

FCC SAR Test Report

APPLICANT : Xiaomi Communications Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : POCO
MODEL NAME : 24069PC21G
FCC ID : 2AFZZPC21G
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)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
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 12
5. Proximity Sensor Triggering Test 15
6. RF Exposure Limits 17
6.1 Uncontrolled Environment 17
6.2 Controlled Environment 17
7. Specific Absorption Rate (SAR) 18
7.1 Introduction 18
7.2 SAR Definition 18
8. System Description and Setup 19
8.1 E-Field Probe 20
8.2 Data Acquisition Electronics (DAE) 20
8.3 Phantom 21
8.4 Device Holder 22
9. Measurement Procedures 23
9.1 Spatial Peak SAR Evaluation 23
9.2 Power Reference Measurement 24
9.3 Area Scan 24
9.4 Zoom Scan 25
9.5 Volume Scan Procedures 25
9.6 Power Drift Monitoring 25
10. Test Equipment List 26
11. System Verification 27
11.1 Tissue Simulating Liquids 27
11.2 Tissue Verification 27
11.3 System Performance Check Results 29
12. RF Exposure Positions 31
12.1 Ear and handset reference point 31
12.2 Definition of the cheek position 32
12.3 Definition of the tilt position 33
12.4 Body Worn Accessory 34
12.5 Product Specific 10g SAR Exposure 35
12.6 Wireless Router 35
13. Conducted RF Output Power (Unit: dBm) 36
14. Antenna Location 51
15. SAR Test Results 52
15.1 Head SAR 55
15.2 Hotspot SAR 70
15.3 Body Worn Accessory SAR 81
15.4 Product specific 10g SAR 87
15.5 Repeated SAR Measurement 88
15.6 NR Linearity Data Analysis 89
16. Simultaneous Transmission Analysis 92
16.1 Head Exposure Conditions 93
16.2 Hotspot Exposure Conditions 94
16.3 Body-Worn Accessory Exposure Conditions 95
16.4 Product specific 10g SAR Exposure Conditions 96
17. Uncertainty Assessment 97
18. References 98
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 reduction mechanism verification



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Xiaomi Communications Co., Ltd., Mobile Phone, 24069PC21G**, 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	GSM	GSM850	1.09	0.83	0.47	1.59
		GSM1900	1.02	0.83	0.23	
	WCDMA	WCDMA II	1.08	0.95	0.67	
		WCDMA IV	1.09	0.69	0.52	
		WCDMA V	0.99	0.86	0.32	
	LTE	LTE Band 2	1.09	1.04	0.66	
		LTE Band 7	1.09	0.52	0.76	
		LTE Band 26/5	0.71	0.92	0.34	
		LTE Band 66/4	1.09	0.76	0.57	
		LTE Band 41/38	1.09	0.42	0.57	
		LTE Band 42	1.03	1.05	1.09	
	5G NR	LTE Band 48	1.09	0.79	0.93	
		FR1 n2	1.07	0.97	0.78	
		FR1 n5	0.84	0.74	0.31	
		FR1 n7	1.01	0.69	0.72	
		FR1 n66	1.00	0.86	0.57	
FR1 n41/n38		1.03	0.61	0.69		
DTS	WLAN	FR1 n48	1.09	0.64	0.72	
		FR1 n77/n78	0.96	0.63	0.94	
NII	WLAN	2.4GHz WLAN	1.01	0.56	0.31	1.59
DSS		5GHz WLAN	1.04	1.02	0.60	1.59
	Bluetooth	2.4GHz Bluetooth	0.45	0.31	0.10	1.59

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	LTE	LTE Band 42	2.30	2.82
		LTE Band 48	2.38	
	5G NR	FR1 n48	2.07	
		FR1 n77/n78	1.73	
NII	WLAN	5GHz WLAN	2.33	2.82

Date of Testing: 2024/2/24~ 2024/3/4

Remark:

- This device supports LTE B4 / B5 / B38 and B66 / B26 / B41. Since the supported frequency span for LTE B4 / B5 / B38 falls completely within the supports frequency span for LTE B66 / B26 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66 / B26 / B41.
- This device supports 5GNR n38/n78 and n41/77. Since the supported frequency span for 5GNR n38/n78 falls completely within the supports frequency span for 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 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 5145.01.

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.
	SAR04-KS, SAR06-KS	CN1257	314309

Applicant	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

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 616217 D04 SAR for laptop and tablets v01r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- 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	Mobile Phone
Brand Name	POCO
Model Name	24069PC21G
FCC ID	2AFZZPC21G
IMEI Code	IMEI 1: 861593070015260 IMEI 2: 861593070015278
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz 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 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 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 WLAN 6GHz U-NII-5: 5925 MHz ~ 6425 MHz WLAN 6GHz U-NII-6: 6425 MHz ~ 6525 MHz WLAN 6GHz U-NII-7: 6525 MHz ~ 6875 MHz WLAN 6GHz U-NII-8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac/ax VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK



HW Version	1351N16T
SW Version	Xiaomi HyperOS 1.0
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
3. 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).
4. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode.
5. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
6. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose SIM1 slot to perform all tests.
7. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
8. For WLAN/BT when transmit simultaneously with each other, or when transmit simultaneous with WWAN/BT, power reduction will be activated to head, Body and hotspot exposure conditions.
9. 5GNR n77/n78 supports HPUE mode, HPUE power and SAR testing performed separately.
10. 5GNR n77/n78 HPUE with higher power. 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.
11. For 5GNR n77/n78 HPUE, 5GNR n77/n78 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, using FTM to perform SAR with default 100% transmission.
12. 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.
13. There are two types of EUT: Sample 1 is 16+512G capacity with battery 1, Sample 2 is 8+256G capacity with battery 2. According to the difference, sample 1 was chosen to perform full testing.
14. This device has NFC function and the NFC SAR report will be separately submitted.
15. SAR and Power density test report for WLAN 6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5GHz U-NII-1/2A/2C/3 and WLAN 6GHz U-NII-5/6/7/8.
16. This device supports 5GNR 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	n5	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 15, 20, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 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	2AFZZPC21G																																																														
Equipment Name	Mobile 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 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 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 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 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE Release Version	R15, Cat18																																																														
CA Support	Supported, Uplink and Downlink																																																														
LTE MPR permanently built-in by design	<p>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">≥ 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
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																																																								
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 Proximity sensors/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 13.																																																														
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 13.																																																														
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 3 carriers in the downlink and 2 carriers in the uplink.																																																														



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		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	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	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	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	20850	2510	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	21350	2560	21350	2560
LTE Band 26												
	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	26697	814.7	26705	815.5	26715	816.5	26740	819	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	26990	844	26965	841.5
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	38150	2610
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680	41490	2680
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 42												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	42115	3452.5	42140	3455	42165	3457.5	42190	3460	42190	3460	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540	42990	3540	42990	3540
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
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	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 5	Yes	Yes	Yes	Yes		
LTE Band 26	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 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Default	DSI-1	DSI-4	DSI-5	DSI-3
		Tune up Limit	Tune up Limit	Tune up Limit	Tune up Limit	Tune up Limit
LTE Band 5	Ant 0	25.50	25.50	25.50	25.50	25.50
LTE Band 26		25.50	25.50	25.50	25.50	25.50
LTE Band 5	Ant 1	25.50	23.00	24.00	23.00	24.00
LTE Band 26		25.50	23.00	24.00	23.00	24.00
LTE Band 4	Ant 2	25.50	19.50	25.50	19.50	24.50
LTE Band 66		25.50	19.50	25.50	19.50	24.50
LTE Band 4	Ant 3	25.00	25.00	25.00	22.00	22.00
LTE Band 66		25.00	25.00	25.00	22.00	22.00
LTE Band 4	Ant 4	25.00	20.00	21.50	20.00	21.50
LTE Band 66		25.00	20.00	21.50	20.00	21.50
LTE Band 4	Ant 5	22.50	22.50	22.50	22.50	22.50
LTE Band 66		22.50	22.50	22.50	22.50	22.50
LTE Band 38	Ant 2	25.50	19.50	25.50	19.50	23.50
LTE Band 41		25.50	19.50	25.50	19.50	23.50
LTE Band 38_Other PA	Ant 2	22.00	16.00	22.00	16.00	20.00
LTE Band 41_Other PA		22.00	16.00	22.00	16.00	20.00
LTE Band 38	Ant 3	25.00	25.00	25.00	20.50	20.50
LTE Band 41		25.00	25.00	25.00	20.50	20.50
LTE Band 38_Other PA	Ant 3	25.00	25.00	25.00	20.50	20.50
LTE Band 41_Other PA		25.00	25.00	25.00	20.50	20.50
LTE Band 38	Ant 4	25.00	19.00	21.00	19.00	21.00
LTE Band 41		25.00	19.00	21.00	19.00	21.00
LTE Band 38_Other PA	Ant 4	25.50	19.50	21.50	19.50	21.50
LTE Band 41_Other PA		25.50	19.50	21.50	19.50	21.50
LTE Band 38	Ant 5	22.00	22.00	20.50	20.50	20.50
LTE Band 41		22.00	22.00	20.50	20.50	20.50
LTE Band 38_Other PA	Ant 5	22.50	22.50	21.00	21.00	21.00
LTE Band 41_Other PA		22.50	22.50	21.00	21.00	21.00

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 n66: 1710 MHz ~ 1780 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR 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 n5	LTE B7
LTE Anchor Bands for n66	LTE B7
LTE Anchor Bands for n78	LTE B2/5/7/38/41

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band																
NR Band 2																
	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	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890
NR Band 5																
	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	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 SCS15KHz																
	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	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	503500	2517.5	504000	2520
M	507000	2535	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	510500	2552.5	510000	2550

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 38												
	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)
L	515004	2575.02	515502	2577.51	516000	2580	516504	2582.52	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610	521496	2607.48	520998	2604.99	519996	2599.98



NR Band 41																									
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	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	518598	2592.99	
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	537000	2685	529998	2649.99	528996	2644.98	528000	2640	

NR Band 48										
	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	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98

NR Band 77																									
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	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	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930	

NR Band 78																									
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	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	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	
H	653000	3795	652834	3792.51	652668	3790.02	652500	3787.5	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650334	3755.01			

For <3450 MHz ~ 3550 MHz >

NR Band 77																									
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495			
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	
H	636334	3545.01	636168	3542.52	636000	3540	635834	3537.51	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02			

NR Band 78																									
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495			
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	
H	636334	3545.01	636168	3542.52	636000	3540	635834	3537.51	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02			



<For NR Overlap Bands Description>

1) NR Bands BW

Band	10 MHz	15 MHz	20 MHz	25 MHz	30 MHz	40 MHz	50 MHz	60 MHz	70 MHz	80 MHz	90 MHz	100 MHz
FR1 n38	Yes	Yes	Yes	Yes	Yes	Yes						
FR1 n41			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n77	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n78	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

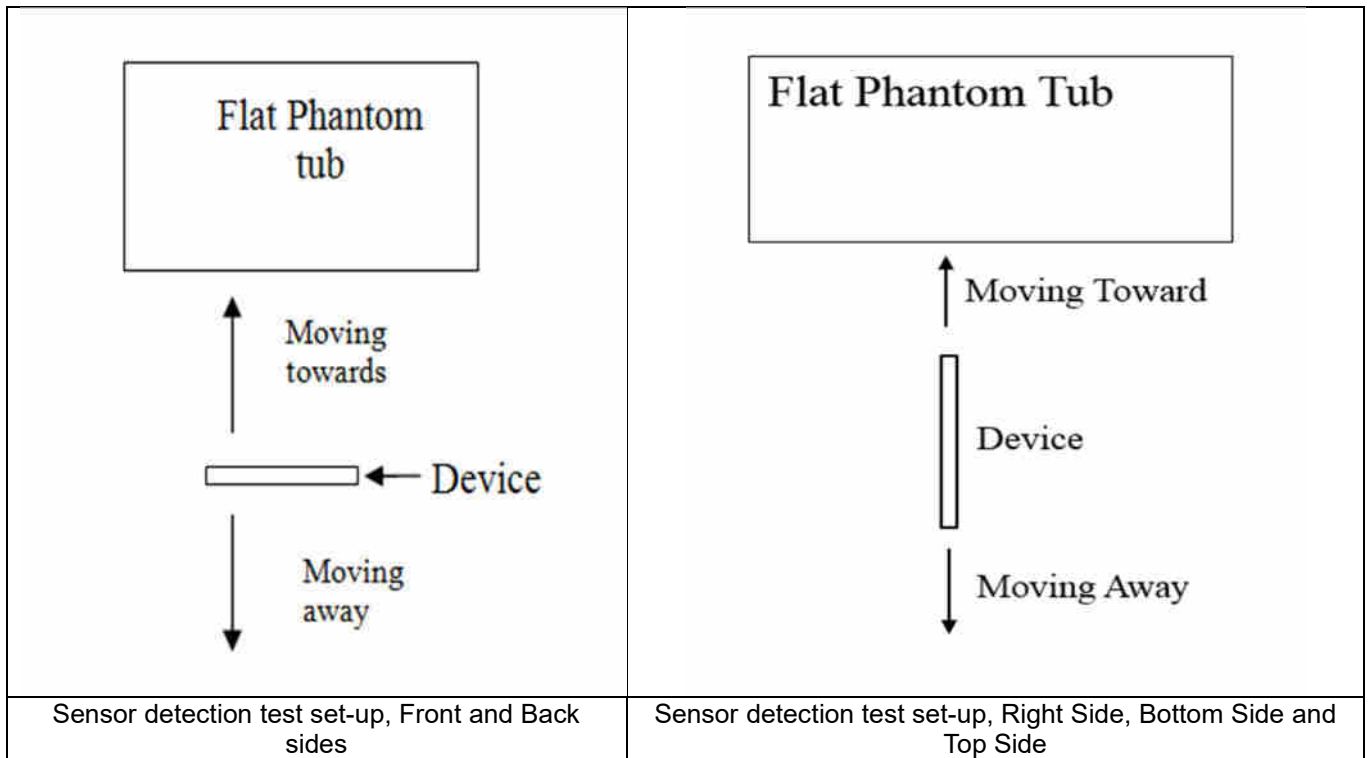
2) NR Bands tune up:

