676	0.052	0.56	0.94	0.31
		Left Tilted	0.212	0.015	0.126	0.178	0.030	0.35	0.41	0.26
LTE band66 Ant1	FR1 n77 Ant7	Right Cheek	0.211	0.037	0.225	0.473	0.037	0.47	0.72	0.29
		Right Tilted	0.231	0.022	0.141	0.155	0.026	0.39	0.41	0.28
LTE band66 Ant1	FR1 n77 Ant2	Left Cheek	0.198	0.015	0.296	0.676	0.052	0.51	0.89	0.27
		Left Tilted	0.212	0.014	0.126	0.178	0.030	0.35	0.40	0.26
LTE band66 Ant1	FR1 n77 Ant5	Right Cheek	0.211	0.114	0.225	0.473	0.037	0.55	0.80	0.36
		Right Tilted	0.231	0.035	0.141	0.155	0.026	0.41	0.42	0.29
LTE band66 Ant1	FR1 n77 Ant7	Left Cheek	0.198	0.078	0.296	0.676	0.052	0.57	0.95	0.33
		Left Tilted	0.212	0.116	0.126	0.178	0.030	0.45	0.51	0.36
LTE band7 Ant2	FR1 n77 Ant2	Right Cheek	0.273	0.039	0.225	0.473	0.037	0.54	0.79	0.35
		Right Tilted	0.081	0.021	0.141	0.155	0.026	0.24	0.26	0.13
LTE band7 Ant2	FR1 n77 Ant5	Left Cheek	0.176	0.062	0.296	0.676	0.052	0.53	0.91	0.29
		Left Tilted	0.090	0.015	0.126	0.178	0.030	0.23	0.28	0.14
LTE band7 Ant2	FR1 n77 Ant7	Right Cheek	0.273	0.037	0.225	0.473	0.037	0.54	0.78	0.35
		Right Tilted	0.081	0.022	0.141	0.155	0.026	0.24	0.26	0.13
LTE band7 Ant2	FR1 n77 Ant2	Left Cheek	0.176	0.015	0.296	0.676	0.052	0.49	0.87	0.24
		Left Tilted	0.090	0.014	0.126	0.178	0.030	0.23	0.28	0.13
LTE band7 Ant2	FR1 n77 Ant5	Right Cheek	0.273	0.114	0.225	0.473	0.037	0.61	0.86	0.42
		Right Tilted	0.081	0.035	0.141	0.155	0.026	0.26	0.27	0.14
LTE band7 Ant2	FR1 n77 Ant7	Left Cheek	0.176	0.078	0.296	0.676	0.052	0.55	0.93	0.31
		Left Tilted	0.090	0.116	0.126	0.178	0.030	0.33	0.38	0.24
LTE band13 Ant1	FR1 n77 Ant2	Right Cheek	0.330	0.039	0.225	0.473	0.037	0.59	0.84	0.41
		Right Tilted	0.211	0.021	0.141	0.155	0.026	0.37	0.39	0.26
LTE band13 Ant1	FR1 n77 Ant5	Left Cheek	0.302	0.062	0.296	0.676	0.052	0.66	1.04	0.42
		Left Tilted	0.212	0.015	0.126	0.178	0.030	0.35	0.41	0.26
LTE band13 Ant1	FR1 n77 Ant7	Right Cheek	0.330	0.037	0.225	0.473	0.037	0.59	0.84	0.40
		Right Tilted	0.211	0.022	0.141	0.155	0.026	0.37	0.39	0.26
LTE band13 Ant1	FR1 n77 Ant2	Left Cheek	0.302	0.015	0.296	0.676	0.052	0.61	0.99	0.37
		Left Tilted	0.212	0.014	0.126	0.178	0.030	0.35	0.40	0.26
LTE band13 Ant1	FR1 n77 Ant5	Right Cheek	0.330	0.114	0.225	0.473	0.037	0.67	0.92	0.48
		Right Tilted	0.211	0.035	0.141	0.155	0.026	0.39	0.40	0.27
LTE band13 Ant1	FR1 n77 Ant7	Left Cheek	0.302	0.078	0.296	0.676	0.052	0.68	1.06	0.43
		Left Tilted	0.212	0.116	0.126	0.178	0.030	0.45	0.51	0.36
LTE band71 Ant1	FR1 n77 Ant2	Right Cheek	0.281	0.039	0.225	0.473	0.037	0.55	0.79	0.36
		Right Tilted	0.066	0.021	0.141	0.155	0.026	0.23	0.24	0.11
LTE band71 Ant1	FR1 n77 Ant5	Left Cheek	0.201	0.062	0.296	0.676	0.052	0.56	0.94	0.32
		Left Tilted	0.092	0.015	0.126	0.178	0.030	0.23	0.29	0.14
LTE band71 Ant1	FR1 n77 Ant7	Right Cheek	0.281	0.037	0.225	0.473	0.037	0.54	0.79	0.36
		Right Tilted	0.066	0.022	0.141	0.155	0.026	0.23	0.24	0.11



		Left Cheek	0.201	0.015	0.296	0.676	0.052	0.51	0.89	0.27
		Left Tilted	0.092	0.014	0.126	0.178	0.030	0.23	0.28	0.14
LTE band71 Ant1	FR1 n77 Ant7	Right Cheek	0.281	0.114	0.225	0.473	0.037	0.62	0.87	0.43
		Right Tilted	0.066	0.035	0.141	0.155	0.026	0.24	0.26	0.13
		Left Cheek	0.201	0.078	0.296	0.676	0.052	0.58	0.96	0.33
		Left Tilted	0.092	0.116	0.126	0.178	0.030	0.33	0.39	0.24
		Right Cheek	0.092	0.039	0.225	0.473	0.037	0.36	0.60	0.17
LTE band25 Ant1	FR1 n77 Ant2	Right Tilted	0.082	0.021	0.141	0.155	0.026	0.24	0.26	0.13
		Left Cheek	0.100	0.062	0.296	0.676	0.052	0.46	0.84	0.21
		Left Tilted	0.089	0.015	0.126	0.178	0.030	0.23	0.28	0.13
		Right Cheek	0.092	0.037	0.225	0.473	0.037	0.35	0.60	0.17
LTE band25 Ant1	FR1 n77 Ant5	Right Tilted	0.082	0.022	0.141	0.155	0.026	0.25	0.26	0.13
		Left Cheek	0.100	0.015	0.296	0.676	0.052	0.41	0.79	0.17
		Left Tilted	0.089	0.014	0.126	0.178	0.030	0.23	0.28	0.13
		Right Cheek	0.092	0.114	0.225	0.473	0.037	0.43	0.68	0.24
LTE band25 Ant1	FR1 n77 Ant7	Right Tilted	0.082	0.035	0.141	0.155	0.026	0.26	0.27	0.14
		Left Cheek	0.100	0.078	0.296	0.676	0.052	0.47	0.85	0.23
		Left Tilted	0.089	0.116	0.126	0.178	0.030	0.33	0.38	0.24
		Right Cheek	0.092	0.037	0.225	0.473	0.037	0.35	0.60	0.17



15.2 Hotspot Exposure Conditions

<Flip Open>

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4
		WWAN	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All Bands Ant1	Front	1.111	0.040	0.148	0.024	1.15	1.26	1.14
	Back	1.080	0.130	0.240	0.050	1.21	1.32	1.13
	Left side	0.751	0.090	0.152	0.036	0.84	0.90	0.79
	Right side	0.417		0.054	0.017	0.42	0.47	0.43
	Top side		0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	1.202				1.20	1.20	1.20
WWAN All Bands Ant2	Front	0.573	0.040	0.148	0.024	0.61	0.72	0.60
	Back	1.046	0.130	0.240	0.050	1.18	1.29	1.10
	Left side	0.107	0.090	0.152	0.036	0.20	0.26	0.14
	Right side	0.989		0.054	0.017	0.99	1.04	1.01
	Top side		0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.287				0.29	0.29	0.29
WWAN All Bands Ant4	Front	0.195	0.040	0.148	0.024	0.24	0.34	0.22
	Back	1.072	0.130	0.240	0.050	1.20	1.31	1.12
	Left side	0.061	0.090	0.152	0.036	0.15	0.21	0.10
	Right side	1.075		0.054	0.017	1.08	1.13	1.09
	Top side	0.452	0.307	0.335	0.091	0.76	0.79	0.54
	Bottom side					0.00	0.00	0.00
WWAN All Bands Ant5	Front	0.178	0.040	0.148	0.024	0.22	0.33	0.20
	Back	0.931	0.130	0.240	0.050	1.06	1.17	0.98
	Left side	0.218	0.090	0.152	0.036	0.31	0.37	0.25
	Right side	0.715		0.054	0.017	0.72	0.77	0.73
	Top side	0.294	0.307	0.335	0.091	0.60	0.63	0.39
	Bottom side	0.192				0.19	0.19	0.19
WWAN All Bands Ant6	Front	0.322	0.040	0.148	0.024	0.36	0.47	0.35
	Back	0.845	0.130	0.240	0.050	0.98	1.09	0.90
	Left side	1.116	0.090	0.152	0.036	1.21	1.27	1.15
	Right side	0.117		0.054	0.017	0.12	0.17	0.13
	Top side	1.067	0.307	0.335	0.091	1.37	1.40	1.16
	Bottom side					0.00	0.00	0.00
WWAN All Bands Ant7	Front	0.220	0.040	0.148	0.024	0.26	0.37	0.24
	Back	1.223	0.130	0.240	0.050	1.35	1.46	1.27
	Left side	1.219	0.090	0.152	0.036	1.31	1.37	1.26
	Right side	0.152		0.054	0.017	0.15	0.21	0.17
	Top side		0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.155				0.16	0.16	0.16

For ENDC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE band7 Ant2	FR1 n66 Ant1	Front	0.462	0.697	0.040	0.148	0.024	1.20	1.31	1.18	
		Back	0.656	0.619	0.130	0.240	0.050	1.41	1.52	1.33	
		Left side	0.069	0.307	0.090	0.152	0.036	0.47	0.53	0.41	
		Right side	0.613	0.098		0.054	0.017	0.71	0.77	0.73	
		Top side			0.307	0.335	0.091	0.31	0.34	0.09	
		Bottom side	0.140	0.927				1.07	1.07	1.07	
LTE All	FR1 All	Front	0.788	0.521	0.040	0.148	0.024	1.35	1.46	1.33	



FCC SAR Test Report

Report No. : FA462605

Bands(2,4,5,12,25,26,66,71) Ant1	Bands(n38,41) Ant2	Back	0.743	0.561	0.130	0.240	0.050	1.43	1.54	1.35	
		Left side	0.738	0.058	0.090	0.152	0.036	0.89	0.95	0.83	
		Right side	0.417	0.894		0.054	0.017	1.31	1.37	1.33	
		Top side			0.307	0.335	0.091	0.31	0.34	0.09	
		Bottom side	1.202	0.223				1.43	1.43	1.43	
LTE band12 Ant1	FR1 n66 Ant4	Front	0.663	0.110	0.040	0.148	0.024	0.81	0.92	0.80	
		Back	0.743	0.523	0.130	0.240	0.050	1.40	1.51	1.32	
		Left side	0.738		0.090	0.152	0.036	0.83	0.89	0.77	
		Right side	0.417	0.314		0.054	0.017	0.73	0.79	0.75	
		Top side		0.446	0.307	0.335	0.091	0.75	0.78	0.54	
		Bottom side	0.069				0.07	0.07	0.07		
LTE band12 Ant1	FR1 n77 Ant6	Front	0.663	0.322	0.040	0.148	0.024	1.03	1.13	1.01	
		Back	0.743	0.407	0.130	0.240	0.050	1.28	1.39	1.20	
		Left side	0.738	0.590	0.090	0.152	0.036	1.42	1.48	1.36	
		Right side	0.417	0.117		0.054	0.017	0.53	0.59	0.55	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	0.069				0.07	0.07	0.07		
LTE band14 Ant1	FR1 n2 Ant4	Front	0.490		0.040	0.148	0.024	0.53	0.64	0.51	
		Back	0.475	0.527	0.130	0.240	0.050	1.13	1.24	1.05	
		Left side	0.239		0.090	0.152	0.036	0.33	0.39	0.28	
		Right side	0.226	0.287		0.054	0.017	0.51	0.57	0.53	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side	0.120				0.12	0.12	0.12		
LTE band14 Ant1	FR1 n66 Ant4	Front	0.490	0.110	0.040	0.148	0.024	0.64	0.75	0.62	
		Back	0.475	0.523	0.130	0.240	0.050	1.13	1.24	1.05	
		Left side	0.239		0.090	0.152	0.036	0.33	0.39	0.28	
		Right side	0.226	0.314		0.054	0.017	0.54	0.59	0.56	
		Top side		0.446	0.307	0.335	0.091	0.75	0.78	0.54	
		Bottom side	0.120				0.12	0.12	0.12		
LTE band14 Ant1	FR1 n77 Ant6	Front	0.490	0.322	0.040	0.148	0.024	0.85	0.96	0.84	
		Back	0.475	0.407	0.130	0.240	0.050	1.01	1.12	0.93	
		Left side	0.239	0.590	0.090	0.152	0.036	0.92	0.98	0.87	
		Right side	0.226	0.117		0.054	0.017	0.34	0.40	0.36	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	0.120				0.12	0.12	0.12		
LTE band2 Ant4	FR1 n5 Ant1	Front		0.762	0.040	0.148	0.024	0.80	0.91	0.79	
		Back	0.554	0.400	0.130	0.240	0.050	1.08	1.19	1.00	
		Left side		0.279	0.090	0.152	0.036	0.37	0.43	0.32	
		Right side	0.298	0.228		0.054	0.017	0.53	0.58	0.54	
		Top side	0.377		0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side		0.192			0.19	0.19	0.19		
LTE band2 Ant4	FR1 n66 Ant1	Front		0.697	0.040	0.148	0.024	0.74	0.85	0.72	
		Back	0.554	0.619	0.130	0.240	0.050	1.30	1.41	1.22	
		Left side		0.307	0.090	0.152	0.036	0.40	0.46	0.34	
		Right side	0.298	0.098		0.054	0.017	0.40	0.45	0.41	
		Top side	0.377		0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side		0.927			0.93	0.93	0.93		
LTE band5 Ant1	FR1 n66 Ant4	Front	0.681	0.110	0.040	0.148	0.024	0.83	0.94	0.82	
		Back	0.520	0.523	0.130	0.240	0.050	1.17	1.28	1.09	
		Left side	0.309		0.090	0.152	0.036	0.40	0.46	0.35	
		Right side	0.287	0.314		0.054	0.017	0.60	0.66	0.62	
		Top side		0.446	0.307	0.335	0.091	0.75	0.78	0.54	
		Bottom side	0.208				0.21	0.21	0.21		
LTE band5 Ant1	FR1 n77 Ant6	Front	0.681	0.322	0.040	0.148	0.024	1.04	1.15	1.03	
		Back	0.520	0.407	0.130	0.240	0.050	1.06	1.17	0.98	
		Left side	0.309	0.590	0.090	0.152	0.036	0.99	1.05	0.94	