Band	Antenna	Default	DSI-1	DSI-4	DSI-5	DSI-3
		Tune up Limit	Tune up Limit	Tune up Limit	Tune up Limit	Tune up Limit
FR1 n38	Ant 2	25.50	17.50	25.50	17.50	21.50
FR1 n41		25.50	17.50	25.50	17.50	22.00
FR1 n38_Main PA-1	Ant 2	25.50	17.50	25.50	17.50	22.00
FR1 n41_Main PA-1		25.50	17.50	25.50	17.50	22.00
FR1 n38	Ant 3	25.00	25.00	25.00	22.00	22.00
FR1 n41		25.00	25.00	25.00	22.00	22.00
FR1 n38	Ant 4	25.00	19.50	25.00	19.50	25.00
FR1 n41		25.00	19.50	25.00	19.50	25.00
FR1 n38	Ant 5	22.00	22.00	22.00	20.50	22.00
FR1 n41		22.00	22.00	22.00	20.50	22.00
FR1 n38_Main PA-1	Ant 5	22.00	22.00	22.00	20.50	22.00
FR1 n41_Main PA-1		22.00	22.00	22.00	20.50	22.00
FR1 n77 PC3	Ant 6	25.70	17.20	18.70	17.20	18.70
FR1 n78 PC3		25.70	17.20	18.70	17.20	18.70
FR1 n77 PC3	Ant 1	24.50	18.00	21.00	18.00	21.00
FR1 n78 PC3		24.50	18.00	21.00	18.00	21.00
FR1 n77 PC3	Ant 7	24.50	17.00	24.50	17.00	19.00
FR1 n78 PC3		24.50	17.00	24.50	17.00	18.50
FR1 n77 PC3	Ant 8	21.50	18.50	20.50	18.50	20.50
FR1 n78 PC3		21.50	18.50	20.50	18.50	20.50
FR1 n77 PC2	Ant 6	28.00	20.20	22.00	20.50	22.00
FR1 n78 PC2		28.00	20.20	22.00	20.50	22.00
FR1 n77 PC2	Ant 1	26.50	21.00	24.00	21.00	24.00
FR1 n78 PC2		26.50	21.00	24.00	21.00	24.00
FR1 n77 PC2	Ant 7	26.50	20.00	26.50	20.00	22.00
FR1 n78 PC2		26.50	20.00	26.50	20.00	21.50
FR1 n77 PC2	Ant 8	23.50	21.50	23.50	21.50	23.50
FR1 n78 PC2		23.50	21.50	23.50	21.50	23.50

5. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (3980MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or bottom or right or top side of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or bottom or right or top side of the device use a detection threshold distance. When front/back/right/top/bottom sides of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:



<P-Sensor>

< Sensor for Ant3 >

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	16	16	16	16	16	16	16	16

< Sensor for Ant2/7 >

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	6	6	6	6	6	6

6. RF Exposure Limits

6.1 Uncontrolled Environment

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

6.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7. Specific Absorption Rate (SAR)

7.1 Introduction

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

7.2 SAR Definition

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

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

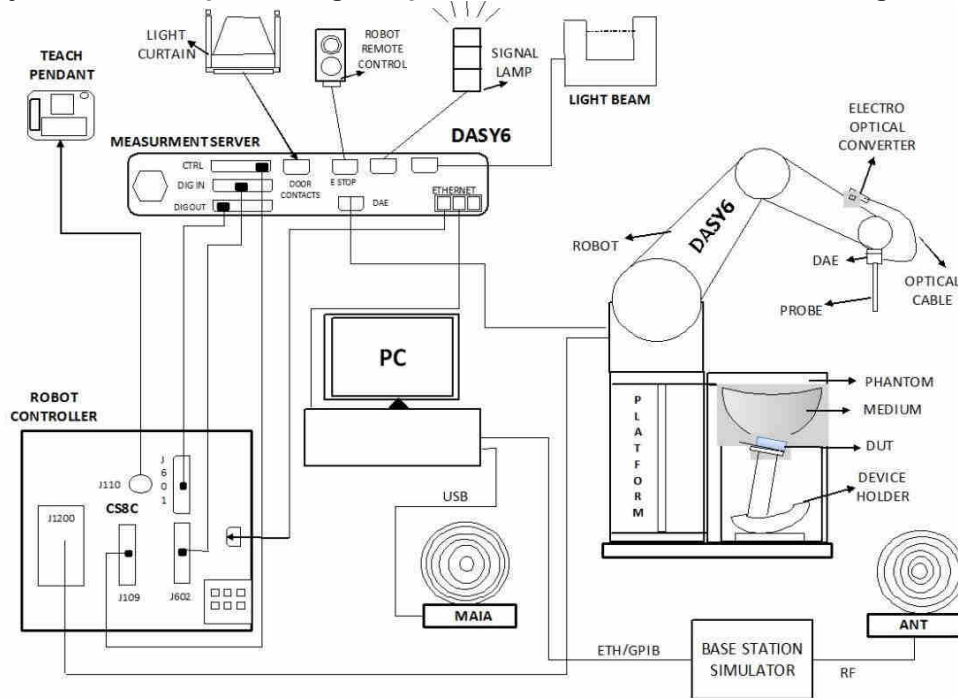
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

The DASY5 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.

8.1 E-Field Probe

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 6 GHz)	
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

8.2 Data Acquisition Electronics (DAE)

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


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



Photo of DAE

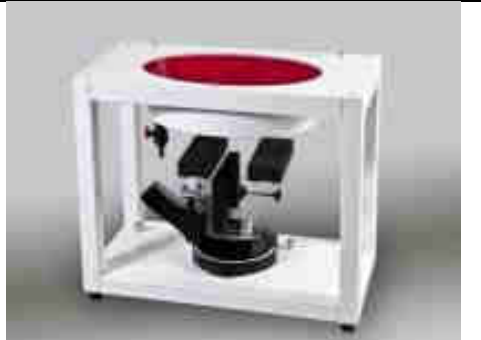
8.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

8.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

9. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

9.1 Spatial Peak SAR Evaluation

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

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

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

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values 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

9.2 Power Reference Measurement

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

9.3 Area Scan

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

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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.	

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

9.5 Volume Scan Procedures

The volume scan is used 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.

9.6 Power Drift Monitoring

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



10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	835MHz System Validation Kit	D835V2	4d091	2022/8/19	2025/8/18
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2025/2/22
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	2022/3/30	2025/3/29
SPEAG	2450MHz System Validation Kit	D2450V2	1040	2023/4/25	2024/4/24
SPEAG	2600MHz System Validation Kit	D2600V2	1112	2023/12/18	2024/12/17
SPEAG	3500MHz System Validation Kit	D3500V2	1037	2023/11/20	2024/11/19
SPEAG	3700MHz System Validation Kit	D3700V2	1008	2023/11/20	2024/11/19
SPEAG	3900MHz System Validation Kit	D3900V2	1048	2023/3/9	2024/3/8
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2022/9/23	2025/9/22
SPEAG	Data Acquisition Electronics	DAE4	1649	2023/4/24	2024/4/23
SPEAG	Dosimetric E-Field Probe	EX3DV4	7764	2023/10/5	2024/10/4
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
Testo	Thermo-Hygrometer	608-H1	1241332126	2023/7/10	2024/7/9
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306175	2023/7/5	2024/7/4
Agilent	ENA Series Network Analyzer	E5071C	MY46111157	2023/7/5	2024/7/4
SPEAG	Dielectric Probe Kit	DAK-3.5	1144	2023/8/17	2024/8/16
Anritsu	Vector Signal Generator	MG3710A	6201682672	2024/1/2	2025/1/1
Rohde & Schwarz	Power Meter	NRVD	102081	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2023/7/5	2024/7/4
R&S	BLUETOOTH TESTER	CBT	101246	2023/5/15	2024/5/14
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2023/10/11	2024/10/10
TES	DIGITAC THERMOMETER	1310	220305411	2023/7/8	2024/7/7
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	

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.

11. System Verification

11.1 Tissue Simulating Liquids

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

11.2 Tissue Verification

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

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (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
835	Head	22.6	0.912	41.900	0.90	41.50	1.33	0.96	±5	2024/2/24
1750	Head	22.9	1.320	40.200	1.37	40.10	-3.65	0.25	±5	2024/2/24
1900	Head	22.6	1.410	40.200	1.40	40.00	0.71	0.50	±5	2024/2/24
2600	Head	22.8	1.880	39.200	1.96	39.00	-4.08	0.51	±5	2024/2/25
3500	Head	22.9	2.810	38.700	2.91	37.90	-3.44	2.11	±5	2024/2/26
3700	Head	22.9	2.990	38.400	3.12	37.70	-4.17	1.86	±5	2024/2/26
3900	Head	22.7	3.180	38.000	3.32	37.50	-4.22	1.33	±5	2024/2/27
835	Head	22.8	0.924	41.400	0.90	41.50	2.67	-0.24	±5	2024/2/28
1750	Head	22.7	1.350	40.100	1.37	40.10	-1.46	0.00	±5	2024/2/28
1900	Head	22.9	1.430	39.800	1.40	40.00	2.14	-0.50	±5	2024/2/28
2600	Head	22.6	1.960	40.400	1.96	39.00	0.00	3.59	±5	2024/2/29
3500	Head	22.7	2.880	38.500	2.91	37.90	-1.03	1.58	±5	2024/3/1
3700	Head	22.7	3.080	38.000	3.12	37.70	-1.28	0.80	±5	2024/3/1
3900	Head	22.9	3.280	37.600	3.32	37.50	-1.20	0.27	±5	2024/3/2
2450	Head	22.6	1.860	38.400	1.80	39.20	3.33	-2.04	±5	2024/3/3
5250	Head	22.8	4.570	35.500	4.71	35.90	-2.97	-1.11	±5	2024/3/3
5600	Head	22.8	4.950	34.800	5.07	35.50	-2.37	-1.97	±5	2024/3/4
5750	Head	22.8	5.130	34.600	5.22	35.40	-1.72	-2.26	±5	2024/3/4



11.3 System Performance Check Results

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

<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 (%)
2024/2/24	835	Head	50	4d091	7764	1649	0.502	9.45	10.04	6.24
2024/2/24	1750	Head	50	1090	7764	1649	1.93	37.00	38.6	4.32
2024/2/24	1900	Head	50	5d118	7764	1649	2.08	39.30	41.6	5.85
2024/2/25	2600	Head	50	1112	7764	1649	2.68	55.10	53.6	-2.72
2024/2/26	3500	Head	50	1037	7764	1649	3.39	65.40	67.8	3.67
2024/2/26	3700	Head	50	1008	7764	1649	3.34	67.20	66.8	-0.60
2024/2/27	3900	Head	50	1048	7764	1649	3.51	69.10	70.2	1.59
2024/2/28	835	Head	50	4d091	7764	1649	0.472	9.45	9.44	-0.11
2024/2/28	1750	Head	50	1090	7764	1649	1.84	37.00	36.8	-0.54
2024/2/28	1900	Head	50	5d118	7764	1649	2.03	39.30	40.6	3.31
2024/2/29	2600	Head	50	1112	7764	1649	2.67	55.10	53.4	-3.09
2024/3/1	3500	Head	50	1037	7764	1649	3.21	65.40	64.2	-1.83
2024/3/1	3700	Head	50	1008	7764	1649	3.32	67.20	66.4	-1.19
2024/3/2	3900	Head	50	1048	7764	1649	3.29	69.10	65.8	-4.78
2024/3/3	2450	Head	50	1040	7764	1649	2.55	52.70	51	-3.23
2024/3/3	5250	Head	50	1113	7764	1649	3.87	81.50	77.4	-5.03
2024/3/4	5600	Head	50	1113	7764	1649	3.88	82.60	77.6	-6.05
2024/3/4	5750	Head	50	1113	7764	1649	3.79	80.80	75.8	-6.19

<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 (%)
2024/2/24	835	Head	50	4d091	7764	1649	0.329	6.22	6.58	5.79
2024/2/24	1750	Head	50	1090	7764	1649	1.05	19.50	21	7.69
2024/2/24	1900	Head	50	5d118	7764	1649	1.10	20.40	22	7.84
2024/2/25	2600	Head	50	1112	7764	1649	1.22	24.80	24.4	-1.61
2024/2/26	3500	Head	50	1037	7764	1649	1.33	24.70	26.6	7.69
2024/2/26	3700	Head	50	1008	7764	1649	1.28	24.40	25.6	4.92
2024/2/27	3900	Head	50	1048	7764	1649	1.29	24.10	25.8	7.05
2024/2/28	835	Head	50	4d091	7764	1649	0.305	6.22	6.1	-1.93
2024/2/28	1750	Head	50	1090	7764	1649	0.968	19.50	19.36	-0.72
2024/2/28	1900	Head	50	5d118	7764	1649	1.04	20.40	20.8	1.96
2024/2/29	2600	Head	50	1112	7764	1649	1.20	24.80	24	-3.23
2024/3/1	3500	Head	50	1037	7764	1649	1.23	24.70	24.6	-0.40
2024/3/1	3700	Head	50	1008	7764	1649	1.23	24.40	24.6	0.82
2024/3/2	3900	Head	50	1048	7764	1649	1.18	24.10	23.6	-2.07
2024/3/3	2450	Head	50	1040	7764	1649	1.19	24.60	23.8	-3.25
2024/3/3	5250	Head	50	1113	7764	1649	1.09	23.30	21.8	-6.44
2024/3/4	5600	Head	50	1113	7764	1649	1.11	23.70	22.2	-6.33
2024/3/4	5750	Head	50	1113	7764	1649	1.08	23.00	21.6	-6.09

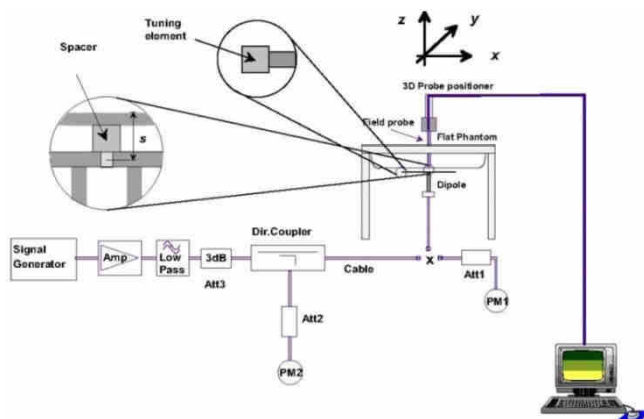


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

12. RF Exposure Positions

12.1 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.

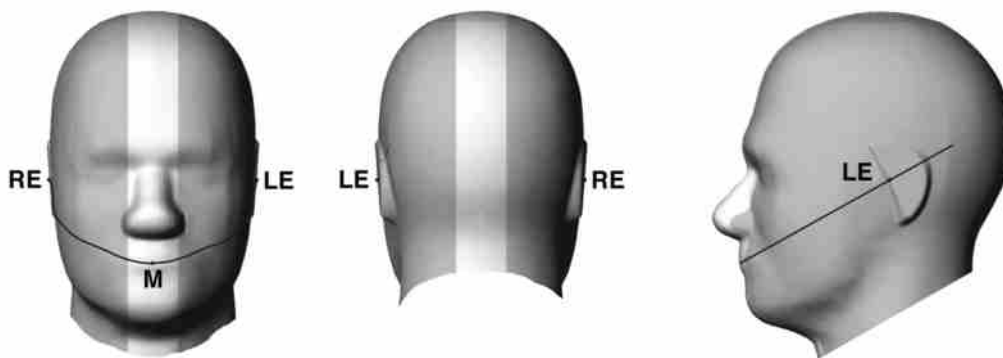


Fig 12.1.1 Front, back, and side views of SAM twin phantom

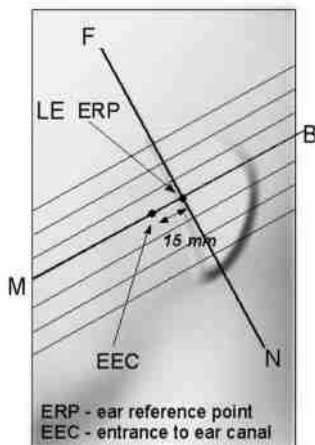


Fig 12.1.2 Close-up side view of phantom showing the ear region.

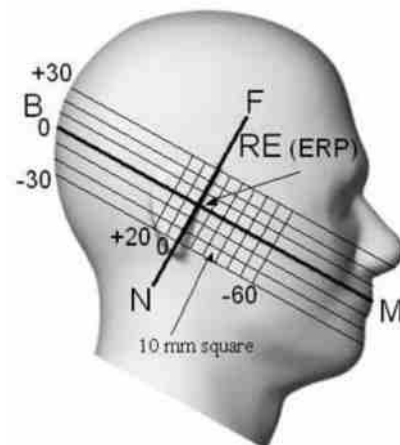


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 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.

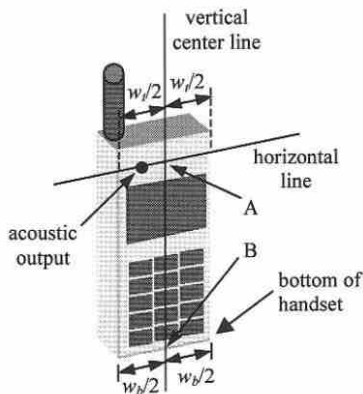


Fig 12.2.1 Handset vertical and horizontal reference lines—“fixed case”

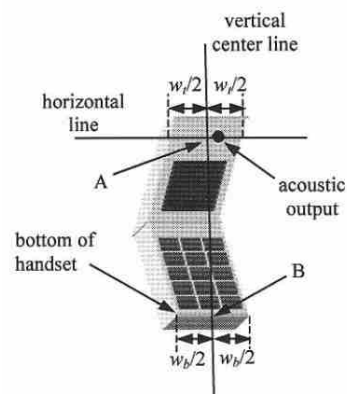


Fig 12.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

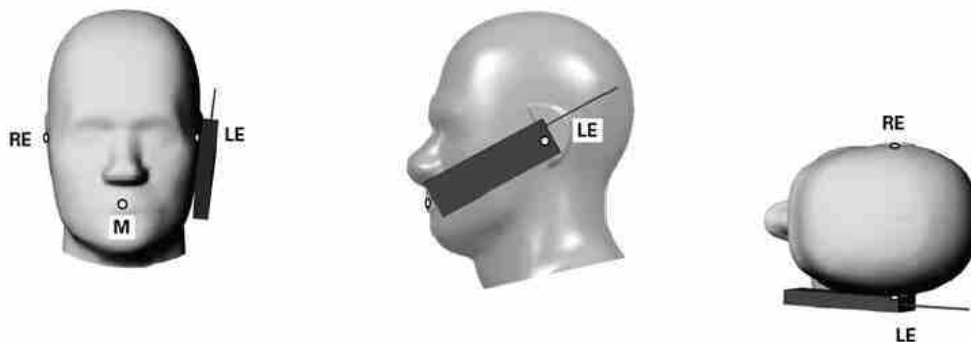


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 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

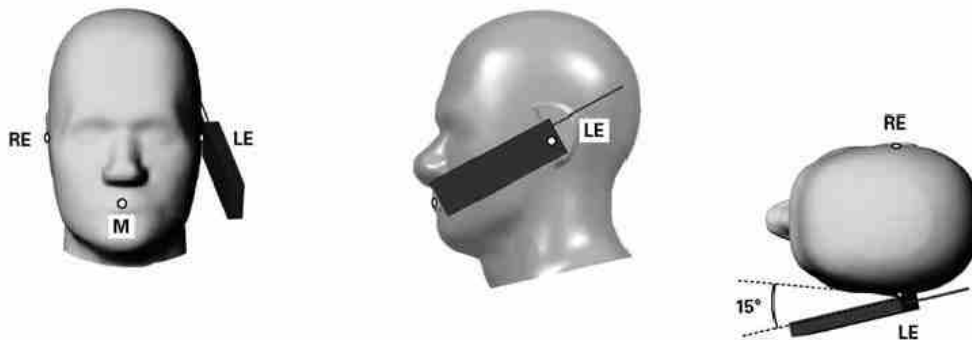


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 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 $> 1.2 \text{ W/kg}$, 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.

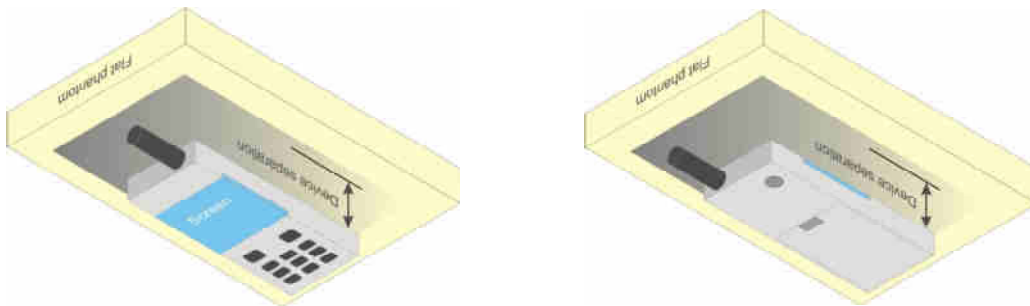


Fig 12.4 Body Worn Position

12.5 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.

12.6 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.

13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<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_o/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: Δ_{ACK} , Δ_{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 $\beta_o/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_o/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-TFCCI is equal to the target E-TFCCI of 75 for sub-test 1, and other subtest's E-TFCCI
- 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	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 $\Delta_{CDI} = 30/15$ with $\beta_{ht} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CDI} = 5/15$ with $\beta_{ht} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{ht}/\beta_c = 24/15$. 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 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_{IP})	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.		

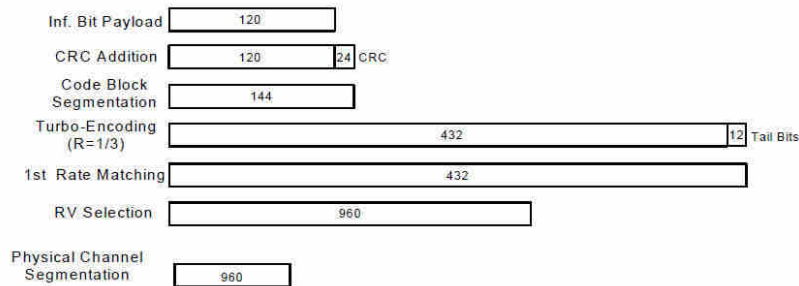


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration

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 Parmns
 - 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 $\beta_{IS} = 30/15 * \beta_c$.

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>

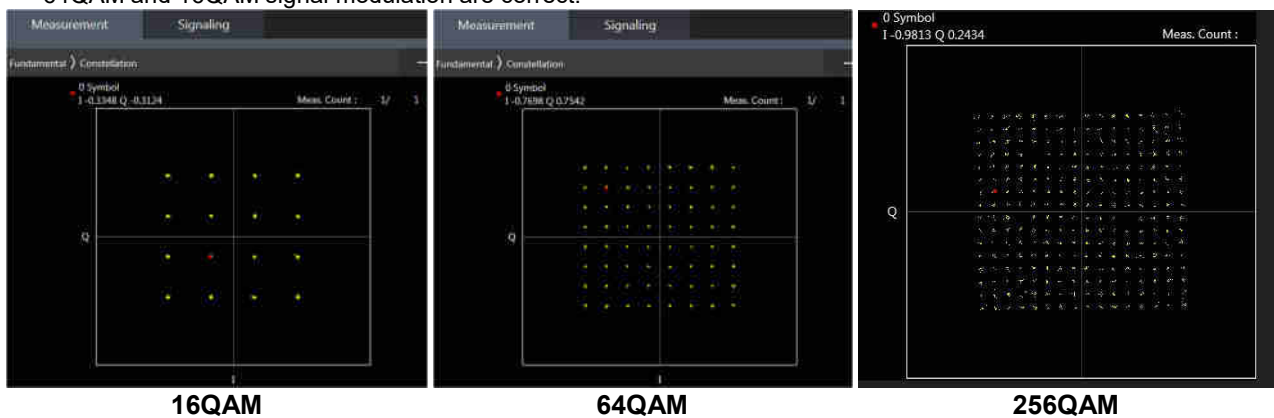
General Note:

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 / 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 / B5 / B38 SAR test was covered by B66 / B26 / B41; 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.