FCC SAR Test Report

Report No. : FA462605

		Right side	0.287	0.117		0.054	0.017	0.40	0.46	0.42	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	0.208					0.21	0.21	0.21	
LTE band66 Ant4	FR1 n5 Ant1	Front	0.111	0.762	0.040	0.148	0.024	0.91	1.02	0.90	
		Back	0.557	0.400	0.130	0.240	0.050	1.09	1.20	1.01	
		Left side		0.279	0.090	0.152	0.036	0.37	0.43	0.32	
		Right side	0.287	0.228		0.054	0.017	0.52	0.57	0.53	
		Top side	0.452		0.307	0.335	0.091	0.76	0.79	0.54	
		Bottom side		0.192				0.19	0.19	0.19	
LTE band66 Ant1	FR1 n77 Ant6	Front	0.741	0.322	0.040	0.148	0.024	1.10	1.21	1.09	
		Back	0.743	0.407	0.130	0.240	0.050	1.28	1.39	1.20	
		Left side	0.283	0.590	0.090	0.152	0.036	0.96	1.03	0.91	
		Right side	0.083	0.117		0.054	0.017	0.20	0.25	0.22	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	1.195					1.20	1.20	1.20	
LTE band66 Ant4	FR1 n7 Ant2	Front	0.111	0.573	0.040	0.148	0.024	0.72	0.83	0.71	
		Back	0.557	0.865	0.130	0.240	0.050	1.55	1.66	1.47	5
		Left side		0.107	0.090	0.152	0.036	0.20	0.26	0.14	
		Right side	0.287	0.964		0.054	0.017	1.25	1.31	1.27	
		Top side	0.452		0.307	0.335	0.091	0.76	0.79	0.54	
		Bottom side		0.188				0.19	0.19	0.19	
LTE band7 Ant2	FR1 n2 Ant4	Front	0.462		0.040	0.148	0.024	0.50	0.61	0.49	
		Back	0.653	0.527	0.130	0.240	0.050	1.31	1.42	1.23	
		Left side	0.069		0.090	0.152	0.036	0.16	0.22	0.11	
		Right side	0.610	0.287		0.054	0.017	0.90	0.95	0.91	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side	0.140					0.14	0.14	0.14	
LTE band2 Ant4	FR1 n7 Ant2	Front		0.573	0.040	0.148	0.024	0.61	0.72	0.60	
		Back	0.554	0.865	0.130	0.240	0.050	1.55	1.66	1.47	6
		Left side		0.107	0.090	0.152	0.036	0.20	0.26	0.14	
		Right side	0.298	0.964		0.054	0.017	1.26	1.32	1.28	
		Top side	0.377		0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side		0.188				0.19	0.19	0.19	
LTE band7 Ant2	FR1 n77 Ant6	Front	0.462	0.322	0.040	0.148	0.024	0.82	0.93	0.81	
		Back	0.653	0.407	0.130	0.240	0.050	1.19	1.30	1.11	
		Left side	0.069	0.590	0.090	0.152	0.036	0.75	0.81	0.70	
		Right side	0.610	0.117		0.054	0.017	0.73	0.78	0.74	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	0.140					0.14	0.14	0.14	
LTE band66 Ant4	FR1 n71 Ant1	Front	0.111	0.716	0.040	0.148	0.024	0.87	0.98	0.85	
		Back	0.557	0.875	0.130	0.240	0.050	1.56	1.67	1.48	7
		Left side		0.751	0.090	0.152	0.036	0.84	0.90	0.79	
		Right side	0.287	0.282		0.054	0.017	0.57	0.62	0.59	
		Top side	0.452		0.307	0.335	0.091	0.76	0.79	0.54	
		Bottom side		0.088				0.09	0.09	0.09	
LTE band2 Ant4	FR1 n71 Ant1	Front		0.716	0.040	0.148	0.024	0.76	0.86	0.74	
		Back	0.554	0.875	0.130	0.240	0.050	1.56	1.67	1.48	8
		Left side		0.751	0.090	0.152	0.036	0.84	0.90	0.79	
		Right side	0.298	0.282		0.054	0.017	0.58	0.63	0.60	
		Top side	0.377		0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side		0.088				0.09	0.09	0.09	
LTE band66 Ant1	FR1 n25 Ant4	Front	0.741		0.040	0.148	0.024	0.78	0.89	0.77	
		Back	0.743	0.527	0.130	0.240	0.050	1.40	1.51	1.32	
		Left side	0.283		0.090	0.152	0.036	0.37	0.44	0.32	
		Right side	0.083	0.287		0.054	0.017	0.37	0.42	0.39	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	



LTE band13 Ant1	FR1 n77 Ant6	Bottom side	1.195					1.20	1.20	1.20	
		Front	0.491	0.322	0.040	0.148	0.024	0.85	0.96	0.84	
		Back	0.517	0.407	0.130	0.240	0.050	1.05	1.16	0.97	
		Left side	0.344	0.590	0.090	0.152	0.036	1.02	1.09	0.97	
		Right side	0.361	0.117		0.054	0.017	0.48	0.53	0.50	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
LTE band13 Ant1	FR1 n66 Ant4	Bottom side	0.190					0.19	0.19	0.19	
		Front	0.491	0.110	0.040	0.148	0.024	0.64	0.75	0.63	
		Back	0.517	0.523	0.130	0.240	0.050	1.17	1.28	1.09	
		Left side	0.344		0.090	0.152	0.036	0.43	0.50	0.38	
		Right side	0.361	0.314		0.054	0.017	0.68	0.73	0.69	
		Top side		0.446	0.307	0.335	0.091	0.75	0.78	0.54	
LTE band48 Ant6	FR1 n5 Ant1	Bottom side	0.190					0.19	0.19	0.19	
		Front	0.273	0.762	0.040	0.148	0.024	1.08	1.18	1.06	
		Back	0.739	0.400	0.130	0.240	0.050	1.27	1.38	1.19	
		Left side	0.865	0.279	0.090	0.152	0.036	1.23	1.30	1.18	
		Right side	0.077	0.228		0.054	0.017	0.31	0.36	0.32	
		Top side	0.908		0.307	0.335	0.091	1.22	1.24	1.00	
LTE band71 Ant1	FR1 n2 Ant4	Bottom side	0.077					0.08	0.08	0.08	
		Front	0.684		0.040	0.148	0.024	0.72	0.83	0.71	
		Back	0.660	0.527	0.130	0.240	0.050	1.32	1.43	1.24	
		Left side	0.694		0.090	0.152	0.036	0.78	0.85	0.73	
		Right side	0.256	0.287		0.054	0.017	0.54	0.60	0.56	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
LTE band71 Ant1	FR1 n66 Ant4	Bottom side	0.077					0.08	0.08	0.08	
		Front	0.684	0.110	0.040	0.148	0.024	0.83	0.94	0.82	
		Back	0.660	0.523	0.130	0.240	0.050	1.31	1.42	1.23	
		Left side	0.694		0.090	0.152	0.036	0.78	0.85	0.73	
		Right side	0.256	0.314		0.054	0.017	0.57	0.62	0.59	
		Top side		0.446	0.307	0.335	0.091	0.75	0.78	0.54	
LTE band71 Ant1	FR1 n77 Ant6	Bottom side	0.077					0.08	0.08	0.08	
		Front	0.684	0.322	0.040	0.148	0.024	1.05	1.15	1.03	
		Back	0.660	0.407	0.130	0.240	0.050	1.20	1.31	1.12	
		Left side	0.694	0.590	0.090	0.152	0.036	1.37	1.44	1.32	
		Right side	0.256	0.117		0.054	0.017	0.37	0.43	0.39	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE band12 Ant1	FR1 n25 Ant4	Front	0.663		0.040	0.148	0.024	0.70	0.81	0.69	
		Back	0.743	0.527	0.130	0.240	0.050	1.40	1.51	1.32	
		Left side	0.738		0.090	0.152	0.036	0.83	0.89	0.77	
		Right side	0.417	0.287		0.054	0.017	0.70	0.76	0.72	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side	0.069					0.07	0.07	0.07	
LTE band13 Ant1	FR1 n25 Ant4	Front	0.491		0.040	0.148	0.024	0.53	0.64	0.52	
		Back	0.517	0.527	0.130	0.240	0.050	1.17	1.28	1.09	
		Left side	0.344		0.090	0.152	0.036	0.43	0.50	0.38	
		Right side	0.361	0.287		0.054	0.017	0.65	0.70	0.67	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
		Bottom side	0.190					0.19	0.19	0.19	
LTE band25	FR1 n77	Front	0.788	0.322	0.040	0.148	0.024	1.15	1.26	1.13	
		Back	0.726	0.407	0.130	0.240	0.050	1.26	1.37	1.18	



Ant1	Ant6	Left side	0.151	0.590	0.090	0.152	0.036	0.83	0.89	0.78	
		Right side	0.063	0.117		0.054	0.017	0.18	0.23	0.20	
		Top side		1.033	0.307	0.335	0.091	1.34	1.37	1.12	
		Bottom side	1.202					1.20	1.20	1.20	
LTE band26 Ant1	FR1 n25 Ant4	Front	0.681		0.040	0.148	0.024	0.72	0.83	0.71	
		Back	0.520	0.527	0.130	0.240	0.050	1.18	1.29	1.10	
		Left side	0.309		0.090	0.152	0.036	0.40	0.46	0.35	
		Right side	0.287	0.287		0.054	0.017	0.57	0.63	0.59	
		Top side		0.376	0.307	0.335	0.091	0.68	0.71	0.47	
LTE band48 Ant6	FR1 n66 Ant1	Front	0.273	0.697	0.040	0.148	0.024	1.01	1.12	0.99	
		Back	0.739	0.619	0.130	0.240	0.050	1.49	1.60	1.41	9
		Left side	0.865	0.307	0.090	0.152	0.036	1.26	1.32	1.21	
		Right side	0.077	0.098		0.054	0.017	0.18	0.23	0.19	
		Top side	0.908		0.307	0.335	0.091	1.22	1.24	1.00	
		Bottom side		0.927				0.93	0.93	0.93	

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz	WLAN5GHz	Bluetooth	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Front	0.788	0.195	0.040	0.148	0.024	1.02	1.13	1.01
		Back	0.743	0.577	0.130	0.240	0.050	1.45	1.56	1.37
		Left side	0.738	0.061	0.090	0.152	0.036	0.89	0.95	0.84
		Right side	0.417	0.603		0.054	0.017	1.02	1.07	1.04
		Top side		0.257	0.307	0.335	0.091	0.56	0.59	0.35
		Bottom side	1.202					1.20	1.20	1.20
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Front	0.788	0.178	0.040	0.148	0.024	1.01	1.11	0.99
		Back	0.743	0.588	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.738	0.218	0.090	0.152	0.036	1.05	1.11	0.99
		Right side	0.417	0.715		0.054	0.017	1.13	1.19	1.15
		Top side		0.294	0.307	0.335	0.091	0.60	0.63	0.39
		Bottom side	1.202	0.150				1.35	1.35	1.35
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant7	Front	0.788	0.220	0.040	0.148	0.024	1.05	1.16	1.03
		Back	0.743	0.590	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.738	0.597	0.090	0.152	0.036	1.43	1.49	1.37
		Right side	0.417	0.050		0.054	0.017	0.47	0.52	0.48
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	1.202	0.080				1.28	1.28	1.28
LTE band12 Ant1	FR1 n77 Ant2	Front	0.663	0.533	0.040	0.148	0.024	1.24	1.34	1.22
		Back	0.743	0.589	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.738	0.102	0.090	0.152	0.036	0.93	0.99	0.88
		Right side	0.417	0.631		0.054	0.017	1.05	1.10	1.07
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.069	0.287				0.36	0.36	0.36
LTE band12 Ant1	FR1 n77 Ant5	Front	0.663	0.077	0.040	0.148	0.024	0.78	0.89	0.76
		Back	0.743	0.191	0.130	0.240	0.050	1.06	1.17	0.98
		Left side	0.738	0.092	0.090	0.152	0.036	0.92	0.98	0.87
		Right side	0.417	0.377		0.054	0.017	0.79	0.85	0.81
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
		Bottom side	0.069	0.192				0.26	0.26	0.26
LTE band12 Ant1	FR1 n77 Ant7	Front	0.663	0.194	0.040	0.148	0.024	0.90	1.01	0.88
		Back	0.743	0.587	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.738	0.401	0.090	0.152	0.036	1.23	1.29	1.18
		Right side	0.417	0.152		0.054	0.017	0.57	0.62	0.59
		Top side			0.307	0.335	0.091	0.31	0.34	0.09



		Bottom side	0.069	0.155				0.22	0.22	0.22
LTE band14 Ant1	FR1 n77 Ant2	Front	0.490	0.533	0.040	0.148	0.024	1.06	1.17	1.05
		Back	0.475	0.589	0.130	0.240	0.050	1.19	1.30	1.11
		Left side	0.239	0.102	0.090	0.152	0.036	0.43	0.49	0.38
		Right side	0.226	0.631		0.054	0.017	0.86	0.91	0.87
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.120	0.287				0.41	0.41	0.41
				Front	0.490	0.077	0.040	0.148	0.024	0.61
LTE band14 Ant1	FR1 n77 Ant5	Back	0.475	0.191	0.130	0.240	0.050	0.80	0.91	0.72
		Left side	0.239	0.092	0.090	0.152	0.036	0.42	0.48	0.37
		Right side	0.226	0.377		0.054	0.017	0.60	0.66	0.62
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
		Bottom side	0.120	0.192				0.31	0.31	0.31
				Front	0.490	0.194	0.040	0.148	0.024	0.72
LTE band14 Ant1	FR1 n77 Ant7	Back	0.475	0.587	0.130	0.240	0.050	1.19	1.30	1.11
		Left side	0.239	0.401	0.090	0.152	0.036	0.73	0.79	0.68
		Right side	0.226	0.152		0.054	0.017	0.38	0.43	0.40
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.120	0.155				0.28	0.28	0.28
				Front	0.681	0.533	0.040	0.148	0.024	1.25
LTE band5 Ant1	FR1 n77 Ant2	Back	0.520	0.589	0.130	0.240	0.050	1.24	1.35	1.16
		Left side	0.309	0.102	0.090	0.152	0.036	0.50	0.56	0.45
		Right side	0.287	0.631		0.054	0.017	0.92	0.97	0.94
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.208	0.287				0.50	0.50	0.50
				Front	0.681	0.077	0.040	0.148	0.024	0.80
LTE band5 Ant1	FR1 n77 Ant5	Back	0.520	0.191	0.130	0.240	0.050	0.84	0.95	0.76
		Left side	0.309	0.092	0.090	0.152	0.036	0.49	0.55	0.44
		Right side	0.287	0.377		0.054	0.017	0.66	0.72	0.68
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
		Bottom side	0.208	0.192				0.40	0.40	0.40
				Front	0.681	0.194	0.040	0.148	0.024	0.92
LTE band5 Ant1	FR1 n77 Ant7	Back	0.520	0.587	0.130	0.240	0.050	1.24	1.35	1.16
		Left side	0.309	0.401	0.090	0.152	0.036	0.80	0.86	0.75
		Right side	0.287	0.152		0.054	0.017	0.44	0.49	0.46
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.208	0.155				0.36	0.36	0.36
				Front	0.741	0.533	0.040	0.148	0.024	1.31
LTE band66 Ant1	FR1 n77 Ant2	Back	0.743	0.589	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.283	0.102	0.090	0.152	0.036	0.48	0.54	0.42
		Right side	0.083	0.631		0.054	0.017	0.71	0.77	0.73
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	1.195	0.287				1.48	1.48	1.48
				Front	0.741	0.077	0.040	0.148	0.024	0.86
LTE band66 Ant1	FR1 n77 Ant5	Back	0.743	0.191	0.130	0.240	0.050	1.06	1.17	0.98
		Left side	0.283	0.092	0.090	0.152	0.036	0.47	0.53	0.41
		Right side	0.083	0.377		0.054	0.017	0.46	0.51	0.48
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
		Bottom side	1.195	0.192				1.39	1.39	1.39
				Front	0.741	0.194	0.040	0.148	0.024	0.98
LTE band66 Ant1	FR1 n77 Ant7	Back	0.743	0.587	0.130	0.240	0.050	1.46	1.57	1.38
		Left side	0.283	0.401	0.090	0.152	0.036	0.77	0.84	0.72
		Right side	0.083	0.152		0.054	0.017	0.24	0.29	0.25
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	1.195	0.155				1.35	1.35	1.35
				Front	0.462	0.533	0.040	0.148	0.024	1.04



	Ant2	Back	0.653	0.589	0.130	0.240	0.050	1.37	1.48	1.29
		Left side	0.069	0.102	0.090	0.152	0.036	0.26	0.32	0.21
		Right side	0.610	0.631		0.054	0.017	1.24	1.30	1.26
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	0.140	0.287				0.43	0.43	0.43
LTE band7 Ant2	FR1 n77 Ant5	Front	0.462	0.077	0.040	0.148	0.024	0.58	0.69	0.56
		Back	0.653	0.191	0.130	0.240	0.050	0.97	1.08	0.89
		Left side	0.069	0.092	0.090	0.152	0.036	0.25	0.31	0.20
		Right side	0.610	0.377		0.054	0.017	0.99	1.04	1.00
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
	Bottom side	0.140	0.192				0.33	0.33	0.33	
LTE band7 Ant2	FR1 n77 Ant7	Front	0.462	0.194	0.040	0.148	0.024	0.70	0.80	0.68
		Back	0.653	0.587	0.130	0.240	0.050	1.37	1.48	1.29
		Left side	0.069	0.401	0.090	0.152	0.036	0.56	0.62	0.51
		Right side	0.610	0.152		0.054	0.017	0.76	0.82	0.78
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.140	0.155				0.30	0.30	0.30	
LTE band13 Ant1	FR1 n77 Ant2	Front	0.491	0.533	0.040	0.148	0.024	1.06	1.17	1.05
		Back	0.517	0.589	0.130	0.240	0.050	1.24	1.35	1.16
		Left side	0.344	0.102	0.090	0.152	0.036	0.54	0.60	0.48
		Right side	0.361	0.631		0.054	0.017	0.99	1.05	1.01
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.190	0.287				0.48	0.48	0.48	
LTE band13 Ant1	FR1 n77 Ant5	Front	0.491	0.077	0.040	0.148	0.024	0.61	0.72	0.59
		Back	0.517	0.191	0.130	0.240	0.050	0.84	0.95	0.76
		Left side	0.344	0.092	0.090	0.152	0.036	0.53	0.59	0.47
		Right side	0.361	0.377		0.054	0.017	0.74	0.79	0.76
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
	Bottom side	0.190	0.192				0.38	0.38	0.38	
LTE band13 Ant1	FR1 n77 Ant7	Front	0.491	0.194	0.040	0.148	0.024	0.73	0.83	0.71
		Back	0.517	0.587	0.130	0.240	0.050	1.23	1.34	1.15
		Left side	0.344	0.401	0.090	0.152	0.036	0.84	0.90	0.78
		Right side	0.361	0.152		0.054	0.017	0.51	0.57	0.53
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.190	0.155				0.35	0.35	0.35	
LTE band71 Ant1	FR1 n77 Ant2	Front	0.684	0.533	0.040	0.148	0.024	1.26	1.37	1.24
		Back	0.660	0.589	0.130	0.240	0.050	1.38	1.49	1.30
		Left side	0.694	0.102	0.090	0.152	0.036	0.89	0.95	0.83
		Right side	0.256	0.631		0.054	0.017	0.89	0.94	0.90
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.077	0.287				0.36	0.36	0.36	
LTE band71 Ant1	FR1 n77 Ant5	Front	0.684	0.077	0.040	0.148	0.024	0.80	0.91	0.79
		Back	0.660	0.191	0.130	0.240	0.050	0.98	1.09	0.90
		Left side	0.694	0.092	0.090	0.152	0.036	0.88	0.94	0.82
		Right side	0.256	0.377		0.054	0.017	0.63	0.69	0.65
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
	Bottom side	0.077	0.192				0.27	0.27	0.27	
LTE band71 Ant1	FR1 n77 Ant7	Front	0.684	0.194	0.040	0.148	0.024	0.92	1.03	0.90
		Back	0.660	0.587	0.130	0.240	0.050	1.38	1.49	1.30
		Left side	0.694	0.401	0.090	0.152	0.036	1.19	1.25	1.13
		Right side	0.256	0.152		0.054	0.017	0.41	0.46	0.43
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
	Bottom side	0.077	0.155				0.23	0.23	0.23	



WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band25 Ant1	FR1 n77 Ant2	Front	0.788	0.533	0.040	0.148	0.024	1.36	1.47	1.35
		Back	0.726	0.589	0.130	0.240	0.050	1.45	1.56	1.37
		Left side	0.151	0.102	0.090	0.152	0.036	0.34	0.41	0.29
		Right side	0.063	0.631		0.054	0.017	0.69	0.75	0.71
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	1.202	0.287				1.49	1.49	1.49
LTE band25 Ant1	FR1 n77 Ant5	Front	0.788	0.077	0.040	0.148	0.024	0.91	1.01	0.89
		Back	0.726	0.191	0.130	0.240	0.050	1.05	1.16	0.97
		Left side	0.151	0.092	0.090	0.152	0.036	0.33	0.40	0.28
		Right side	0.063	0.377		0.054	0.017	0.44	0.49	0.46
		Top side		0.083	0.307	0.335	0.091	0.39	0.42	0.17
		Bottom side	1.202	0.192				1.39	1.39	1.39
LTE band25 Ant1	FR1 n77 Ant7	Front	0.788	0.194	0.040	0.148	0.024	1.02	1.13	1.01
		Back	0.726	0.587	0.130	0.240	0.050	1.44	1.55	1.36
		Left side	0.151	0.401	0.090	0.152	0.036	0.64	0.70	0.59
		Right side	0.063	0.152		0.054	0.017	0.22	0.27	0.23
		Top side			0.307	0.335	0.091	0.31	0.34	0.09
		Bottom side	1.202	0.155				1.36	1.36	1.36

<Flip Close >

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4
		WWAN	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All Bands Ant1	Front	0.611		0.207	0.010	0.61	0.82	0.62
	Back	1.197	0.146	0.264	0.067	1.34	1.46	1.26
	Left side	0.953	0.078	0.276	0.008	1.03	1.23	0.96
	Right side	0.522		0.137	0.005	0.52	0.66	0.53
	Top side		0.388	0.322	0.117	0.39	0.32	0.12
	Bottom side	1.205				1.21	1.21	1.21
WWAN All Bands Ant2	Front	0.258		0.207	0.010	0.26	0.47	0.27
	Back	1.022	0.146	0.264	0.067	1.17	1.29	1.09
	Left side	0.160	0.078	0.276	0.008	0.24	0.44	0.17
	Right side	1.030		0.137	0.005	1.03	1.17	1.04
	Top side		0.388	0.322	0.117	0.39	0.32	0.12
	Bottom side	0.287				0.29	0.29	0.29
WWAN All Bands Ant4	Front	0.082		0.207	0.010	0.08	0.29	0.09
	Back	0.812	0.146	0.264	0.067	0.96	1.08	0.88
	Left side	0.001	0.078	0.276	0.008	0.08	0.28	0.01
	Right side	0.857		0.137	0.005	0.86	0.99	0.86
	Top side	0.193	0.388	0.322	0.117	0.58	0.52	0.31
	Bottom side					0.00	0.00	0.00
WWAN All Bands Ant5	Front	0.173		0.207	0.010	0.17	0.38	0.18
	Back	0.939	0.146	0.264	0.067	1.09	1.20	1.01
	Left side	0.260	0.078	0.276	0.008	0.34	0.54	0.27
	Right side	0.777		0.137	0.005	0.78	0.91	0.78
	Top side	0.059	0.388	0.322	0.117	0.45	0.38	0.18
	Bottom side	0.145				0.15	0.15	0.15
WWAN All Bands Ant6	Front	0.404		0.207	0.010	0.40	0.61	0.41
	Back	0.962	0.146	0.264	0.067	1.11	1.23	1.03
	Left side	1.070	0.078	0.276	0.008	1.15	1.35	1.08
	Right side	0.157		0.137	0.005	0.16	0.29	0.16