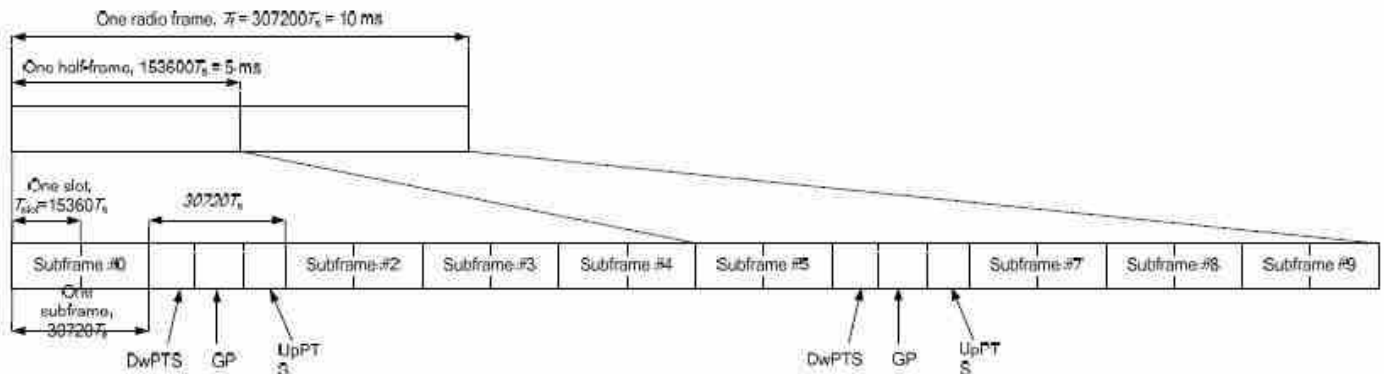


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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	D	S	U	U	D	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:

- 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.



<LTE Carrier Aggregation>

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. All permutations exist. No restrictions on Pcell & Scell combinations.
4. The gray color table is covered by other combinations and no need to verify power

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation		
Number	Combination	Covered by	Number	Combination	Covered by
		Measurement Superset			Measurement Superset
1	CA_2A-4A		1	CA_2A-7A-7A	
2	CA_2A-7A	3CC-1	2	CA_2A-7C	
3	CA_38C		3	CA_4A-7C	
4	CA_41A-41A		4	CA_5A-7A-7A	
5	CA_41C		5	CA_41D	
6	CA_4A-5A				
7	CA_4A-7A				
8	CA_7A-7A	3CC-1			
9	CA_7C	3CC-2			
10	CA_66C				
11	CA_2A-2A				
12	CA_5A-7A	3CC-4			
13	CA_7A-66A				
14	CA_66B				

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 three 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 LTE Band 4/7/38/41/66 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 4/7/38/41/66

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_7C	Ant2/3/4/5
CA_38C	Ant2/3/4/5

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation for LTE B7/38 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- ii. The device supports uplink carrier aggregation with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre the 3GPP requirement.
- iii. According Nov. 2017 TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iv. Additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n5 /n66 /n78 is NSA mode.
2. 5G NR n2/n5/n7/n66/n38/n41/ n48/n77/n78 is SA 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 n77/n78 HPUE, 5G NR n77/n78 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, using FTM to perform SAR with default 100% transmission.
5. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
6. 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.
7. 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.
8. 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.
9. 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.
10. 5G NR n77/n78 supports HPUE, HPUE power and SAR testing performed separately.
11. 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.
12. For Inter-band ULCA bands co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for Inter-band ULCA bands.

<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 combinations	LTE Tx	NR Tx
DC_2A-n78A	Ant2/3	Ant6/1/7/8
DC_7A-n78A	Ant2/3/4/5	Ant6/1/7/8
DC_38A-n78A	Ant2/3/4/5	Ant6/1/7/8
DC_41A-n78A	Ant2/3/4/5	Ant6/1/7/8
DC_5A-n78A	Ant0/1	Ant6/1/7/8
DC_7A-n5A	Ant2/3/4/5	Ant0/1
DC_7A-n66A	Ant3/4	Ant2/5

<WLAN Conducted Power>

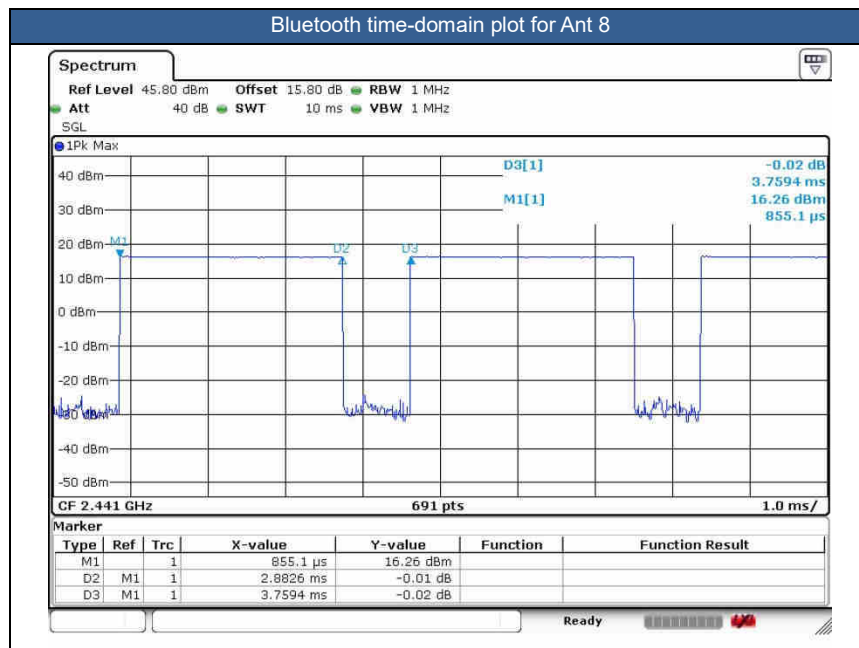
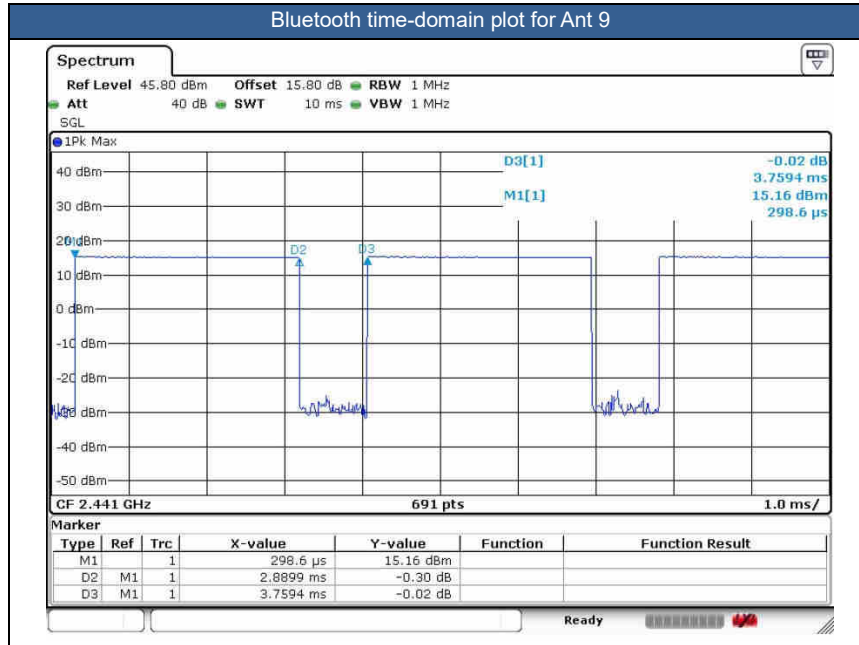
General Note:

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.
6. 802.11 ax supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.
7. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
8. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

<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 76.87% for ant 9 and 76.68% for ant 8 as following figure, for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 100%, therefore the actual duty cycle will be scaled up to 83.3% for Bluetooth reported SAR calculation.





14. Antenna Location

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

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For 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 Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
5. For WLAN/BT when transmit simultaneously with each other, or when transmit simultaneous with WWAN/BT, power reduction will be activated to head, Body and hotspot exposure conditions.
6. 5G NR n77/n78 supports HPUE mode, HPUE power and SAR testing performed separately.
7. For 5G NR n77/n78 HPUE, 5G NR n77/n78 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, using FTM to perform SAR with default 100% transmission.
8. 5G NR n77/n78 HPUE with higher power. 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.
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.
10. 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 (for handheld on state, the maximum full power means reduced 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 LTE Band 42/48, 5G NR n48/n77/n78, 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.
11. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is <1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
12. LTE B2 at ant2/3 and LTE B7/38/41 at ant2/5/3/4 and 5G NR n66/7/41 at ant2/5 support different PAs for some



antennas. In addition, LTE bands support Main PA for SA standalone Mode, LTE bands support Other PA only under ENDC combinations and LTE bands support Other PA only under ULCA combinations. For RF exposure, main PA and other PAs was chosen to perform full SAR testing to ensure the RF exposure is compliance separately.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is \leq $\frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

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 \leq 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 \leq 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 \leq 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 \leq 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / 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 / B5 / B38 SAR test was covered by B66 / B26 / B41; 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/n66/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. Per KDB 248227 D01v02r02, when SAR measurement is required for at least one of the two U-NII bands and the highest reported SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is < 1.2 W/kg, SAR is not required for the 160 MHz channel.
4. 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.
5. 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.
6. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
7. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
8. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

DSI status description:

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

Exposure Condition	DSI	Trigger conditions
Head SAR	DSI 1	Earpiece On
Hotspot Mode SAR	DSI 5	Hotspot On
Body worn/ Extremity Mode SAR	DSI 4	Sensor Off/ receiver off
Body worn/ Extremity Mode SAR	DSI 3	Sensor On



15.1 Head SAR

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)	Reported 1g SAR (W/kg)
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	DSI 1	189	836.4	26.21	28.00	1.510	-	-	0.12	0.132	0.199
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 0	DSI 1	189	836.4	26.21	28.00	1.510	-	-	-0.12	0.083	0.125
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	DSI 1	189	836.4	26.21	28.00	1.510	-	-	-0.12	0.135	0.204
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 0	DSI 1	189	836.4	26.21	28.00	1.510	-	-	-0.05	0.056	0.085
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	DSI 1	189	836.4	24.95	26.50	1.429	-	-	-0.03	0.387	0.553
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	DSI 1	189	836.4	24.95	26.50	1.429	-	-	-0.11	0.061	0.087
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	189	836.4	24.95	26.50	1.429	-	-	0.08	0.701	1.002
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	128	824.2	24.88	26.50	1.452	-	-	0.07	0.563	0.818
01	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	251	848.8	24.92	26.50	1.439	-	-	-0.02	0.755	1.086
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	DSI 1	189	836.4	24.95	26.50	1.429	-	-	-0.02	0.087	0.124
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	4182	836.4	24.02	25.00	1.253	-	-	0.03	0.111	0.139
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 1	4182	836.4	24.02	25.00	1.253	-	-	0.05	0.186	0.233
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	4182	836.4	24.02	25.00	1.253	-	-	-0.11	0.176	0.221
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 1	4182	836.4	24.02	25.00	1.253	-	-	0.07	0.089	0.112
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 1	4182	836.4	21.12	22.50	1.374	-	-	0.04	0.355	0.488
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 1	4182	836.4	21.12	22.50	1.374	-	-	-0.06	0.058	0.080
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 1	4182	836.4	21.12	22.50	1.374	-	-	-0.16	0.633	0.870
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 1	4132	826.4	21.10	22.50	1.380	-	-	0.06	0.498	0.687
02	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 1	4233	846.6	20.99	22.50	1.416	-	-	-0.04	0.698	0.988
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 1	4182	836.4	21.12	22.50	1.374	-	-	0.09	0.070	0.096
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	24.23	25.50	1.340	-	-	-0.17	0.188	0.252
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	23.21	24.50	1.346	-	-	0.03	0.153	0.206
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	24.23	25.50	1.340	-	-	0.05	0.113	0.151
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	23.21	24.50	1.346	-	-	-0.08	0.091	0.122
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	24.23	25.50	1.340	-	-	-0.04	0.167	0.224
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	23.21	24.50	1.346	-	-	-0.01	0.145	0.195
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	24.23	25.50	1.340	-	-	0.07	0.089	0.119
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	23.21	24.50	1.346	-	-	-0.05	0.075	0.101
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	21.63	23.00	1.371	-	-	0.15	0.250	0.343
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	21.54	23.00	1.400	-	-	0.08	0.226	0.316
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	21.63	23.00	1.371	-	-	-0.06	0.255	0.350
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	21.54	23.00	1.400	-	-	-0.1	0.229	0.321
03	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	21.63	23.00	1.371	-	-	0.05	0.521	0.714
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	21.54	23.00	1.400	-	-	0.03	0.452	0.633
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	21.63	23.00	1.371	-	-	-0.08	0.063	0.086
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	21.54	23.00	1.400	-	-	-0.06	0.053	0.074
	LTE Band 5 ENDC	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.57	21.00	1.390	-	-	-0.01	0.352	0.489
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	24.45	25.50	1.274	-	-	-0.14	0.180	0.229
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	24.37	25.50	1.297	-	-	-0.15	0.138	0.179
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	24.45	25.50	1.274	-	-	-0.08	0.112	0.143
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	24.37	25.50	1.297	-	-	-0.07	0.081	0.105
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	24.45	25.50	1.274	-	-	0.04	0.168	0.214
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	24.37	25.50	1.297	-	-	0.02	0.127	0.165
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	24.45	25.50	1.274	-	-	-0.09	0.084	0.107
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	24.37	25.50	1.297	-	-	-0.1	0.067	0.087
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	21.47	22.50	1.268	-	-	0.06	0.252	0.319
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	21.38	22.50	1.294	-	-	0.08	0.309	0.400
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	21.47	22.50	1.268	-	-	-0.05	0.038	0.048
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	21.38	22.50	1.294	-	-	0.18	0.052	0.067
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	21.47	22.50	1.268	-	-	0.06	0.579	0.734