	Top side	1.060	0.388	0.322	0.117	1.45	1.38	1.18
	Bottom side					0.00	0.00	0.00
WWAN All Bands Ant7	Front	0.128		0.207	0.010	0.13	0.34	0.14
	Back	1.231	0.146	0.264	0.067	1.38	1.50	1.30
	Left side	0.441	0.078	0.276	0.008	0.52	0.72	0.45
	Right side	0.183		0.137	0.005	0.18	0.32	0.19
	Top side		0.388	0.322	0.117	0.39	0.32	0.12
	Bottom side	0.160				0.16	0.16	0.16

For ENDC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4GHz	WLAN5GHz	Bluetooth	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE band7 Ant2	FR1 n66 Ant1	Front	0.258	0.312		0.207	0.010	0.57	0.78	0.58	
		Back	0.607	0.564	0.146	0.264	0.067	1.32	1.44	1.24	
		Left side	0.160	0.267	0.078	0.276	0.008	0.51	0.70	0.44	
		Right side	0.671	0.049		0.137	0.005	0.72	0.86	0.73	
		Top side			0.388	0.322	0.117	0.39	0.32	0.12	
		Bottom side	0.287	1.133				1.42	1.42	1.42	
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 All Bands(n38,41) Ant2	Front	0.479	0.184		0.207	0.010	0.66	0.87	0.67	
		Back	0.702	0.537	0.146	0.264	0.067	1.39	1.50	1.31	
		Left side	0.657	0.040	0.078	0.276	0.008	0.78	0.97	0.71	
		Right side	0.522	0.513		0.137	0.005	1.04	1.17	1.04	
		Top side			0.388	0.322	0.117	0.39	0.32	0.12	
		Bottom side	1.205	0.268				1.47	1.47	1.47	
LTE band12 Ant1	FR1 n66 Ant4	Front	0.479	0.059		0.207	0.010	0.54	0.75	0.55	
		Back	0.661	0.547	0.146	0.264	0.067	1.35	1.47	1.28	
		Left side	0.646		0.078	0.276	0.008	0.72	0.92	0.65	
		Right side	0.310	0.272		0.137	0.005	0.58	0.72	0.59	
		Top side		0.176	0.388	0.322	0.117	0.56	0.50	0.29	
		Bottom side	0.085					0.09	0.09	0.09	
LTE band12 Ant1	FR1 n77 Ant6	Front	0.479	0.404		0.207	0.010	0.88	1.09	0.89	
		Back	0.661	0.492	0.146	0.264	0.067	1.30	1.42	1.22	
		Left side	0.646	0.572	0.078	0.276	0.008	1.30	1.49	1.23	
		Right side	0.310	0.157		0.137	0.005	0.47	0.60	0.47	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.085					0.09	0.09	0.09	
LTE band14 Ant1	FR1 n2 Ant4	Front	0.550			0.207	0.010	0.55	0.76	0.56	
		Back	0.647	0.552	0.146	0.264	0.067	1.35	1.46	1.27	
		Left side	0.612		0.078	0.276	0.008	0.69	0.89	0.62	
		Right side	0.519	0.380		0.137	0.005	0.90	1.04	0.90	
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27	
		Bottom side	0.083					0.08	0.08	0.08	
LTE band14 Ant1	FR1 n66 Ant4	Front	0.550	0.059		0.207	0.010	0.61	0.82	0.62	
		Back	0.647	0.547	0.146	0.264	0.067	1.34	1.46	1.26	
		Left side	0.612		0.078	0.276	0.008	0.69	0.89	0.62	
		Right side	0.519	0.272		0.137	0.005	0.79	0.93	0.80	
		Top side		0.176	0.388	0.322	0.117	0.56	0.50	0.29	
		Bottom side	0.083					0.08	0.08	0.08	
LTE band14 Ant1	FR1 n77 Ant6	Front	0.550	0.404		0.207	0.010	0.95	1.16	0.96	
		Back	0.647	0.492	0.146	0.264	0.067	1.29	1.40	1.21	
		Left side	0.612	0.572	0.078	0.276	0.008	1.26	1.46	1.19	
		Right side	0.519	0.157		0.137	0.005	0.68	0.81	0.68	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.083					0.08	0.08	0.08	



LTE band2 Ant4	FR1 n5 Ant1	Front		0.452		0.207	0.010	0.45	0.66	0.46	
		Back	0.567	0.610	0.146	0.264	0.067	1.32	1.44	1.24	
		Left side		0.400	0.078	0.276	0.008	0.48	0.68	0.41	
		Right side	0.393	0.243		0.137	0.005	0.64	0.77	0.64	
		Top side	0.164		0.388	0.322	0.117	0.55	0.49	0.28	
		Bottom side		0.210				0.21	0.21	0.21	
LTE band2 Ant4	FR1 n66 Ant1	Front		0.312		0.207	0.010	0.31	0.52	0.32	
		Back	0.567	0.564	0.146	0.264	0.067	1.28	1.40	1.20	
		Left side		0.267	0.078	0.276	0.008	0.35	0.54	0.28	
		Right side	0.393	0.049		0.137	0.005	0.44	0.58	0.45	
		Top side	0.164		0.388	0.322	0.117	0.55	0.49	0.28	
		Bottom side		1.133				1.13	1.13	1.13	
LTE band5 Ant1	FR1 n66 Ant4	Front	0.346	0.059		0.207	0.010	0.41	0.61	0.42	
		Back	0.702	0.547	0.146	0.264	0.067	1.40	1.51	1.32	
		Left side	0.605		0.078	0.276	0.008	0.68	0.88	0.61	
		Right side	0.522	0.272		0.137	0.005	0.79	0.93	0.80	
		Top side		0.176	0.388	0.322	0.117	0.56	0.50	0.29	
		Bottom side	0.169					0.17	0.17	0.17	
LTE band5 Ant1	FR1 n77 Ant6	Front	0.346	0.404		0.207	0.010	0.75	0.96	0.76	
		Back	0.702	0.492	0.146	0.264	0.067	1.34	1.46	1.26	
		Left side	0.605	0.572	0.078	0.276	0.008	1.26	1.45	1.19	
		Right side	0.522	0.157		0.137	0.005	0.68	0.82	0.68	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.169					0.17	0.17	0.17	
LTE band66 Ant4	FR1 n5 Ant1	Front	0.058	0.452		0.207	0.010	0.51	0.72	0.52	
		Back	0.579	0.610	0.146	0.264	0.067	1.34	1.45	1.26	
		Left side		0.400	0.078	0.276	0.008	0.48	0.68	0.41	
		Right side	0.318	0.243		0.137	0.005	0.56	0.70	0.57	
		Top side	0.193		0.388	0.322	0.117	0.58	0.52	0.31	
		Bottom side		0.210				0.21	0.21	0.21	
LTE band66 Ant1	FR1 n77 Ant6	Front	0.265	0.404		0.207	0.010	0.67	0.88	0.68	
		Back	0.664	0.492	0.146	0.264	0.067	1.30	1.42	1.22	
		Left side	0.194	0.572	0.078	0.276	0.008	0.84	1.04	0.77	
		Right side	0.081	0.157		0.137	0.005	0.24	0.38	0.24	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	1.205					1.21	1.21	1.21	
LTE band66 Ant4	FR1 n7 Ant2	Front	0.058	0.200		0.207	0.010	0.26	0.47	0.27	
		Back	0.579	0.728	0.146	0.264	0.067	1.45	1.57	1.37	
		Left side		0.107	0.078	0.276	0.008	0.19	0.38	0.12	
		Right side	0.318	1.030		0.137	0.005	1.35	1.49	1.35	
		Top side	0.193		0.388	0.322	0.117	0.58	0.52	0.31	
		Bottom side		0.243				0.24	0.24	0.24	
LTE band7 Ant2	FR1 n2 Ant4	Front	0.258			0.207	0.010	0.26	0.47	0.27	
		Back	0.607	0.552	0.146	0.264	0.067	1.31	1.42	1.23	
		Left side	0.160		0.078	0.276	0.008	0.24	0.44	0.17	
		Right side	0.671	0.380		0.137	0.005	1.05	1.19	1.06	
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27	
		Bottom side	0.287					0.29	0.29	0.29	
LTE band2 Ant4	FR1 n7 Ant2	Front		0.200		0.207	0.010	0.20	0.41	0.21	
		Back	0.567	0.728	0.146	0.264	0.067	1.44	1.56	1.36	
		Left side		0.107	0.078	0.276	0.008	0.19	0.38	0.12	
		Right side	0.393	1.030		0.137	0.005	1.42	1.56	1.43	
		Top side	0.164		0.388	0.322	0.117	0.55	0.49	0.28	
		Bottom side		0.243				0.24	0.24	0.24	
LTE band7 Ant2	FR1 n77 Ant6	Front	0.258	0.404		0.207	0.010	0.66	0.87	0.67	
		Back	0.607	0.492	0.146	0.264	0.067	1.25	1.36	1.17	



		Left side	0.160	0.572	0.078	0.276	0.008	0.81	1.01	0.74	
		Right side	0.671	0.157		0.137	0.005	0.83	0.97	0.83	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.287					0.29	0.29	0.29	
LTE band66 Ant4	FR1 n71 Ant1	Front	0.058	0.422		0.207	0.010	0.48	0.69	0.49	
		Back	0.579	0.818	0.146	0.264	0.067	1.54	1.66	1.46	1
		Left side		0.614	0.078	0.276	0.008	0.69	0.89	0.62	
		Right side	0.318	0.303		0.137	0.005	0.62	0.76	0.63	
		Top side	0.193		0.388	0.322	0.117	0.58	0.52	0.31	
		Bottom side		0.101				0.10	0.10	0.10	
LTE band2 Ant4	FR1 n71 Ant1	Front		0.422		0.207	0.010	0.42	0.63	0.43	
		Back	0.567	0.818	0.146	0.264	0.067	1.53	1.65	1.45	2
		Left side		0.614	0.078	0.276	0.008	0.69	0.89	0.62	
		Right side	0.393	0.303		0.137	0.005	0.70	0.83	0.70	
		Top side	0.164		0.388	0.322	0.117	0.55	0.49	0.28	
		Bottom side		0.101				0.10	0.10	0.10	
LTE band66 Ant1	FR1 n25 Ant4	Front	0.265			0.207	0.010	0.27	0.47	0.28	
		Back	0.664	0.552	0.146	0.264	0.067	1.36	1.48	1.28	
		Left side	0.194		0.078	0.276	0.008	0.27	0.47	0.20	
		Right side	0.081	0.380		0.137	0.005	0.46	0.60	0.47	
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27	
		Bottom side	1.205					1.21	1.21	1.21	
LTE band13 Ant1	FR1 n77 Ant6	Front	0.410	0.404		0.207	0.010	0.81	1.02	0.82	
		Back	0.574	0.492	0.146	0.264	0.067	1.21	1.33	1.13	
		Left side	0.709	0.572	0.078	0.276	0.008	1.36	1.56	1.29	
		Right side	0.387	0.157		0.137	0.005	0.54	0.68	0.55	
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.061					0.06	0.06	0.06	
LTE band13 Ant1	FR1 n66 Ant4	Front	0.410	0.059		0.207	0.010	0.47	0.68	0.48	
		Back	0.574	0.547	0.146	0.264	0.067	1.27	1.39	1.19	
		Left side	0.709		0.078	0.276	0.008	0.79	0.99	0.72	
		Right side	0.387	0.272		0.137	0.005	0.66	0.80	0.66	
		Top side		0.176	0.388	0.322	0.117	0.56	0.50	0.29	
		Bottom side	0.061					0.06	0.06	0.06	
LTE band48 Ant6	FR1 n5 Ant1	Front	0.211	0.452		0.207	0.010	0.66	0.87	0.67	
		Back	0.592	0.610	0.146	0.264	0.067	1.35	1.47	1.27	
		Left side	0.759	0.400	0.078	0.276	0.008	1.24	1.44	1.17	
		Right side	0.089	0.243		0.137	0.005	0.33	0.47	0.34	
		Top side	0.582		0.388	0.322	0.117	0.97	0.90	0.70	
		Bottom side		0.210				0.21	0.21	0.21	
LTE band71 Ant1	FR1 n2 Ant4	Front	0.459			0.207	0.010	0.46	0.67	0.47	
		Back	0.685	0.552	0.146	0.264	0.067	1.38	1.50	1.30	
		Left side	0.657		0.078	0.276	0.008	0.74	0.93	0.67	
		Right side	0.320	0.380		0.137	0.005	0.70	0.84	0.71	
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27	
		Bottom side	0.118					0.12	0.12	0.12	
LTE band71 Ant1	FR1 n66 Ant4	Front	0.459	0.059		0.207	0.010	0.52	0.73	0.53	
		Back	0.685	0.547	0.146	0.264	0.067	1.38	1.50	1.30	
		Left side	0.657		0.078	0.276	0.008	0.74	0.93	0.67	
		Right side	0.320	0.272		0.137	0.005	0.59	0.73	0.60	
		Top side		0.176	0.388	0.322	0.117	0.56	0.50	0.29	
		Bottom side	0.118					0.12	0.12	0.12	
LTE band71 Ant1	FR1 n77 Ant6	Front	0.459	0.404		0.207	0.010	0.86	1.07	0.87	
		Back	0.685	0.492	0.146	0.264	0.067	1.32	1.44	1.24	
		Left side	0.657	0.572	0.078	0.276	0.008	1.31	1.51	1.24	
		Right side	0.320	0.157		0.137	0.005	0.48	0.61	0.48	