FCC SAR Test Report

Report No. : FA420425

04	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	21.38	22.50	1.294	-	-	-0.04	0.652	0.844
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	21.47	22.50	1.268	-	-	0.08	0.600	0.761
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	21.47	22.50	1.268	-	-	0.03	0.060	0.076
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	21.38	22.50	1.294	-	-	0.16	0.071	0.092
	FR1 n5 ENDC	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	19.21	20.50	1.346	-	-	0.04	0.385	0.518
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	1413	1732.6	18.92	20.00	1.282	-	-	0.05	0.788	1.010
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	1312	1712.4	18.86	20.00	1.300	-	-	0.03	0.740	0.962
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	1513	1752.6	18.85	20.00	1.303	-	-	0.06	0.788	1.027
05	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	1413	1732.6	18.92	20.00	1.282	-	-	-0.01	0.848	1.087
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	1312	1712.4	18.86	20.00	1.300	-	-	0.03	0.813	1.057
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	1513	1752.6	18.85	20.00	1.303	-	-	0.06	0.813	1.059
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 1	1413	1732.6	18.92	20.00	1.282	-	-	0.13	0.557	0.714
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	DSI 1	1413	1732.6	18.92	20.00	1.282	-	-	0.17	0.519	0.666
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	1413	1732.6	23.11	24.50	1.377	-	-	0.08	0.144	0.198
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	DSI 1	1413	1732.6	23.11	24.50	1.377	-	-	0.14	0.066	0.091
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	DSI 1	1413	1732.6	23.11	24.50	1.377	-	-	0.04	0.115	0.158
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	DSI 1	1413	1732.6	23.11	24.50	1.377	-	-	0.03	0.069	0.095
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 1	1413	1732.6	18.33	20.00	1.469	-	-	-0.07	0.710	1.043
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 1	1312	1712.4	18.22	20.00	1.507	-	-	0.15	0.701	1.056
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 1	1513	1752.6	18.25	20.00	1.496	-	-	0.02	0.719	1.076
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 4	DSI 1	1413	1732.6	18.33	20.00	1.469	-	-	-0.18	0.159	0.234
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 4	DSI 1	1413	1732.6	18.33	20.00	1.469	-	-	0.08	0.170	0.250
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 4	DSI 1	1413	1732.6	18.33	20.00	1.469	-	-	0.01	0.072	0.106
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 5	DSI 1	1413	1732.6	20.93	22.50	1.435	-	-	0.02	0.433	0.622
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 5	DSI 1	1413	1732.6	20.93	22.50	1.435	-	-	0.02	0.070	0.100
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 5	DSI 1	1413	1732.6	20.93	22.50	1.435	-	-	0.08	0.500	0.718
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 5	DSI 1	1413	1732.6	20.93	22.50	1.435	-	-	0.01	0.094	0.135
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132322	1745	18.52	19.50	1.253	-	-	-0.14	0.821	1.029
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132072	1720	18.47	19.50	1.268	-	-	0.09	0.774	0.981
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	18.50	19.50	1.259	-	-	0.01	0.859	1.081
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132322	1745	18.41	19.50	1.285	-	-	0.04	0.766	0.985
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132072	1720	18.22	19.50	1.343	-	-	0.09	0.746	1.002
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	18.27	19.50	1.327	-	-	0.06	0.771	1.023
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	18.27	19.50	1.327	-	-	0.08	0.708	0.940
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	132322	1745	18.52	19.50	1.253	-	-	0.02	0.693	0.868
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	132072	1720	18.47	19.50	1.268	-	-	0.09	0.625	0.792
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	132572	1770	18.50	19.50	1.259	-	-	0.06	0.688	0.866
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	132322	1745	18.41	19.50	1.285	-	-	0.13	0.645	0.829
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	132072	1720	18.22	19.50	1.343	-	-	0.09	0.622	0.835
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	132572	1770	18.27	19.50	1.327	-	-	0.06	0.656	0.871
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 2	DSI 1	132322	1745	18.27	19.50	1.327	-	-	0.08	0.543	0.721
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	132322	1745	18.52	19.50	1.253	-	-	-0.15	0.475	0.595
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	132322	1745	18.41	19.50	1.285	-	-	0.13	0.454	0.584
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	132322	1745	18.52	19.50	1.253	-	-	0.09	0.417	0.523
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	132322	1745	18.41	19.50	1.285	-	-	0.07	0.444	0.571
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132322	1745	23.41	25.00	1.442	-	-	0.11	0.138	0.199
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	132322	1745	22.31	24.00	1.476	-	-	0.03	0.116	0.171
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	132322	1745	23.41	25.00	1.442	-	-	0.16	0.142	0.205
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	132322	1745	22.31	24.00	1.476	-	-	-0.13	0.115	0.170
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	132322	1745	23.41	25.00	1.442	-	-	0.08	0.128	0.185
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	132322	1745	22.31	24.00	1.476	-	-	0.06	0.099	0.146
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	132322	1745	23.41	25.00	1.442	-	-	0.09	0.079	0.114
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	132322	1745	22.31	24.00	1.476	-	-	0.07	0.065	0.096
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	132322	1745	18.55	20.00	1.396	-	-	0.09	0.726	1.014
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	132072	1720	18.48	20.00	1.419	-	-	0.17	0.754	1.070



FCC SAR Test Report

Report No. : FA420425

06	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	132572	1770	18.53	20.00	1.403	-	-	0.02	0.780	1.094
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	132322	1745	18.53	20.00	1.403	-	-	-0.11	0.744	1.044
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	132072	1720	18.51	20.00	1.409	-	-	0.17	0.729	1.027
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	132572	1770	18.48	20.00	1.419	-	-	0.02	0.702	0.996
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	DSI 1	132322	1745	18.41	20.00	1.442	-	-	0.05	0.721	1.040
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	132322	1745	18.44	20.00	1.432	-	-	0.08	0.159	0.228
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	132322	1745	18.42	20.00	1.439	-	-	0.01	0.134	0.193
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 1	132322	1745	18.44	20.00	1.432	-	-	0.02	0.169	0.242
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 1	132322	1745	18.42	20.00	1.439	-	-	0.02	0.143	0.206
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	132322	1745	18.44	20.00	1.432	-	-	0.07	0.073	0.105
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	132322	1745	18.42	20.00	1.439	-	-	0.03	0.071	0.102
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	21.14	22.50	1.368	-	-	0.08	0.397	0.543
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	20.14	21.50	1.368	-	-	0.02	0.337	0.461
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	21.14	22.50	1.368	-	-	0.01	0.101	0.138
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	20.14	21.50	1.368	-	-	0.18	0.083	0.114
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	21.14	22.50	1.368	-	-	0.1	0.527	0.721
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	20.14	21.50	1.368	-	-	-0.18	0.423	0.579
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	21.14	22.50	1.368	-	-	-0.09	0.083	0.114
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	20.14	21.50	1.368	-	-	0.14	0.066	0.090
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	19.34	20.00	1.164	-	-	0.05	0.847	0.986
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	19.31	20.00	1.172	-	-	0.05	0.828	0.971
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	19.24	20.00	1.191	-	-	-0.09	0.778	0.927
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	349000	1745	19.34	20.00	1.164	-	-	0.02	0.791	0.921
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	349000	1745	19.31	20.00	1.172	-	-	-0.03	0.769	0.901
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	349000	1745	19.24	20.00	1.191	-	-	-0.09	0.764	0.910
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	349000	1745	19.34	20.00	1.164	-	-	0.08	0.565	0.658
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	349000	1745	19.31	20.00	1.172	-	-	0.05	0.511	0.599
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	349000	1745	19.34	20.00	1.164	-	-	-0.03	0.518	0.603
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	349000	1745	19.31	20.00	1.172	-	-	0.05	0.483	0.566
	FR1 n66 Main PA-1	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	19.24	20.00	1.191	-	-	0.05	0.721	0.859
	FR1 n66 END C	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	16.05	17.00	1.245	-	-	0.01	0.402	0.500
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	349000	1745	23.75	25.00	1.334	-	-	0.02	0.133	0.177
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	349000	1745	23.69	25.00	1.352	-	-	0.04	0.129	0.174
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	349000	1745	23.75	25.00	1.334	-	-	-0.03	0.058	0.077
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	349000	1745	23.69	25.00	1.352	-	-	0.18	0.061	0.082
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	349000	1745	23.75	25.00	1.334	-	-	0.1	0.127	0.169
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	349000	1745	23.69	25.00	1.352	-	-	-0.08	0.130	0.176
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	349000	1745	23.75	25.00	1.334	-	-	0.07	0.066	0.088
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	349000	1745	23.69	25.00	1.352	-	-	0.07	0.072	0.097
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	349000	1745	19.41	20.50	1.285	-	-	0.07	0.508	0.653
07	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	349000	1745	19.37	20.50	1.297	-	-	0.03	0.770	0.999
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	349000	1745	19.37	20.50	1.297	-	-	-0.09	0.665	0.863
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 4	DSI 1	349000	1745	19.41	20.50	1.285	-	-	0.15	0.146	0.188
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 4	DSI 1	349000	1745	19.37	20.50	1.297	-	-	0.03	0.238	0.309
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 4	DSI 1	349000	1745	19.41	20.50	1.285	-	-	0.17	0.148	0.190
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 4	DSI 1	349000	1745	19.37	20.50	1.297	-	-	0.13	0.207	0.269
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 4	DSI 1	349000	1745	19.41	20.50	1.285	-	-	0.06	0.065	0.084
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 4	DSI 1	349000	1745	19.37	20.50	1.297	-	-	-0.05	0.103	0.134
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	21.99	22.50	1.125	-	-	-0.03	0.465	0.523
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	21.95	22.50	1.135	-	-	0.06	0.532	0.604
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	21.99	22.50	1.125	-	-	0.09	0.092	0.103
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	21.95	22.50	1.135	-	-	-0.07	0.096	0.109
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	21.99	22.50	1.125	-	-	0.02	0.602	0.677
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	21.95	22.50	1.135	-	-	-0.02	0.722	0.819
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	20.93	21.50	1.140	-	-	0.08	0.532	0.607
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	21.99	22.50	1.125	-	-	0.02	0.116	0.130



FCC SAR Test Report

Report No. : FA420425

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	21.95	22.50	1.135	-	-	-0.11	0.136	0.154
	FR1 n66 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	21.96	22.50	1.132	-	-	-0.04	0.492	0.557
	FR1 n66 ENDC	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	19.58	20.50	1.236	-	-	0.07	0.411	0.508
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	661	1880	21.14	23.00	1.535	-	-	0.02	0.506	0.777
08	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	512	1850.2	20.95	23.00	1.603	-	-	0.07	0.634	1.016
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	810	1909.8	20.90	23.00	1.622	-	-	0.08	0.531	0.861
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 2	DSI 1	661	1880	21.14	23.00	1.535	-	-	0.08	0.460	0.706
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 2	DSI 1	661	1880	21.14	23.00	1.535	-	-	0.06	0.362	0.556
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 2	DSI 1	661	1880	21.14	23.00	1.535	-	-	-0.07	0.364	0.559
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 3	DSI 1	661	1880	23.46	25.00	1.426	-	-	0.02	0.066	0.094
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 3	DSI 1	661	1880	23.46	25.00	1.426	-	-	0.03	0.045	0.064
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 3	DSI 1	661	1880	23.46	25.00	1.426	-	-	0.05	0.067	0.096
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 3	DSI 1	661	1880	23.46	25.00	1.426	-	-	0.09	0.048	0.068
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	9400	1880	18.40	19.50	1.288	-	-	-0.16	0.742	0.956
09	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	9262	1852.4	18.38	19.50	1.294	-	-	0.05	0.836	1.082
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	9538	1907.6	18.29	19.50	1.321	-	-	0.04	0.642	0.848
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	9400	1880	18.40	19.50	1.288	-	-	-0.18	0.759	0.978
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	9262	1852.4	18.38	19.50	1.294	-	-	0.08	0.749	0.969
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	9538	1907.6	18.29	19.50	1.321	-	-	0.04	0.786	1.039
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 1	9400	1880	18.40	19.50	1.288	-	-	-0.1	0.451	0.581
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	DSI 1	9400	1880	18.40	19.50	1.288	-	-	0.05	0.496	0.639
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	9400	1880	22.67	24.50	1.524	-	-	-0.16	0.152	0.232
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	DSI 1	9400	1880	22.67	24.50	1.524	-	-	0.17	0.081	0.123
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	DSI 1	9400	1880	22.67	24.50	1.524	-	-	0.03	0.162	0.247
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	DSI 1	9400	1880	22.67	24.50	1.524	-	-	0.05	0.104	0.159
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	18900	1880	18.67	20.00	1.358	-	-	0.13	0.777	1.055
10	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	18700	1860	18.64	20.00	1.368	-	-	0.06	0.796	1.089
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	19100	1900	18.57	20.00	1.390	-	-	0.08	0.780	1.084
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	18900	1880	18.53	20.00	1.403	-	-	0.03	0.725	1.017
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	18700	1860	18.49	20.00	1.416	-	-	0.06	0.712	1.008
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	19100	1900	18.44	20.00	1.432	-	-	0.08	0.744	1.066
	LTE Band 2 Main PA_SA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	18700	1860	18.52	20.00	1.406	-	-	0.03	0.721	1.014
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	18900	1880	18.67	20.00	1.358	-	-	0.16	0.764	1.038
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	18700	1860	18.64	20.00	1.368	-	-	0.06	0.770	1.053
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	19100	1900	18.57	20.00	1.390	-	-	0.08	0.712	0.990
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	18900	1880	18.53	20.00	1.403	-	-	0.11	0.712	0.999
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	18700	1860	18.49	20.00	1.416	-	-	0.06	0.705	0.998
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	19100	1900	18.44	20.00	1.432	-	-	0.08	0.716	1.025
	LTE Band 2 Main PA_SA	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 2	DSI 1	18700	1860	18.52	20.00	1.406	-	-	0.03	0.725	1.019
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	18900	1880	18.67	20.00	1.358	-	-	0.03	0.476	0.647
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	18900	1880	18.53	20.00	1.403	-	-	0.13	0.388	0.544
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	18900	1880	18.67	20.00	1.358	-	-	0.06	0.531	0.721
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	18900	1880	18.53	20.00	1.403	-	-	0.18	0.427	0.599
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	18700	1860	18.58	20.00	1.387	-	-	0.17	0.781	1.083
	LTE Band 2 Other PA_ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	18700	1860	15.67	17.00	1.358	-	-	0.01	0.403	0.547
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	23.45	25.00	1.429	-	-	0.12	0.183	0.261
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	22.33	24.00	1.469	-	-	0.05	0.154	0.226
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	18900	1880	23.45	25.00	1.429	-	-	0.16	0.089	0.127
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	18900	1880	22.33	24.00	1.469	-	-	0.08	0.073	0.107
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	18900	1880	23.45	25.00	1.429	-	-	0.03	0.180	0.257
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	18900	1880	22.33	24.00	1.469	-	-	0.07	0.143	0.210
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	18900	1880	23.45	25.00	1.429	-	-	0.13	0.133	0.190
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	18900	1880	22.33	24.00	1.469	-	-	-0.09	0.109	0.160
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	24.02	24.50	1.117	-	-	0.07	0.115	0.128



FCC SAR Test Report

Report No. : FA420425

11	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	0.09	0.854	1.073
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	18.98	20.00	1.265	-	-	-0.14	0.743	0.940
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	18.86	20.00	1.300	-	-	0.06	0.713	0.927
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	0.07	0.733	0.921
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	376000	1880	18.98	20.00	1.265	-	-	0.13	0.717	0.907
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	376000	1880	18.86	20.00	1.300	-	-	0.06	0.745	0.969
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	0.02	0.473	0.594
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	376000	1880	18.98	20.00	1.265	-	-	0.07	0.461	0.583
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	-0.09	0.535	0.672
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	376000	1880	18.98	20.00	1.265	-	-	-0.02	0.495	0.626
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	376000	1880	23.51	25.00	1.409	-	-	-0.09	0.157	0.221
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	376000	1880	23.48	25.00	1.419	-	-	0.17	0.168	0.238
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	376000	1880	23.51	25.00	1.409	-	-	-0.01	0.096	0.135
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	376000	1880	23.48	25.00	1.419	-	-	-0.02	0.079	0.112
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	376000	1880	23.51	25.00	1.409	-	-	0.02	0.158	0.223
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	376000	1880	23.48	25.00	1.419	-	-	0.09	0.162	0.230
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	376000	1880	23.51	25.00	1.409	-	-	0.07	0.114	0.161
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	376000	1880	23.48	25.00	1.419	-	-	0.06	0.117	0.166
2600MHz																				
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	16.57	17.50	1.239	-	-	-0.04	0.798	0.989
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	20850	2510	16.50	17.50	1.259	-	-	-0.09	0.765	0.963
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	16.48	17.50	1.265	-	-	0.08	0.819	1.036
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	16.55	17.50	1.245	-	-	0.07	0.782	0.973
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	20850	2510	16.51	17.50	1.256	-	-	-0.09	0.787	0.988
12	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	16.54	17.50	1.247	-	-	0.05	0.871	1.086
	LTE Band 7 Main PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	16.39	17.50	1.291	-	-	-0.07	0.742	0.958
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	21100	2535	16.57	17.50	1.239	-	-	0.06	0.700	0.867
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	20850	2510	16.50	17.50	1.259	-	-	-0.09	0.709	0.893
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	21350	2560	16.48	17.50	1.265	-	-	0.08	0.761	0.962
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	21100	2535	16.55	17.50	1.245	-	-	-0.04	0.715	0.890
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	20850	2510	16.51	17.50	1.256	-	-	-0.09	0.719	0.903
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	21350	2560	16.54	17.50	1.247	-	-	0.08	0.743	0.927
	LTE Band 7 Main PA	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 2	DSI 1	21100	2535	16.39	17.50	1.291	-	-	-0.07	0.732	0.945
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	21100	2535	16.57	17.50	1.239	-	-	-0.05	0.378	0.468
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	21100	2535	16.55	17.50	1.245	-	-	-0.16	0.349	0.434
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	21100	2535	16.57	17.50	1.239	-	-	0.03	0.436	0.540
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	21100	2535	16.55	17.50	1.245	-	-	0.08	0.435	0.541
	LTE Band 7 Main PA-1	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	16.04	17.50	1.400	-	-	0.08	0.721	1.009
	LTE Band 7 Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	12.26	13.00	1.186	-	-	0.12	0.313	0.371
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	13.34	14.50	1.306	-	-	0.01	0.346	0.452
	CA 7C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350+21152	2560+2540.2	15.24	16.00	1.191	-	-	-0.06	0.825	0.983
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	21100	2535	23.63	25.00	1.371	-	-	0.14	0.189	0.259
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	21100	2535	22.40	24.00	1.445	-	-	-0.13	0.148	0.214
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	21100	2535	23.63	25.00	1.371	-	-	0.07	0.182	0.250
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	21100	2535	22.40	24.00	1.445	-	-	0.05	0.149	0.215
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	23.63	25.00	1.371	-	-	0.1	0.211	0.289
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	22.40	24.00	1.445	-	-	0.06	0.171	0.247
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	21100	2535	23.63	25.00	1.371	-	-	0.04	0.129	0.177
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	21100	2535	22.40	24.00	1.445	-	-	0.03	0.101	0.146
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	23.65	24.50	1.216	-	-	-0.12	0.161	0.196
	LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	23.67	24.50	1.211	-	-	-0.12	0.160	0.194
	CA 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 3	DSI 1	21100+21298	2535+2554.8	21.65	23.50	1.531	-	-	0.06	0.174	0.266
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21100	2535	18.77	20.00	1.327	-	-	0.07	0.670	0.889
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	20850	2510	18.56	20.00	1.393	-	-	0.08	0.574	0.800
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350	2560	18.75	20.00	1.334	-	-	-0.02	0.747	0.996



FCC SAR Test Report

Report No. : FA420425

LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	21100	2535	18.65	20.00	1.365	-	-	0.09	0.587	0.801
LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	20850	2510	18.45	20.00	1.429	-	-	0.08	0.500	0.714
LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350	2560	18.59	20.00	1.384	-	-	0.04	0.657	0.909
LTE Band 7 Main PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	DSI 1	21100	2535	18.47	20.00	1.422	-	-	0.07	0.594	0.845
LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	21100	2535	18.77	20.00	1.327	-	-	0.04	0.221	0.293
LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	21100	2535	18.65	20.00	1.365	-	-	0.14	0.182	0.248
LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 1	21100	2535	18.77	20.00	1.327	-	-	0.01	0.223	0.296
LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 1	21100	2535	18.65	20.00	1.365	-	-	0.07	0.164	0.224
LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	21100	2535	18.77	20.00	1.327	-	-	-0.1	0.109	0.145
LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	21100	2535	18.65	20.00	1.365	-	-	0.18	0.088	0.120
LTE Band 7 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350	2560	19.48	20.50	1.265	-	-	0.18	0.394	0.498
LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350	2560	19.22	20.50	1.343	-	-	0.18	0.402	0.540
LTE Band 7 ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350	2560	15.51	17.00	1.409	-	-	-0.07	0.355	0.500
CA 7C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	21350+21152	2560+2540.2	17.30	19.00	1.479	-	-	-0.03	0.646	0.956
LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	20.65	22.00	1.365	-	-	0.02	0.512	0.699
LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	19.64	21.00	1.368	-	-	0.03	0.428	0.585
LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	20.65	22.00	1.365	-	-	0.07	0.226	0.308
LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	19.64	21.00	1.368	-	-	0.15	0.221	0.302
LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	20.65	22.00	1.365	-	-	0.08	0.387	0.528
LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	19.64	21.00	1.368	-	-	0.07	0.302	0.413
LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	20.65	22.00	1.365	-	-	-0.06	0.187	0.255
LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	19.64	21.00	1.368	-	-	0.18	0.151	0.207
LTE Band 7 Main PA-1	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	20.87	22.00	1.297	-	-	-0.06	0.369	0.479
LTE Band 7 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	21.17	22.50	1.358	-	-	-0.06	0.451	0.613
LTE Band 7 ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	19.78	21.00	1.324	-	-	-0.02	0.415	0.550
CA 7C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 5	DSI 1	21100+21298	2535+2554.8	19.69	21.00	1.352	-	-	0.07	0.483	0.653
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	18.37	19.50	1.297	62.9	1.006	-0.03	0.799	1.043
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	39750	2506	18.35	19.50	1.303	62.9	1.006	0.05	0.636	0.834
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	40185	2549.5	18.21	19.50	1.346	62.9	1.006	0.03	0.794	1.075
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	41055	2636.5	18.23	19.50	1.340	62.9	1.006	-0.05	0.805	1.085
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	41490	2680	18.16	19.50	1.361	62.9	1.006	0.18	0.721	0.987
13 LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	18.34	19.50	1.306	62.9	1.006	0.02	0.832	1.093
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	39750	2506	18.00	19.50	1.413	62.9	1.006	0.05	0.666	0.946
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	40185	2549.5	18.31	19.50	1.315	62.9	1.006	0.03	0.797	1.055
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	41055	2636.5	18.19	19.50	1.352	62.9	1.006	-0.05	0.772	1.050
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	41490	2680	18.24	19.50	1.337	62.9	1.006	0.18	0.685	0.921
LTE Band 41 Main PA_SA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	18.21	19.50	1.346	62.9	1.006	0.04	0.661	0.895
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	40620	2593	18.37	19.50	1.297	62.9	1.006	-0.15	0.745	0.972
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	39750	2506	18.35	19.50	1.303	62.9	1.006	0.05	0.549	0.720
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	40185	2549.5	18.21	19.50	1.346	62.9	1.006	0.03	0.699	0.946
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	41055	2636.5	18.23	19.50	1.340	62.9	1.006	-0.05	0.701	0.945
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	41490	2680	18.16	19.50	1.361	62.9	1.006	0.18	0.634	0.868
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	40620	2593	18.34	19.50	1.306	62.9	1.006	0.02	0.757	0.995
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	39750	2506	18.00	19.50	1.413	62.9	1.006	0.05	0.634	0.901
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	40185	2549.5	18.31	19.50	1.315	62.9	1.006	0.03	0.724	0.958
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	41055	2636.5	18.19	19.50	1.352	62.9	1.006	-0.05	0.740	1.007
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	41490	2680	18.24	19.50	1.337	62.9	1.006	0.18	0.672	0.904
LTE Band 41 Main PA_SA	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 2	DSI 1	40620	2593	18.21	19.50	1.346	62.9	1.006	0.04	0.728	0.986
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	40620	2593	18.37	19.50	1.297	62.9	1.006	-0.02	0.375	0.489
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	40620	2593	18.34	19.50	1.306	62.9	1.006	0.17	0.373	0.490
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	40620	2593	18.37	19.50	1.297	62.9	1.006	0.15	0.460	0.600
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	40620	2593	18.34	19.50	1.306	62.9	1.006	0.07	0.453	0.595
LTE Band 41 Other PA_NSA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	15.48	16.00	1.127	62.9	1.006	0.12	0.354	0.401
CA 38C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 2	DSI 1	37901+38099	2585.1+2604.9	17.52	18.50	1.253	62.9	1.006	0.08	0.786	0.991
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	40620	2593	23.48	25.00	1.419	62.9	1.006	-0.04	0.064	0.091