		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18	
		Bottom side	0.118					0.12	0.12	0.12	

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band12 Ant1	FR1 n25 Ant4	Front	0.479			0.207	0.010	0.48	0.69	0.49
		Back	0.661	0.552	0.146	0.264	0.067	1.36	1.48	1.28
		Left side	0.646		0.078	0.276	0.008	0.72	0.92	0.65
		Right side	0.310	0.380		0.137	0.005	0.69	0.83	0.70
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27
		Bottom side	0.085					0.09	0.09	0.09
LTE band13 Ant1	FR1 n25 Ant4	Front	0.410			0.207	0.010	0.41	0.62	0.42
		Back	0.574	0.552	0.146	0.264	0.067	1.27	1.39	1.19
		Left side	0.709		0.078	0.276	0.008	0.79	0.99	0.72
		Right side	0.387	0.380		0.137	0.005	0.77	0.90	0.77
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27
		Bottom side	0.061					0.06	0.06	0.06
LTE band25 Ant1	FR1 n77 Ant6	Front	0.164	0.404		0.207	0.010	0.57	0.78	0.58
		Back	0.700	0.492	0.146	0.264	0.067	1.34	1.46	1.26
		Left side	0.114	0.572	0.078	0.276	0.008	0.76	0.96	0.69
		Right side	0.066	0.157		0.137	0.005	0.22	0.36	0.23
		Top side		1.060	0.388	0.322	0.117	1.45	1.38	1.18
		Bottom side	1.190					1.19	1.19	1.19
LTE band26 Ant1	FR1 n25 Ant4	Front	0.346			0.207	0.010	0.35	0.55	0.36
		Back	0.702	0.552	0.146	0.264	0.067	1.40	1.52	1.32
		Left side	0.605		0.078	0.276	0.008	0.68	0.88	0.61
		Right side	0.522	0.380		0.137	0.005	0.90	1.04	0.91
		Top side		0.149	0.388	0.322	0.117	0.54	0.47	0.27
		Bottom side	0.169					0.17	0.17	0.17
LTE band48 Ant6	FR1 n66 Ant1	Front	0.211	0.312		0.207	0.010	0.52	0.73	0.53
		Back	0.592	0.564	0.146	0.264	0.067	1.30	1.42	1.22
		Left side	0.759	0.267	0.078	0.276	0.008	1.10	1.30	1.03
		Right side	0.089	0.049		0.137	0.005	0.14	0.28	0.14
		Top side	0.582		0.388	0.322	0.117	0.97	0.90	0.70
		Bottom side		1.133				1.13	1.13	1.13

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Front	0.479	0.082		0.207	0.010	0.56	0.77	0.57
		Back	0.702	0.462	0.146	0.264	0.067	1.31	1.43	1.23
		Left side	0.657	0.001	0.078	0.276	0.008	0.74	0.93	0.67
		Right side	0.522	0.482		0.137	0.005	1.00	1.14	1.01
		Top side		0.039	0.388	0.322	0.117	0.43	0.36	0.16
		Bottom side	1.205					1.21	1.21	1.21
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Front	0.479	0.173		0.207	0.010	0.65	0.86	0.66
		Back	0.702	0.608	0.146	0.264	0.067	1.46	1.57	1.38
		Left side	0.657	0.260	0.078	0.276	0.008	1.00	1.19	0.93
		Right side	0.522	0.777		0.137	0.005	1.30	1.44	1.30
		Top side		0.050	0.388	0.322	0.117	0.44	0.37	0.17
		Bottom side	1.205	0.145				1.35	1.35	1.35
LTE All	FR1 n41	Front	0.479	0.128		0.207	0.010	0.61	0.81	0.62



FCC SAR Test Report

Report No. : FA462605

Bands(2,4,5,12,25,26,66,71) Ant1	Ant7	Back	0.702	0.584	0.146	0.264	0.067	1.43	1.55	1.35
		Left side	0.657	0.342	0.078	0.276	0.008	1.08	1.28	1.01
		Right side	0.522	0.027		0.137	0.005	0.55	0.69	0.55
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	1.205	0.064				1.27	1.27	1.27
LTE band12 Ant1	FR1 n77 Ant2	Front	0.479	0.223		0.207	0.010	0.70	0.91	0.71
		Back	0.661	0.508	0.146	0.264	0.067	1.32	1.43	1.24
		Left side	0.646	0.090	0.078	0.276	0.008	0.81	1.01	0.74
		Right side	0.310	0.486		0.137	0.005	0.80	0.93	0.80
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
LTE band12 Ant1	FR1 n77 Ant5	Bottom side	0.085	0.272				0.36	0.36	0.36
		Front	0.479	0.074		0.207	0.010	0.55	0.76	0.56
		Back	0.661	0.172	0.146	0.264	0.067	0.98	1.10	0.90
		Left side	0.646	0.081	0.078	0.276	0.008	0.81	1.00	0.74
		Right side	0.310	0.319		0.137	0.005	0.63	0.77	0.63
LTE band12 Ant1	FR1 n77 Ant7	Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.085	0.063				0.15	0.15	0.15
		Front	0.479	0.117		0.207	0.010	0.60	0.80	0.61
		Back	0.661	0.601	0.146	0.264	0.067	1.41	1.53	1.33
		Left side	0.646	0.441	0.078	0.276	0.008	1.17	1.36	1.10
LTE band14 Ant1	FR1 n77 Ant2	Right side	0.310	0.183		0.137	0.005	0.49	0.63	0.50
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.085	0.160				0.25	0.25	0.25
		Front	0.550	0.223		0.207	0.010	0.77	0.98	0.78
		Back	0.647	0.508	0.146	0.264	0.067	1.30	1.42	1.22
LTE band14 Ant1	FR1 n77 Ant5	Left side	0.612	0.090	0.078	0.276	0.008	0.78	0.98	0.71
		Right side	0.519	0.486		0.137	0.005	1.01	1.14	1.01
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.083	0.272				0.36	0.36	0.36
		Front	0.550	0.074		0.207	0.010	0.62	0.83	0.63
LTE band14 Ant1	FR1 n77 Ant7	Back	0.647	0.172	0.146	0.264	0.067	0.97	1.08	0.89
		Left side	0.612	0.081	0.078	0.276	0.008	0.77	0.97	0.70
		Right side	0.519	0.319		0.137	0.005	0.84	0.98	0.84
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.083	0.063				0.15	0.15	0.15
LTE band14 Ant1	FR1 n77 Ant7	Front	0.550	0.117		0.207	0.010	0.67	0.87	0.68
		Back	0.647	0.601	0.146	0.264	0.067	1.39	1.51	1.32
		Left side	0.612	0.441	0.078	0.276	0.008	1.13	1.33	1.06
		Right side	0.519	0.183		0.137	0.005	0.70	0.84	0.71
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
LTE band5 Ant1	FR1 n77 Ant2	Bottom side	0.083	0.160				0.24	0.24	0.24
		Front	0.346	0.223		0.207	0.010	0.57	0.78	0.58
		Back	0.702	0.508	0.146	0.264	0.067	1.36	1.47	1.28
		Left side	0.605	0.090	0.078	0.276	0.008	0.77	0.97	0.70
		Right side	0.522	0.486		0.137	0.005	1.01	1.15	1.01
LTE band5 Ant1	FR1 n77 Ant5	Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.169	0.272				0.44	0.44	0.44
		Front	0.346	0.074		0.207	0.010	0.42	0.63	0.43
		Back	0.702	0.172	0.146	0.264	0.067	1.02	1.14	0.94
		Left side	0.605	0.081	0.078	0.276	0.008	0.76	0.96	0.69
LTE band5 Ant1	FR1 n77 Ant7	Right side	0.522	0.319		0.137	0.005	0.84	0.98	0.85
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.169	0.063				0.23	0.23	0.23
LTE band5 Ant1	FR1 n77 Ant7	Front	0.346	0.117		0.207	0.010	0.46	0.67	0.47
		Back	0.702	0.601	0.146	0.264	0.067	1.45	1.57	1.37
		Left side	0.605	0.441	0.078	0.276	0.008	1.12	1.32	1.05



		Right side	0.522	0.183		0.137	0.005	0.71	0.84	0.71
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.169	0.160				0.33	0.33	0.33
LTE band66 Ant1	FR1 n77 Ant2	Front	0.265	0.223		0.207	0.010	0.49	0.70	0.50
		Back	0.664	0.508	0.146	0.264	0.067	1.32	1.44	1.24
		Left side	0.194	0.090	0.078	0.276	0.008	0.36	0.56	0.29
		Right side	0.081	0.486		0.137	0.005	0.57	0.70	0.57
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	1.205	0.272				1.48	1.48	1.48
		FR1 n77 Ant5	Front	0.265	0.074		0.207	0.010	0.34	0.55
Back	0.664	0.172	0.146	0.264	0.067	0.98	1.10	0.90		
Left side	0.194	0.081	0.078	0.276	0.008	0.35	0.55	0.28		
Right side	0.081	0.319		0.137	0.005	0.40	0.54	0.41		
Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18		
Bottom side	1.205	0.063				1.27	1.27	1.27		
LTE band66 Ant1	FR1 n77 Ant7	Front	0.265	0.117		0.207	0.010	0.38	0.59	0.39
		Back	0.664	0.601	0.146	0.264	0.067	1.41	1.53	1.33
		Left side	0.194	0.441	0.078	0.276	0.008	0.71	0.91	0.64
		Right side	0.081	0.183		0.137	0.005	0.26	0.40	0.27
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	1.205	0.160				1.37	1.37	1.37
LTE band7 Ant2	FR1 n77 Ant2	Front	0.258	0.223		0.207	0.010	0.48	0.69	0.49
		Back	0.607	0.508	0.146	0.264	0.067	1.26	1.38	1.18
		Left side	0.160	0.090	0.078	0.276	0.008	0.33	0.53	0.26
		Right side	0.671	0.486		0.137	0.005	1.16	1.29	1.16
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.287	0.272				0.56	0.56	0.56
LTE band7 Ant2	FR1 n77 Ant5	Front	0.258	0.074		0.207	0.010	0.33	0.54	0.34
		Back	0.607	0.172	0.146	0.264	0.067	0.93	1.04	0.85
		Left side	0.160	0.081	0.078	0.276	0.008	0.32	0.52	0.25
		Right side	0.671	0.319		0.137	0.005	0.99	1.13	1.00
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.287	0.063				0.35	0.35	0.35
LTE band7 Ant2	FR1 n77 Ant7	Front	0.258	0.117		0.207	0.010	0.38	0.58	0.39
		Back	0.607	0.601	0.146	0.264	0.067	1.35	1.47	1.28
		Left side	0.160	0.441	0.078	0.276	0.008	0.68	0.88	0.61
		Right side	0.671	0.183		0.137	0.005	0.85	0.99	0.86
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.287	0.160				0.45	0.45	0.45
LTE band13 Ant1	FR1 n77 Ant2	Front	0.410	0.223		0.207	0.010	0.63	0.84	0.64
		Back	0.574	0.508	0.146	0.264	0.067	1.23	1.35	1.15
		Left side	0.709	0.090	0.078	0.276	0.008	0.88	1.08	0.81
		Right side	0.387	0.486		0.137	0.005	0.87	1.01	0.88
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.061	0.272				0.33	0.33	0.33
LTE band13 Ant1	FR1 n77 Ant5	Front	0.410	0.074		0.207	0.010	0.48	0.69	0.49
		Back	0.574	0.172	0.146	0.264	0.067	0.89	1.01	0.81
		Left side	0.709	0.081	0.078	0.276	0.008	0.87	1.07	0.80
		Right side	0.387	0.319		0.137	0.005	0.71	0.84	0.71
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.061	0.063				0.12	0.12	0.12
LTE band13 Ant1	FR1 n77 Ant7	Front	0.410	0.117		0.207	0.010	0.53	0.73	0.54
		Back	0.574	0.601	0.146	0.264	0.067	1.32	1.44	1.24
		Left side	0.709	0.441	0.078	0.276	0.008	1.23	1.43	1.16
		Right side	0.387	0.183		0.137	0.005	0.57	0.71	0.58
		Top side			0.388	0.322	0.117	0.39	0.32	0.12



LTE band71 Ant1	FR1 n77 Ant2	Bottom side	0.061	0.160				0.22	0.22	0.22
		Front	0.459	0.223		0.207	0.010	0.68	0.89	0.69
		Back	0.685	0.508	0.146	0.264	0.067	1.34	1.46	1.26
		Left side	0.657	0.090	0.078	0.276	0.008	0.83	1.02	0.76
		Right side	0.320	0.486		0.137	0.005	0.81	0.94	0.81
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.118	0.272				0.39	0.39	0.39
LTE band71 Ant1	FR1 n77 Ant5	Front	0.459	0.074		0.207	0.010	0.53	0.74	0.54
		Back	0.685	0.172	0.146	0.264	0.067	1.00	1.12	0.92
		Left side	0.657	0.081	0.078	0.276	0.008	0.82	1.01	0.75
		Right side	0.320	0.319		0.137	0.005	0.64	0.78	0.64
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	0.118	0.063				0.18	0.18	0.18
LTE band71 Ant1	FR1 n77 Ant7	Front	0.459	0.117		0.207	0.010	0.58	0.78	0.59
		Back	0.685	0.601	0.146	0.264	0.067	1.43	1.55	1.35
		Left side	0.657	0.441	0.078	0.276	0.008	1.18	1.37	1.11
		Right side	0.320	0.183		0.137	0.005	0.50	0.64	0.51
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	0.118	0.160				0.28	0.28	0.28

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band25 Ant1	FR1 n77 Ant2	Front	0.164	0.223		0.207	0.010	0.39	0.59	0.40
		Back	0.700	0.508	0.146	0.264	0.067	1.35	1.47	1.28
		Left side	0.114	0.090	0.078	0.276	0.008	0.28	0.48	0.21
		Right side	0.066	0.486		0.137	0.005	0.55	0.69	0.56
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	1.190	0.272				1.46	1.46	1.46
LTE band25 Ant1	FR1 n77 Ant5	Front	0.164	0.074		0.207	0.010	0.24	0.45	0.25
		Back	0.700	0.172	0.146	0.264	0.067	1.02	1.14	0.94
		Left side	0.114	0.081	0.078	0.276	0.008	0.27	0.47	0.20
		Right side	0.066	0.319		0.137	0.005	0.39	0.52	0.39
		Top side		0.059	0.388	0.322	0.117	0.45	0.38	0.18
		Bottom side	1.190	0.063				1.25	1.25	1.25
LTE band25 Ant1	FR1 n77 Ant7	Front	0.164	0.117		0.207	0.010	0.28	0.49	0.29
		Back	0.700	0.601	0.146	0.264	0.067	1.45	1.57	1.37
		Left side	0.114	0.441	0.078	0.276	0.008	0.63	0.83	0.56
		Right side	0.066	0.183		0.137	0.005	0.25	0.39	0.25
		Top side			0.388	0.322	0.117	0.39	0.32	0.12
		Bottom side	1.190	0.160				1.35	1.35	1.35



15.3 Body-Worn Accessory Exposure Conditions

<Flip Close >

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4
		WWAN	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All Bands	Front	0.502	0.040	0.397	0.010	0.54	0.90	0.51
	Back	0.896	0.166	0.477	0.037	1.06	1.37	0.93

For ENDC Standalone

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band7 Ant2	FR1 n66 Ant1	Front	0.148	0.234	0.38
		Back	0.489	0.615	1.10
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 All Bands(n38,41) Ant2	Front	0.400	0.139	0.54
		Back	0.829	0.670	1.50
LTE band12 Ant1	FR1 n66 Ant4	Front	0.400	0.077	0.48
		Back	0.501	0.701	1.20
LTE band12 Ant1	FR1 n77 Ant6	Front	0.400	0.287	0.69
		Back	0.501	0.622	1.12
LTE band14 Ant1	FR1 n2 Ant4	Front	0.373	0.081	0.45
		Back	0.808	0.710	1.52
LTE band14 Ant1	FR1 n66 Ant4	Front	0.373	0.077	0.45
		Back	0.808	0.701	1.51
LTE band14 Ant1	FR1 n77 Ant6	Front	0.373	0.287	0.66
		Back	0.808	0.622	1.43
LTE band2 Ant4	FR1 n5 Ant1	Front	0.090	0.362	0.45
		Back	0.727	0.770	1.50
LTE band2 Ant4	FR1 n66 Ant1	Front	0.090	0.234	0.32
		Back	0.727	0.615	1.34
LTE band5 Ant1	FR1 n66 Ant4	Front	0.269	0.077	0.35
		Back	0.829	0.701	1.53
LTE band5 Ant1	FR1 n77 Ant6	Front	0.269	0.287	0.56
		Back	0.829	0.622	1.45
LTE band66 Ant4	FR1 n5 Ant1	Front	0.084	0.362	0.45
		Back	0.720	0.770	1.49
LTE band66 Ant1	FR1 n77 Ant6	Front	0.249	0.287	0.54
		Back	0.683	0.622	1.31
LTE band66 Ant4	FR1 n7 Ant2	Front	0.084	0.136	0.22
		Back	0.720	0.493	1.21
LTE band7 Ant2	FR1 n2 Ant4	Front	0.148	0.081	0.23
		Back	0.489	0.710	1.20
LTE band2 Ant4	FR1 n7 Ant2	Front	0.090	0.136	0.23
		Back	0.727	0.493	1.22
LTE band7 Ant2	FR1 n77 Ant6	Front	0.148	0.287	0.44
		Back	0.489	0.622	1.11
LTE band66 Ant4	FR1 n71 Ant1	Front	0.084	0.321	0.41
		Back	0.720	0.596	1.32
LTE band2 Ant4	FR1 n71 Ant1	Front	0.090	0.321	0.41
		Back	0.727	0.596	1.32
LTE band66 Ant1	FR1 n25 Ant4	Front	0.249	0.081	0.33
		Back	0.683	0.710	1.39
LTE band13 Ant1	FR1 n77 Ant6	Front	0.502	0.287	0.79
		Back	0.759	0.622	1.38



LTE band13 Ant1	FR1 n66 Ant4	Front	0.502	0.077	0.58
		Back	0.759	0.701	1.46
LTE band48 Ant6	FR1 n5 Ant1	Front	0.186	0.362	0.55
		Back	0.480	0.770	1.25
LTE band71 Ant1	FR1 n2 Ant4	Front	0.316	0.081	0.40
		Back	0.633	0.710	1.34
LTE band71 Ant1	FR1 n66 Ant4	Front	0.316	0.077	0.39
		Back	0.633	0.701	1.33
LTE band71 Ant1	FR1 n77 Ant6	Front	0.316	0.287	0.60
		Back	0.633	0.622	1.26

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band12 Ant1	FR1 n25 Ant4	Front	0.400	0.081	0.48
		Back	0.501	0.710	1.21
LTE band13 Ant1	FR1 n25 Ant4	Front	0.502	0.081	0.58
		Back	0.759	0.710	1.47
LTE band25 Ant1	FR1 n77 Ant6	Front	0.126	0.287	0.41
		Back	0.621	0.622	1.24
LTE band26 Ant1	FR1 n25 Ant4	Front	0.269	0.081	0.35
		Back	0.829	0.710	1.54
LTE band48 Ant6	FR1 n66 Ant1	Front	0.186	0.234	0.42
		Back	0.480	0.615	1.10

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Front	0.400	0.045	0.45
		Back	0.829	0.292	1.12
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Front	0.400	0.092	0.49
		Back	0.829	0.496	1.33
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant7	Front	0.400	0.070	0.47
		Back	0.829	0.615	1.44
LTE band12 Ant1	FR1 n77 Ant2	Front	0.400	0.170	0.57
		Back	0.501	0.351	0.85
LTE band12 Ant1	FR1 n77 Ant5	Front	0.400	0.055	0.46
		Back	0.501	0.094	0.60
LTE band12 Ant1	FR1 n77 Ant7	Front	0.400	0.084	0.48
		Back	0.501	0.635	1.14
LTE band14 Ant1	FR1 n77 Ant2	Front	0.373	0.170	0.54
		Back	0.808	0.351	1.16
LTE band14 Ant1	FR1 n77 Ant5	Front	0.373	0.055	0.43
		Back	0.808	0.094	0.90
LTE band14 Ant1	FR1 n77 Ant7	Front	0.373	0.084	0.46
		Back	0.808	0.635	1.44
LTE band5 Ant1	FR1 n77 Ant2	Front	0.269	0.170	0.44
		Back	0.829	0.351	1.18
LTE band5 Ant1	FR1 n77 Ant5	Front	0.269	0.055	0.32
		Back	0.829	0.094	0.92
LTE band5 Ant1	FR1 n77 Ant7	Front	0.269	0.084	0.35
		Back	0.829	0.635	1.46
LTE band66 Ant1	FR1 n77 Ant2	Front	0.249	0.170	0.42
		Back	0.683	0.351	1.03
LTE band66 Ant1	FR1 n77 Ant5	Front	0.249	0.055	0.30



		Back	0.683	0.094	0.78
LTE band66 Ant1	FR1 n77 Ant7	Front	0.249	0.084	0.33
		Back	0.683	0.635	1.32
LTE band7 Ant2	FR1 n77 Ant2	Front	0.148	0.170	0.32
		Back	0.489	0.351	0.84
LTE band7 Ant2	FR1 n77 Ant5	Front	0.148	0.055	0.20
		Back	0.489	0.094	0.58
LTE band7 Ant2	FR1 n77 Ant7	Front	0.148	0.084	0.23
		Back	0.489	0.635	1.12
LTE band13 Ant1	FR1 n77 Ant2	Front	0.502	0.170	0.67
		Back	0.759	0.351	1.11
LTE band13 Ant1	FR1 n77 Ant5	Front	0.502	0.055	0.56
		Back	0.759	0.094	0.85
LTE band13 Ant1	FR1 n77 Ant7	Front	0.502	0.084	0.59
		Back	0.759	0.635	1.39
LTE band71 Ant1	FR1 n77 Ant2	Front	0.316	0.170	0.49
		Back	0.633	0.351	0.98
LTE band71 Ant1	FR1 n77 Ant5	Front	0.316	0.055	0.37
		Back	0.633	0.094	0.73
LTE band71 Ant1	FR1 n77 Ant7	Front	0.316	0.084	0.40
		Back	0.633	0.635	1.27

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band25 Ant1	FR1 n77 Ant2	Front	0.126	0.170	0.30
		Back	0.621	0.351	0.97
LTE band25 Ant1	FR1 n77 Ant5	Front	0.126	0.055	0.18
		Back	0.621	0.094	0.72
LTE band25 Ant1	FR1 n77 Ant7	Front	0.126	0.084	0.21
		Back	0.621	0.635	1.26



For ENDC simultaneous

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band7 Ant2	FR1 n66 Ant1	Front	0.148	0.234	0.040	0.397	0.010	0.42	0.78	0.39
		Back	0.489	0.499	0.166	0.477	0.037	1.15	1.47	1.03
LTE All band(2,4,5,12,25,26,66,71) Ant1	FR1 All band(n38,41) Ant2	Front	0.400	0.139	0.040	0.397	0.010	0.58	0.94	0.55
		Back	0.520	0.512	0.166	0.477	0.037	1.20	1.51	1.07
LTE band12 Ant1	FR1 n66 Ant4	Front	0.400	0.060	0.040	0.397	0.010	0.50	0.86	0.47
		Back	0.501	0.505	0.166	0.477	0.037	1.17	1.48	1.04
LTE band12 Ant1	FR1 n77 Ant6	Front	0.400	0.287	0.040	0.397	0.010	0.73	1.08	0.70
		Back	0.501	0.494	0.166	0.477	0.037	1.16	1.47	1.03
LTE band14 Ant1	FR1 n2 Ant4	Front	0.373	0.054	0.040	0.397	0.010	0.47	0.82	0.44
		Back	0.505	0.505	0.166	0.477	0.037	1.18	1.49	1.05
LTE band14 Ant1	FR1 n66 Ant4	Front	0.373	0.060	0.040	0.397	0.010	0.47	0.83	0.44
		Back	0.505	0.505	0.166	0.477	0.037	1.18	1.49	1.05
LTE band14 Ant1	FR1 n77 Ant6	Front	0.373	0.287	0.040	0.397	0.010	0.70	1.06	0.67
		Back	0.505	0.494	0.166	0.477	0.037	1.17	1.48	1.04
LTE band2 Ant4	FR1 n5 Ant1	Front	0.063	0.362	0.040	0.397	0.010	0.47	0.82	0.44
		Back	0.511	0.493	0.166	0.477	0.037	1.17	1.48	1.04
LTE band2 Ant4	FR1 n66 Ant1	Front	0.063	0.234	0.040	0.397	0.010	0.34	0.69	0.31
		Back	0.511	0.499	0.166	0.477	0.037	1.18	1.49	1.05
LTE band5 Ant1	FR1 n66 Ant4	Front	0.269	0.060	0.040	0.397	0.010	0.37	0.73	0.34
		Back	0.520	0.505	0.166	0.477	0.037	1.19	1.50	1.06
LTE band5 Ant1	FR1 n77 Ant6	Front	0.269	0.287	0.040	0.397	0.010	0.60	0.95	0.57
		Back	0.520	0.494	0.166	0.477	0.037	1.18	1.49	1.05
LTE band66 Ant4	FR1 n5 Ant1	Front	0.061	0.362	0.040	0.397	0.010	0.46	0.82	0.43
		Back	0.514	0.493	0.166	0.477	0.037	1.17	1.48	1.04
LTE band66 Ant1	FR1 n77 Ant6	Front	0.249	0.287	0.040	0.397	0.010	0.58	0.93	0.55
		Back	0.325	0.494	0.166	0.477	0.037	0.99	1.30	0.86
LTE band66 Ant4	FR1 n7 Ant2	Front	0.061	0.136	0.040	0.397	0.010	0.24	0.59	0.21
		Back	0.514	0.493	0.166	0.477	0.037	1.17	1.48	1.04
LTE band7 Ant2	FR1 n2 Ant4	Front	0.148	0.054	0.040	0.397	0.010	0.24	0.60	0.21
		Back	0.489	0.505	0.166	0.477	0.037	1.16	1.47	1.03
LTE band2 Ant4	FR1 n7 Ant2	Front	0.063	0.136	0.040	0.397	0.010	0.24	0.60	0.21
		Back	0.511	0.493	0.166	0.477	0.037	1.17	1.48	1.04
LTE band7 Ant2	FR1 n77 Ant6	Front	0.148	0.287	0.040	0.397	0.010	0.48	0.83	0.45
		Back	0.489	0.494	0.166	0.477	0.037	1.15	1.46	1.02
LTE band66 Ant4	FR1 n71 Ant1	Front	0.061	0.321	0.040	0.397	0.010	0.42	0.78	0.39
		Back	0.514	0.596	0.166	0.477	0.037	1.28	1.59	1.15
LTE band2 Ant4	FR1 n71 Ant1	Front	0.063	0.321	0.040	0.397	0.010	0.42	0.78	0.39
		Back	0.511	0.596	0.166	0.477	0.037	1.27	1.58	1.14
LTE band66 Ant1	FR1 n25 Ant4	Front	0.249	0.054	0.040	0.397	0.010	0.34	0.70	0.31
		Back	0.325	0.505	0.166	0.477	0.037	1.00	1.31	0.87
LTE band13 Ant1	FR1 n77 Ant6	Front	0.502	0.287	0.040	0.397	0.010	0.83	1.19	0.80
		Back	0.504	0.494	0.166	0.477	0.037	1.16	1.48	1.04
LTE band13 Ant1	FR1 n66 Ant4	Front	0.502	0.060	0.040	0.397	0.010	0.60	0.96	0.57
		Back	0.504	0.505	0.166	0.477	0.037	1.18	1.49	1.05
LTE band48 Ant6	FR1 n5 Ant1	Front	0.186	0.362	0.040	0.397	0.010	0.59	0.95	0.56
		Back	0.480	0.493	0.166	0.477	0.037	1.14	1.45	1.01
LTE band71 Ant1	FR1 n2 Ant4	Front	0.316	0.054	0.040	0.397	0.010	0.41	0.77	0.38
		Back	0.502	0.505	0.166	0.477	0.037	1.17	1.48	1.04
LTE band71 Ant1	FR1 n66 Ant4	Front	0.316	0.060	0.040	0.397	0.010	0.42	0.77	0.39
		Back	0.502	0.505	0.166	0.477	0.037	1.17	1.48	1.04
LTE band71 Ant1	FR1 n77	Front	0.316	0.287	0.040	0.397	0.010	0.64	1.00	0.61