FCC SAR Test Report

Report No. : FA420425

LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	40620	2593	22.39	24.00	1.449	62.9	1.006	-0.09	0.067	0.098
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	40620	2593	23.48	25.00	1.419	62.9	1.006	-0.15	0.051	0.073
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	40620	2593	22.39	24.00	1.449	62.9	1.006	-0.13	0.042	0.061
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	40620	2593	23.48	25.00	1.419	62.9	1.006	0.06	0.188	0.268
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	40620	2593	22.39	24.00	1.449	62.9	1.006	-0.06	0.106	0.154
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	40620	2593	23.48	25.00	1.419	62.9	1.006	0.03	0.039	0.056
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	40620	2593	22.39	24.00	1.449	62.9	1.006	0.09	0.031	0.045
LTE Band 41 Other PA NSA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	40620	2593	24.55	25.00	1.109	62.9	1.006	0.18	0.182	0.203
CA 38C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 3	DSI 1	37901+38099	2585.1+2604.9	22.07	23.50	1.390	62.9	1.006	0.01	0.162	0.227
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.51	19.00	1.409	62.9	1.006	0.06	0.405	0.574
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.47	19.00	1.422	62.9	1.006	-0.01	0.299	0.428
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	17.51	19.00	1.409	62.9	1.006	0.03	0.127	0.180
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	17.47	19.00	1.422	62.9	1.006	0.05	0.108	0.155
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 1	40620	2593	17.51	19.00	1.409	62.9	1.006	0.08	0.101	0.143
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 1	40620	2593	17.47	19.00	1.422	62.9	1.006	0.15	0.080	0.114
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	40620	2593	17.51	19.00	1.409	62.9	1.006	-0.08	0.051	0.072
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	40620	2593	17.47	19.00	1.422	62.9	1.006	0.15	0.044	0.063
LTE Band 41 Other PA NSA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.69	19.50	1.517	62.9	1.006	0.07	0.268	0.409
CA 38C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 4	DSI 1	37901+38099	2585.1+2604.9	16.47	18.00	1.422	62.9	1.006	0.03	0.365	0.522
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	20.40	22.00	1.445	62.9	1.006	0.04	0.375	0.545
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	19.36	21.00	1.459	62.9	1.006	0.18	0.285	0.418
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	20.40	22.00	1.445	62.9	1.006	0.04	0.062	0.090
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	19.36	21.00	1.459	62.9	1.006	-0.12	0.047	0.069
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	20.40	22.00	1.445	62.9	1.006	-0.03	0.254	0.369
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	19.36	21.00	1.459	62.9	1.006	-0.15	0.188	0.276
LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	20.40	22.00	1.445	62.9	1.006	0.03	0.093	0.135
LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	19.36	21.00	1.459	62.9	1.006	-0.08	0.071	0.104
LTE Band 41 Other PA NSA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	21.36	22.50	1.300	62.9	1.006	0.05	0.378	0.494
CA 38C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 5	DSI 1	37901+38099	2585.1+2604.9	19.98	21.00	1.265	62.9	1.006	-0.08	0.368	0.468
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	16.48	17.50	1.265	-	-	0.04	0.746	0.943
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	16.45	17.50	1.274	-	-	0.14	0.756	0.963
FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	16.39	17.50	1.291	-	-	-0.07	0.717	0.926
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	507000	2535	16.48	17.50	1.265	-	-	0.04	0.608	0.769
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	507000	2535	16.45	17.50	1.274	-	-	0.03	0.644	0.820
FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	507000	2535	16.39	17.50	1.291	-	-	-0.07	0.622	0.803
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	507000	2535	16.48	17.50	1.265	-	-	0.11	0.338	0.427
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	507000	2535	16.45	17.50	1.274	-	-	0.14	0.354	0.451
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	507000	2535	16.48	17.50	1.265	-	-	0.05	0.397	0.502
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	507000	2535	16.45	17.50	1.274	-	-	-0.13	0.397	0.506
FR1 n7 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	16.39	17.50	1.291	-	-	0.14	0.674	0.870
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	507000	2535	23.62	25.00	1.374	-	-	0.04	0.171	0.235
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	507000	2535	23.55	25.00	1.396	-	-	-0.06	0.157	0.219
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	507000	2535	23.62	25.00	1.374	-	-	0.03	0.119	0.164
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	507000	2535	23.55	25.00	1.396	-	-	0.05	0.111	0.155
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	507000	2535	23.62	25.00	1.374	-	-	0.03	0.207	0.284
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	507000	2535	23.55	25.00	1.396	-	-	0.01	0.219	0.306
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	507000	2535	23.62	25.00	1.374	-	-	-0.15	0.124	0.170
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	507000	2535	23.55	25.00	1.396	-	-	-0.11	0.120	0.168
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	507000	2535	18.24	19.50	1.337	-	-	-0.14	0.695	0.929
14 FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	507000	2535	18.23	19.50	1.340	-	-	0.05	0.754	1.010
FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 4	DSI 1	507000	2535	18.20	19.50	1.349	-	-	-0.12	0.623	0.840
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 4	DSI 1	507000	2535	18.24	19.50	1.337	-	-	0.19	0.246	0.329
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 4	DSI 1	507000	2535	18.23	19.50	1.340	-	-	0.03	0.262	0.351
FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 4	DSI 1	507000	2535	18.24	19.50	1.337	-	-	-0.08	0.188	0.251
FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 4	DSI 1	507000	2535	18.23	19.50	1.340	-	-	-0.1	0.205	0.275



FCC SAR Test Report

Report No. : FA420425

	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 4	DSI 1	507000	2535	18.24	19.50	1.337	-	-	0.05	0.102	0.136
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 4	DSI 1	507000	2535	18.23	19.50	1.340	-	-	-0.15	0.110	0.147
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	21.02	22.00	1.253	-	-	-0.03	0.580	0.727
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	20.97	22.00	1.268	-	-	0.11	0.553	0.701
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	21.02	22.00	1.253	-	-	0.12	0.103	0.129
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	20.97	22.00	1.268	-	-	0.06	0.111	0.141
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	21.02	22.00	1.253	-	-	-0.04	0.529	0.663
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	20.97	22.00	1.268	-	-	0.06	0.513	0.650
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	21.02	22.00	1.253	-	-	0.03	0.175	0.219
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	20.97	22.00	1.268	-	-	0.09	0.167	0.212
	FR1 n7 Main PA-1	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	21.01	22.00	1.256	-	-	0.06	0.571	0.717
15	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.68	17.50	1.208	-	-	0.05	0.852	1.029
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.43	17.50	1.279	-	-	-0.03	0.759	0.971
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.49	17.50	1.262	-	-	-0.15	0.755	0.953
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	518598	2592.99	16.68	17.50	1.208	-	-	0.08	0.700	0.845
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	518598	2592.99	16.43	17.50	1.279	-	-	0.02	0.639	0.818
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	518598	2592.99	16.49	17.50	1.262	-	-	-0.15	0.651	0.821
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.68	17.50	1.208	-	-	0.09	0.373	0.451
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.43	17.50	1.279	-	-	0.02	0.343	0.439
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	518598	2592.99	16.68	17.50	1.208	-	-	0.03	0.414	0.500
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	518598	2592.99	16.43	17.50	1.279	-	-	0.13	0.400	0.512
	FR1 n41 Main PA-1	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	16.68	17.50	1.208	-	-	0.05	0.698	0.843
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	23.83	25.00	1.309	-	-	0.07	0.148	0.194
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	23.78	25.00	1.324	-	-	0.04	0.126	0.167
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	518598	2592.99	23.83	25.00	1.309	-	-	0.13	0.110	0.144
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	518598	2592.99	23.78	25.00	1.324	-	-	0.12	0.092	0.122
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	518598	2592.99	23.83	25.00	1.309	-	-	-0.08	0.224	0.293
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	518598	2592.99	23.78	25.00	1.324	-	-	0.07	0.207	0.274
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	518598	2592.99	23.83	25.00	1.309	-	-	0.07	0.096	0.126
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	518598	2592.99	23.78	25.00	1.324	-	-	0.07	0.091	0.121
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	518598	2592.99	18.36	19.50	1.300	-	-	0.07	0.762	0.991
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	518598	2592.99	18.32	19.50	1.312	-	-	0.13	0.739	0.970
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	518598	2592.99	18.28	19.50	1.324	-	-	-0.1	0.741	0.981
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	18.36	19.50	1.300	-	-	-0.04	0.251	0.326
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	18.32	19.50	1.312	-	-	-0.11	0.274	0.360
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	518598	2592.99	18.36	19.50	1.300	-	-	0.06	0.201	0.261
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	518598	2592.99	18.32	19.50	1.312	-	-	0.06	0.191	0.251
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	518598	2592.99	18.36	19.50	1.300	-	-	0.05	0.113	0.147
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	518598	2592.99	18.32	19.50	1.312	-	-	0.17	0.111	0.146
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	21.05	22.00	1.245	-	-	-0.01	0.650	0.809
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	20.98	22.00	1.265	-	-	0.03	0.524	0.663
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	19.98	21.00	1.265	-	-	0.17	0.637	0.806
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	21.05	22.00	1.245	-	-	-0.13	0.100	0.124
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	20.98	22.00	1.265	-	-	-0.12	0.109	0.138
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	21.05	22.00	1.245	-	-	0.03	0.481	0.599
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	20.98	22.00	1.265	-	-	0.07	0.461	0.583
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	21.05	22.00	1.245	-	-	-0.13	0.160	0.199
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	20.98	22.00	1.265	-	-	0.07	0.169	0.214
	FR1 n41 Main PA-1	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	21.01	22.00	1.256	-	-	0.11	0.597	0.750
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	42590	3500	18.82	19.20	1.091	62.9	1.006	0.06	0.866	0.951
16	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	42190	3460	18.52	19.20	1.169	62.9	1.006	-0.15	0.877	1.032
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	42990	3540	18.54	19.20	1.164	62.9	1.006	0.05	0.870	1.019
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	42590	3500	18.57	19.20	1.156	62.9	1.006	-0.1	0.731	0.850
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	42190	3460	18.44	19.20	1.191	62.9	1.006	-0.15	0.681	0.816
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	42990	3540	18.50	19.20	1.175	62.9	1.006	0.05	0.699	0.826