FCC SAR Test Report

Report No. : FA462605

	Ant6	Back	0.502	0.471	0.166	0.477	0.037	1.14	1.45	1.01
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WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band12 Ant1	FR1 n25 Ant4	Front	0.400	0.054	0.040	0.397	0.010	0.49	0.85	0.46
		Back	0.501	0.505	0.166	0.477	0.037	1.17	1.48	1.04
LTE band13 Ant1	FR1 n25 Ant4	Front	0.502	0.054	0.040	0.397	0.010	0.60	0.95	0.57
		Back	0.504	0.505	0.166	0.477	0.037	1.18	1.49	1.05
LTE band25 Ant1	FR1 n77 Ant6	Front	0.126	0.287	0.040	0.397	0.010	0.45	0.81	0.42
		Back	0.507	0.471	0.166	0.477	0.037	1.14	1.46	1.02
LTE band26 Ant1	FR1 n25 Ant4	Front	0.269	0.054	0.040	0.397	0.010	0.36	0.72	0.33
		Back	0.520	0.505	0.166	0.477	0.037	1.19	1.50	1.06
LTE band48 Ant6	FR1 n66 Ant1	Front	0.186	0.234	0.040	0.397	0.010	0.46	0.82	0.43
		Back	0.480	0.499	0.166	0.477	0.037	1.15	1.46	1.02

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant4	Front	0.400	0.045	0.040	0.397	0.010	0.49	0.84	0.46
		Back	0.520	0.292	0.166	0.477	0.037	0.98	1.29	0.85
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant5	Front	0.400	0.092	0.040	0.397	0.010	0.53	0.89	0.50
		Back	0.520	0.496	0.166	0.477	0.037	1.18	1.49	1.05
LTE All Bands(2,4,5,12,25,26,66,71) Ant1	FR1 n41 Ant7	Front	0.400	0.070	0.040	0.397	0.010	0.51	0.87	0.48
		Back	0.520	0.304	0.166	0.477	0.037	0.99	1.30	0.86
LTE band12 Ant1	FR1 n77 Ant2	Front	0.400	0.170	0.040	0.397	0.010	0.61	0.97	0.58
		Back	0.501	0.351	0.166	0.477	0.037	1.02	1.33	0.89
LTE band12 Ant1	FR1 n77 Ant5	Front	0.400	0.055	0.040	0.397	0.010	0.50	0.85	0.47
		Back	0.501	0.094	0.166	0.477	0.037	0.76	1.07	0.63
LTE band12 Ant1	FR1 n77 Ant7	Front	0.400	0.084	0.040	0.397	0.010	0.52	0.88	0.49
		Back	0.501	0.339	0.166	0.477	0.037	1.01	1.32	0.88
LTE band14 Ant1	FR1 n77 Ant2	Front	0.373	0.170	0.040	0.397	0.010	0.58	0.94	0.55
		Back	0.505	0.351	0.166	0.477	0.037	1.02	1.33	0.89
LTE band14 Ant1	FR1 n77 Ant5	Front	0.373	0.055	0.040	0.397	0.010	0.47	0.83	0.44
		Back	0.505	0.094	0.166	0.477	0.037	0.77	1.08	0.64
LTE band14 Ant1	FR1 n77 Ant7	Front	0.373	0.084	0.040	0.397	0.010	0.50	0.85	0.47
		Back	0.505	0.339	0.166	0.477	0.037	1.01	1.32	0.88
LTE band5 Ant1	FR1 n77 Ant2	Front	0.269	0.170	0.040	0.397	0.010	0.48	0.84	0.45
		Back	0.520	0.351	0.166	0.477	0.037	1.04	1.35	0.91
LTE band5 Ant1	FR1 n77 Ant5	Front	0.269	0.055	0.040	0.397	0.010	0.36	0.72	0.33
		Back	0.520	0.094	0.166	0.477	0.037	0.78	1.09	0.65
LTE band5 Ant1	FR1 n77 Ant7	Front	0.269	0.084	0.040	0.397	0.010	0.39	0.75	0.36
		Back	0.520	0.339	0.166	0.477	0.037	1.03	1.34	0.90
LTE band66 Ant1	FR1 n77 Ant2	Front	0.249	0.170	0.040	0.397	0.010	0.46	0.82	0.43
		Back	0.515	0.351	0.166	0.477	0.037	1.03	1.34	0.90
LTE band66 Ant1	FR1 n77 Ant5	Front	0.249	0.055	0.040	0.397	0.010	0.34	0.70	0.31
		Back	0.515	0.094	0.166	0.477	0.037	0.78	1.09	0.65
LTE band66 Ant1	FR1 n77 Ant7	Front	0.249	0.084	0.040	0.397	0.010	0.37	0.73	0.34
		Back	0.515	0.339	0.166	0.477	0.037	1.02	1.33	0.89
LTE band7 Ant2	FR1 n77 Ant2	Front	0.148	0.170	0.040	0.397	0.010	0.36	0.72	0.33
		Back	0.489	0.351	0.166	0.477	0.037	1.01	1.32	0.88
LTE band7 Ant2	FR1 n77 Ant5	Front	0.148	0.055	0.040	0.397	0.010	0.24	0.60	0.21
		Back	0.489	0.094	0.166	0.477	0.037	0.75	1.06	0.62



LTE band7 Ant2	FR1 n77 Ant7	Front	0.148	0.084	0.040	0.397	0.010	0.27	0.63	0.24
		Back	0.489	0.339	0.166	0.477	0.037	0.99	1.31	0.87
LTE band13 Ant1	FR1 n77 Ant2	Front	0.502	0.170	0.040	0.397	0.010	0.71	1.07	0.68
		Back	0.504	0.351	0.166	0.477	0.037	1.02	1.33	0.89
LTE band13 Ant1	FR1 n77 Ant5	Front	0.502	0.055	0.040	0.397	0.010	0.60	0.95	0.57
		Back	0.504	0.094	0.166	0.477	0.037	0.76	1.08	0.64
LTE band13 Ant1	FR1 n77 Ant7	Front	0.502	0.084	0.040	0.397	0.010	0.63	0.98	0.60
		Back	0.504	0.339	0.166	0.477	0.037	1.01	1.32	0.88
LTE band71 Ant1	FR1 n77 Ant2	Front	0.316	0.170	0.040	0.397	0.010	0.53	0.88	0.50
		Back	0.502	0.351	0.166	0.477	0.037	1.02	1.33	0.89
LTE band71 Ant1	FR1 n77 Ant5	Front	0.316	0.055	0.040	0.397	0.010	0.41	0.77	0.38
		Back	0.502	0.094	0.166	0.477	0.037	0.76	1.07	0.63
LTE band71 Ant1	FR1 n77 Ant7	Front	0.316	0.084	0.040	0.397	0.010	0.44	0.80	0.41
		Back	0.502	0.339	0.166	0.477	0.037	1.01	1.32	0.88

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
			WWAN	FR1	WLAN2.4GHz Ant 3	WLAN5GHz Ant 3	Bluetooth Ant 3	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band25 Ant1	FR1 n77 Ant2	Front	0.126	0.170	0.040	0.397	0.010	0.34	0.69	0.31
		Back	0.507	0.351	0.166	0.477	0.037	1.02	1.34	0.90
LTE band25 Ant1	FR1 n77 Ant5	Front	0.126	0.055	0.040	0.397	0.010	0.22	0.58	0.19
		Back	0.507	0.094	0.166	0.477	0.037	0.77	1.08	0.64
LTE band25 Ant1	FR1 n77 Ant7	Front	0.126	0.084	0.040	0.397	0.010	0.25	0.61	0.22
		Back	0.507	0.339	0.166	0.477	0.037	1.01	1.32	0.88



15.4 Product specific 10g SAR Exposure Conditions

Remark:

- For WLAN2.4GHz/Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)	Case No
		WWAN 10g SAR (W/kg)	WLAN5GHz Ant 3 10g SAR (W/kg)		
LTE band66 Ant1	Front	2.619	0.410	3.03	
	Back	3.351	1.075	4.43	10
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side	3.392		3.39	
FR1 n66 Ant1	Front	2.688	0.410	3.10	
	Back	2.723	1.075	3.80	
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side			0.00	
WCDMA II Ant1	Front		0.410	0.41	
	Back		1.075	1.08	
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side	3.027		3.03	
LTE Band 25 Ant1	Front		0.410	0.41	
	Back		1.075	1.08	
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side	3.000		3.00	
FR1 n25 Ant1	Front	1.981	0.410	2.39	
	Back	2.497	1.075	3.57	
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side	2.708		2.71	
FR1 n41 Ant7	Front		0.410	0.41	
	Back	3.009	1.075	4.08	12
	Left side	3.138	0.688	3.83	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side			0.00	
FR1 n48 Ant6	Front		0.410	0.41	
	Back		1.075	1.08	
	Left side	2.316	0.688	3.00	
	Right side		0.160	0.16	
	Top side	1.601	1.757	3.36	
	Bottom side			0.00	
FR1 n77 Ant7	Front		0.410	0.41	
	Back	2.898	1.075	3.97	
	Left side		0.688	0.69	
	Right side		0.160	0.16	
	Top side		1.757	1.76	
	Bottom side			0.00	



For ENDC Standalone

WWAN Band	FR1 Band	Exposure Position	1	2	1+2
			WWAN	FR1	Summed
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
LTE band66 Ant1	FR1 n41 Ant7	Front at 0mm	2.619		2.62
		Back at 0mm	2.288	1.363	3.65
		Left side at 0mm		3.138	3.14
		Right side at 0mm			0.00
		Top side at 0mm			0.00
		Bottom side at 0mm	3.392		3.39
LTE Band 25 Ant1	FR1 n41 Ant7	Front at 0mm			0.00
		Back at 0mm		1.363	1.36
		Left side at 0mm		3.138	3.14
		Right side at 0mm			0.00
		Top side at 0mm			0.00
		Bottom side at 0mm	3.000		3.00
LTE band66 Ant1	FR1 n77 Ant7	Front at 0mm	2.619		2.62
		Back at 0mm	2.288	1.494	3.78
		Left side at 0mm			0.00
		Right side at 0mm			0.00
		Top side at 0mm			0.00
		Bottom side at 0mm	3.392		3.39
LTE Band 25 Ant1	FR1 n77 Ant7	Front at 0mm			0.00
		Back at 0mm		1.494	1.49
		Left side at 0mm			0.00
		Right side at 0mm			0.00
		Top side at 0mm			0.00
		Bottom side at 0mm	3.000		3.00



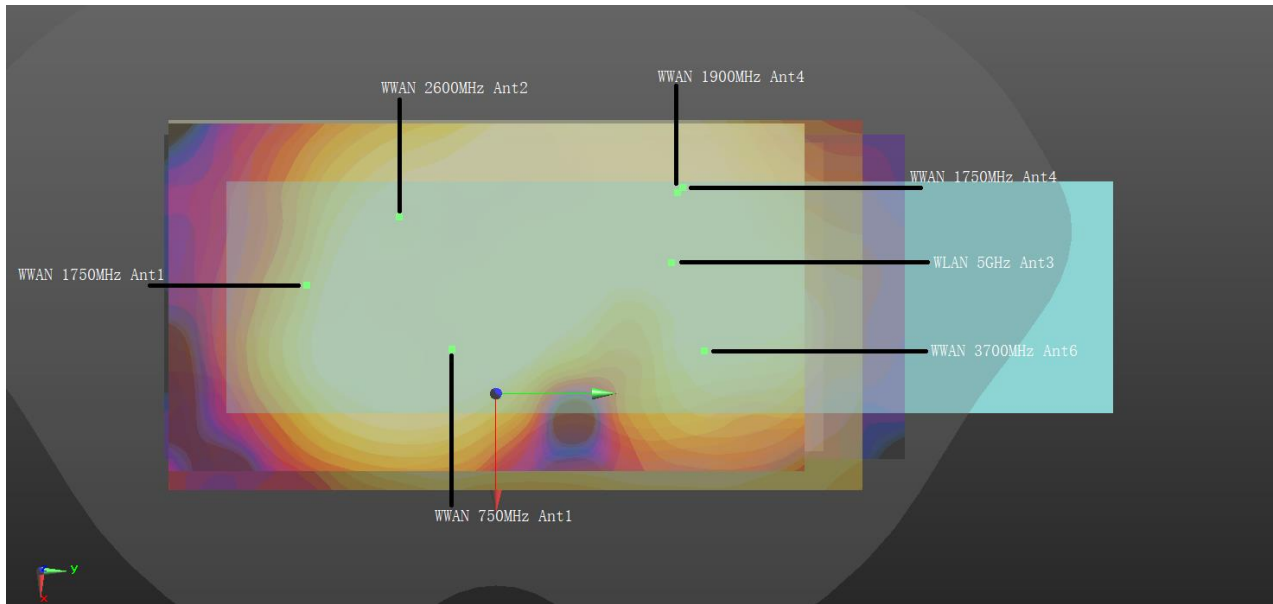
For ENDC simultaneous

WWAN Band	FR1 Band	Exposure Position	1	2	2	1+2+3
			WWAN	FR1	WLAN5GHz Ant 3	Summed
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
LTE band66 Ant1	FR1 n41 Ant7	Front	2.619		0.410	3.03
		Back	1.394	1.363	1.075	3.83
		Left side		3.138	0.688	3.83
		Right side			0.160	0.16
		Top side			1.757	1.76
		Bottom side	3.392			3.39
LTE Band 25 Ant1	FR1 n41 Ant7	Front			0.410	0.41
		Back		1.363	1.075	2.44
		Left side		3.138	0.688	3.83
		Right side			0.160	0.16
		Top side			1.757	1.76
		Bottom side	3.000			3.00
LTE band66 Ant1	FR1 n77 Ant7	Front	2.619		0.410	3.03
		Back	1.394	1.494	1.075	3.96
		Left side			0.688	0.69
		Right side			0.160	0.16
		Top side			1.757	1.76
		Bottom side	3.392			3.39
LTE Band 25 Ant1	FR1 n77 Ant7	Front			0.410	0.41
		Back		1.494	1.075	2.57
		Left side			0.688	0.69
		Right side			0.160	0.16
		Top side			1.757	1.76
		Bottom side	3.000			3.00

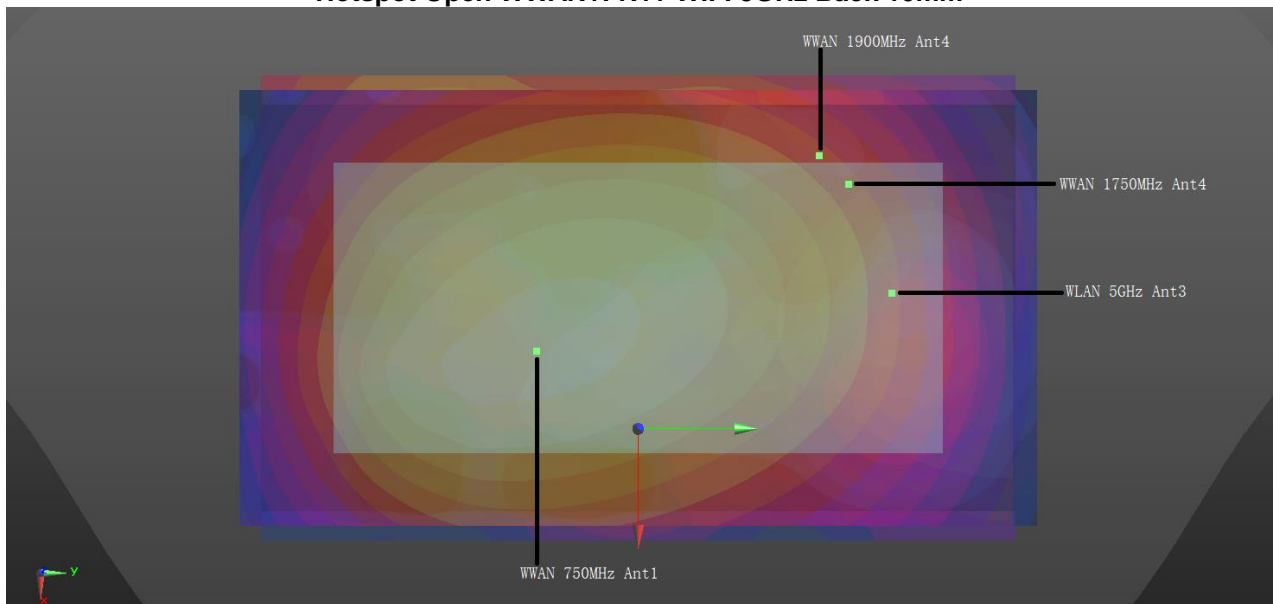
15.5 SPLSR Evaluation and Analysis

General Note:

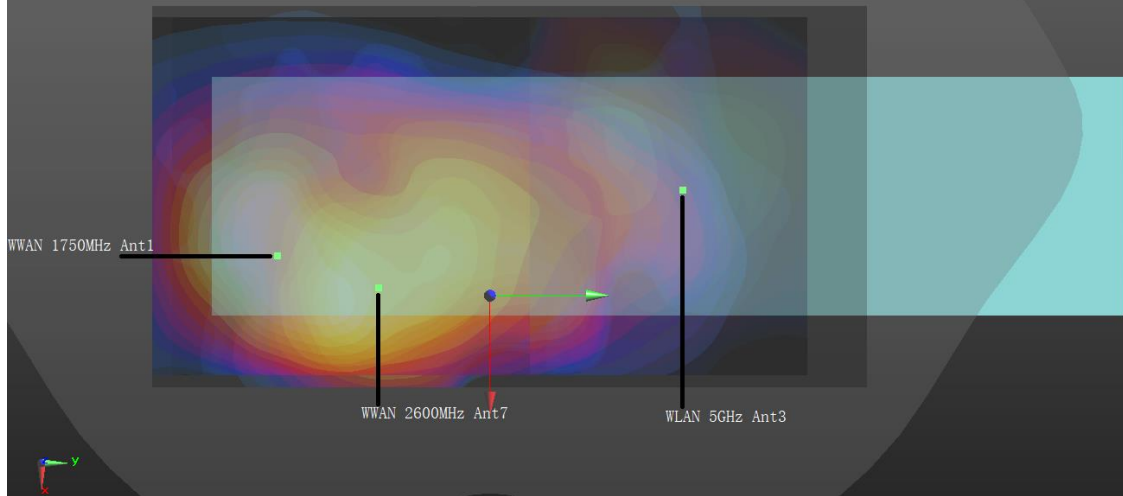
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR1 + SAR2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
3. Per April 2022 TCB Workshop Notes, WWAN ant4 was summed algebraically with the WIFI Antenna 3 for the purposes of hybrid SPLSR combination and they are located at the top of the device.
4. Per April 2022 TCB Workshop, instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.



Hotspot Open WWAN+FR1+ WIFI 5GHz Back 10mm



Hotspot Close WWAN+FR1+ WIFI 5GHz Back 10mm



Extremity Open WWAN+FR1+ WIFI 5GHz Back 0mm

<For Hotspot Flip Open >

Case No	Band	Position	SAR 1g SAR (W/kg)	Summed	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				1g SAR (W/kg)		X	Y	Z				
Case 5	FR1 n7 Ant2	Back	0.865	0.865	10mm	-20.8	-28	-1.57	75.3	1.66	0.03	Not required
	LTE band66 Ant4		0.557		10mm	-26.9	47.1	-1.59				
	WLAN5GHz Ant 3		0.24		10mm							
	FR1 n7 Ant2	Back	0.865	0.865	10mm	-20.8	-28	-1.57	88.2	1.66	0.02	Not required
	LTE band66 Ant4		0.557		10mm							
	WLAN5GHz Ant 3		0.24		10mm	-1	57.9	-1.83				
Case 6	FR1 n7 Ant2	Back	0.865	0.865	10mm	-20.8	-28	-1.57	64.9	1.66	0.03	Not required
	LTE band2 Ant4		0.554		10mm	-23.8	36.8	-1.64				
	WLAN5GHz Ant 3		0.24		10mm							
	FR1 n7 Ant2	Back	0.865	0.865	10mm	-20.8	-28	-1.57	88.2	1.66	0.02	Not required
	LTE band2 Ant4		0.554		10mm							
	WLAN5GHz Ant 3		0.24		10mm	-1	57.9	-1.83				
Case 7	FR1 n71 Ant1	Back	0.875	0.875	10mm	13.5	-13.1	-1.69	72.5	1.67	0.03	Not required
	LTE band66 Ant4		0.557		10mm	-26.9	47.1	-1.59				
	WLAN5GHz Ant 3		0.24		10mm							
	FR1 n71 Ant1	Back	0.875	0.875	10mm	13.5	-13.1	-1.69	72.5	1.67	0.03	Not required
	LTE band66 Ant4		0.557		10mm							
	WLAN5GHz Ant 3		0.24		10mm	-1	57.9	-1.83				
Case 8	FR1 n71 Ant1	Back	0.875	0.875	10mm	13.5	-13.1	-1.69	62.3	1.67	0.03	Not required
	LTE band2 Ant4		0.554		10mm	-23.8	36.8	-1.64				
	WLAN5GHz Ant 3		0.24		10mm							
	FR1 n71 Ant1	Back	0.875	0.875	10mm	13.5	-13.1	-1.69	72.5	1.67	0.03	Not required
	LTE band2 Ant4		0.554		10mm							
	WLAN5GHz Ant 3		0.24		10mm	-1	57.9	-1.83				



Case No	Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				1g SAR (W/kg)	(mm)	X	Y	Z				
Case 9	FR1 n66 Ant1	Back	0.619	0.619	10mm	-3	-49	-1.49	98.0	1.60	0.02	Not required
	LTE band48 Ant6		10mm		14.8	47.4	-1.59					
	WLAN5GHz Ant 3		10mm									
	FR1 n66 Ant1	Back	0.619	0.619	10mm	-3	-49	-1.49	106.9	1.60	0.02	Not required
	LTE band48 Ant6		10mm									
	WLAN5GHz Ant 3		10mm		-1	57.9	-1.83					

<For Hotspot Flip Close >

Case No	Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				1g SAR (W/kg)	(mm)	X	Y	Z				
Case 1	FR1 n71 Ant1	Back	0.818	0.818	10mm	9	-21	-1.65	71.7	1.66	0.03	Not required
	LTE band66 Ant4		10mm		-25.5	41.9	-1.73					
	WLAN5GHz Ant 3		10mm									
	FR1 n71 Ant1	Back	0.818	0.818	10mm	9	-21	-1.65	75.9	1.66	0.03	Not required
	LTE band66 Ant4		10mm									
	WLAN5GHz Ant 3		10mm		-2.2	54.1	-1.65					
Case 2	FR1 n71 Ant1	Back	0.818	0.818	10mm	9	-21	-1.65	72.9	1.65	0.03	Not required
	LTE band2 Ant4		10mm		-29.9	40.7	-1.59					
	WLAN5GHz Ant 3		10mm									
	FR1 n71 Ant1	Back	0.818	0.818	10mm	9	-21	-1.65	75.9	1.65	0.03	Not required
	LTE band2 Ant4		10mm									
	WLAN5GHz Ant 3		10mm		-2.2	54.1	-1.65					

<For Extremity Open >

Case No	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 10	LTE band66 Ant1	Back	3.351	0	21.2	-50.5	-1.39	114.6	4.43	0.08	Not required
	WLAN5GHz Ant 3		1.075	0	6.5	63.2	-1.71				
Case 12	FR1 n41 Ant7	Back	3.009	0	21.6	-23.8	-1.41	88.3	4.08	0.09	Not required
	WLAN5GHz Ant 3		1.075	0	6.5	63.2	-1.71				

Test Engineer : Martin Li, Varus Wang, Light Wang, Ricky Gu



16. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

17. References

- [1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”
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- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.
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- [10] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015
- [11] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015
- [12] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [13] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

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