FCC SAR Test Report

Report No. : FA420425

LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 6	DSI 1	42590	3500	18.75	19.20	1.109	62.9	1.006	-0.18	0.697	0.778
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	42590	3500	18.82	19.20	1.091	62.9	1.006	0.09	0.733	0.805
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	42190	3460	18.52	19.20	1.169	62.9	1.006	-0.15	0.690	0.812
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	42990	3540	18.54	19.20	1.164	62.9	1.006	0.05	0.722	0.846
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	42590	3500	18.57	19.20	1.156	62.9	1.006	0.02	0.601	0.699
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	42190	3460	18.44	19.20	1.191	62.9	1.006	-0.15	0.573	0.687
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	42990	3540	18.50	19.20	1.175	62.9	1.006	0.05	0.582	0.688
LTE Band 42	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 6	DSI 1	42590	3500	18.75	19.20	1.109	62.9	1.006	-0.18	0.582	0.649
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	42590	3500	18.82	19.20	1.091	62.9	1.006	0.05	0.238	0.261
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	42590	3500	18.57	19.20	1.156	62.9	1.006	0.16	0.190	0.221
LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	42590	3500	18.82	19.20	1.091	62.9	1.006	0.07	0.235	0.258
LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	42590	3500	18.57	19.20	1.156	62.9	1.006	0.15	0.190	0.221
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	20.17	21.00	1.211	62.9	1.006	-0.09	0.544	0.663
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42190	3460	20.02	21.00	1.253	62.9	1.006	-0.16	0.608	0.766
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42990	3540	19.96	21.00	1.271	62.9	1.006	0.09	0.658	0.841
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	20.11	21.00	1.227	62.9	1.006	0.17	0.606	0.748
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42190	3460	20.03	21.00	1.250	62.9	1.006	-0.16	0.640	0.805
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42990	3540	19.98	21.00	1.265	62.9	1.006	0.09	0.628	0.799
LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	20.15	21.00	1.216	62.9	1.006	0.13	0.566	0.692
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	42590	3500	20.17	21.00	1.211	62.9	1.006	0.17	0.126	0.153
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	42590	3500	20.11	21.00	1.227	62.9	1.006	0.05	0.101	0.125
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	42590	3500	20.17	21.00	1.211	62.9	1.006	0.03	0.633	0.771
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	42190	3460	20.02	21.00	1.253	62.9	1.006	-0.16	0.648	0.817
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	42990	3540	19.96	21.00	1.271	62.9	1.006	0.02	0.707	0.904
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	42590	3500	20.11	21.00	1.227	62.9	1.006	-0.17	0.635	0.784
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	42190	3460	20.03	21.00	1.250	62.9	1.006	-0.16	0.673	0.846
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	42990	3540	19.98	21.00	1.265	62.9	1.006	0.09	0.569	0.724
LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 1	DSI 1	42590	3500	20.15	21.00	1.216	62.9	1.006	0.13	0.629	0.770
LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	42590	3500	20.17	21.00	1.211	62.9	1.006	0.09	0.058	0.071
LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	42590	3500	20.11	21.00	1.227	62.9	1.006	0.01	0.048	0.059
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	42590	3500	18.24	19.50	1.337	62.9	1.006	0.07	0.707	0.951
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	42190	3460	17.97	19.50	1.422	62.9	1.006	-0.12	0.675	0.966
LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	42990	3540	18.09	19.50	1.384	62.9	1.006	-0.07	0.657	0.914
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	42590	3500	18.16	19.50	1.361	62.9	1.006	0.18	0.714	0.978
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	42190	3460	18.12	19.50	1.374	62.9	1.006	-0.12	0.705	0.975
LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	42990	3540	17.95	19.50	1.429	62.9	1.006	-0.07	0.707	1.016
LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 7	DSI 1	42590	3500	18.14	19.50	1.368	62.9	1.006	0.1	0.721	0.992
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	42590	3500	18.24	19.50	1.337	62.9	1.006	0.05	0.758	1.019
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	42190	3460	17.97	19.50	1.422	62.9	1.006	-0.12	0.709	1.014
LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	42990	3540	18.09	19.50	1.384	62.9	1.006	-0.07	0.707	0.984
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	42590	3500	18.16	19.50	1.361	62.9	1.006	-0.02	0.714	0.978
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	42190	3460	18.12	19.50	1.374	62.9	1.006	-0.12	0.703	0.972
LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	42990	3540	17.95	19.50	1.429	62.9	1.006	-0.07	0.701	1.008
LTE Band 42	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 7	DSI 1	42590	3500	18.14	19.50	1.368	62.9	1.006	0.1	0.696	0.958
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	18.24	19.50	1.337	62.9	1.006	-0.1	0.539	0.725
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42190	3460	17.97	19.50	1.422	62.9	1.006	-0.12	0.493	0.705
LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42990	3540	18.09	19.50	1.384	62.9	1.006	-0.07	0.493	0.686
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	18.16	19.50	1.361	62.9	1.006	-0.17	0.525	0.719
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42190	3460	18.12	19.50	1.374	62.9	1.006	-0.12	0.507	0.701
LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42990	3540	17.95	19.50	1.429	62.9	1.006	-0.07	0.503	0.723
LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	18.14	19.50	1.368	62.9	1.006	0.1	0.518	0.713
LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	42590	3500	18.24	19.50	1.337	62.9	1.006	0.12	0.653	0.878
LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	42190	3460	17.97	19.50	1.422	62.9	1.006	-0.12	0.610	0.873
LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	42990	3540	18.09	19.50	1.384	62.9	1.006	-0.07	0.646	0.899
LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	42590	3500	18.16	19.50	1.361	62.9	1.006	-0.14	0.628	0.860
LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	42190	3460	18.12	19.50	1.374	62.9	1.006	-0.12	0.596	0.824



FCC SAR Test Report

Report No. : FA420425

	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	42990	3540	17.95	19.50	1.429	62.9	1.006	-0.07	0.614	0.883
	LTE Band 42	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 7	DSI 1	42590	3500	18.14	19.50	1.368	62.9	1.006	0.1	0.618	0.850
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	20.77	21.50	1.183	62.9	1.006	0.05	0.172	0.205
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	19.70	20.50	1.202	62.9	1.006	0.06	0.143	0.173
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	20.77	21.50	1.183	62.9	1.006	0.12	0.130	0.155
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	19.70	20.50	1.202	62.9	1.006	0.19	0.111	0.134
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	20.77	21.50	1.183	62.9	1.006	0.19	0.686	0.816
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42190	3460	20.68	21.50	1.208	62.9	1.006	0.07	0.654	0.795
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42990	3540	20.67	21.50	1.211	62.9	1.006	0.04	0.671	0.817
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	19.70	20.50	1.202	62.9	1.006	-0.14	0.632	0.764
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	42190	3460	19.58	20.50	1.236	62.9	1.006	-0.01	0.647	0.804
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	42990	3540	19.56	20.50	1.242	62.9	1.006	0.06	0.657	0.821
	LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	19.69	20.50	1.205	62.9	1.006	-0.01	0.612	0.742
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	20.77	21.50	1.183	62.9	1.006	-0.14	0.309	0.368
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	19.70	20.50	1.202	62.9	1.006	0.05	0.244	0.295
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	55830	3609	18.47	19.20	1.183	62.9	1.006	-0.15	0.897	1.068
17	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	55340	3560	18.45	19.20	1.189	62.9	1.006	-0.16	0.910	1.088
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	56150	3641	18.44	19.20	1.191	62.9	1.006	-0.1	0.886	1.062
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	56640	3690	18.37	19.20	1.211	62.9	1.006	0.07	0.830	1.011
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	55830	3609	18.41	19.20	1.199	62.9	1.006	-0.03	0.836	1.009
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	55340	3560	18.36	19.20	1.213	62.9	1.006	-0.16	0.869	1.061
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	56150	3641	18.31	19.20	1.227	62.9	1.006	-0.1	0.874	1.079
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	56640	3690	18.37	19.20	1.211	62.9	1.006	0.07	0.749	0.912
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 6	DSI 1	55830	3609	18.37	19.20	1.211	62.9	1.006	0.08	0.845	1.029
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	55830	3609	18.47	19.20	1.183	62.9	1.006	-0.06	0.701	0.834
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	55340	3560	18.45	19.20	1.189	62.9	1.006	-0.16	0.740	0.885
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	56150	3641	18.44	19.20	1.191	62.9	1.006	-0.1	0.691	0.828
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	56640	3690	18.37	19.20	1.211	62.9	1.006	0.07	0.659	0.803
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	55830	3609	18.41	19.20	1.199	62.9	1.006	-0.1	0.614	0.741
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	55340	3560	18.36	19.20	1.213	62.9	1.006	-0.16	0.710	0.867
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	56150	3641	18.31	19.20	1.227	62.9	1.006	-0.1	0.694	0.857
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	56640	3690	18.37	19.20	1.211	62.9	1.006	0.07	0.643	0.783
	LTE Band 48	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 6	DSI 1	55830	3609	18.37	19.20	1.211	62.9	1.006	0.08	0.738	0.899
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	55830	3609	18.47	19.20	1.183	62.9	1.006	0.03	0.260	0.309
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	55830	3609	18.41	19.20	1.199	62.9	1.006	0.02	0.210	0.253
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	55830	3609	18.47	19.20	1.183	62.9	1.006	0.04	0.253	0.301
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	55830	3609	18.41	19.20	1.199	62.9	1.006	-0.11	0.204	0.246
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	18.78	20.00	1.324	62.9	1.006	0.02	0.367	0.489
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	55340	3560	18.50	20.00	1.413	62.9	1.006	0.07	0.513	0.729
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	56150	3641	18.68	20.00	1.355	62.9	1.006	0.01	0.393	0.536
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	56640	3690	18.57	20.00	1.390	62.9	1.006	-0.19	0.256	0.358
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	18.77	20.00	1.327	62.9	1.006	0.15	0.402	0.537
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	55340	3560	18.46	20.00	1.426	62.9	1.006	0.07	0.419	0.601
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	56150	3641	18.71	20.00	1.346	62.9	1.006	0.01	0.332	0.450
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	56640	3690	18.66	20.00	1.361	62.9	1.006	-0.19	0.167	0.229
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	18.72	20.00	1.343	62.9	1.006	0.03	0.303	0.409
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	55830	3609	18.78	20.00	1.324	62.9	1.006	-0.13	0.087	0.116
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	55830	3609	18.77	20.00	1.327	62.9	1.006	-0.02	0.066	0.088
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	55830	3609	18.78	20.00	1.324	62.9	1.006	0.02	0.335	0.446
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	55340	3560	18.50	20.00	1.413	62.9	1.006	0.07	0.478	0.679
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	56150	3641	18.68	20.00	1.355	62.9	1.006	0.01	0.629	0.858
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	56640	3690	18.57	20.00	1.390	62.9	1.006	-0.19	0.219	0.306
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	55830	3609	18.77	20.00	1.327	62.9	1.006	0.07	0.312	0.417
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	55340	3560	18.46	20.00	1.426	62.9	1.006	0.07	0.390	0.559
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	56150	3641	18.71	20.00	1.346	62.9	1.006	0.01	0.489	0.662
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	56640	3690	18.66	20.00	1.361	62.9	1.006	-0.19	0.198	0.271



FCC SAR Test Report

Report No. : FA420425

	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 1	DSI 1	55830	3609	18.72	20.00	1.343	62.9	1.006	0.03	0.315	0.426
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	55830	3609	18.78	20.00	1.324	62.9	1.006	0.06	0.040	0.053
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	55830	3609	18.77	20.00	1.327	62.9	1.006	0.08	0.032	0.043
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	55830	3609	18.08	19.50	1.387	62.9	1.006	-0.12	0.550	0.767
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	55340	3560	17.86	19.50	1.459	62.9	1.006	0.08	0.661	0.970
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	56150	3641	17.87	19.50	1.455	62.9	1.006	0.07	0.506	0.741
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.415	0.597
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	55830	3609	18.05	19.50	1.396	62.9	1.006	-0.13	0.439	0.617
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	55340	3560	17.82	19.50	1.472	62.9	1.006	0.08	0.534	0.791
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	56150	3641	17.86	19.50	1.459	62.9	1.006	0.07	0.400	0.587
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.325	0.467
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 7	DSI 1	55830	3609	18.02	19.50	1.406	62.9	1.006	-0.03	0.427	0.604
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	55830	3609	18.08	19.50	1.387	62.9	1.006	-0.08	0.629	0.878
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	55340	3560	17.86	19.50	1.459	62.9	1.006	0.08	0.716	1.051
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	56150	3641	17.87	19.50	1.455	62.9	1.006	0.07	0.550	0.805
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.451	0.648
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	55830	3609	18.05	19.50	1.396	62.9	1.006	0.12	0.498	0.700
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	55340	3560	17.82	19.50	1.472	62.9	1.006	0.08	0.578	0.856
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	56150	3641	17.86	19.50	1.459	62.9	1.006	0.07	0.439	0.644
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.357	0.513
	LTE Band 48	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 7	DSI 1	55830	3609	18.02	19.50	1.406	62.9	1.006	-0.03	0.475	0.672
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.08	19.50	1.387	62.9	1.006	0.04	0.455	0.635
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	55340	3560	17.86	19.50	1.459	62.9	1.006	0.08	0.514	0.754
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	56150	3641	17.87	19.50	1.455	62.9	1.006	0.07	0.419	0.613
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.371	0.533
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.05	19.50	1.396	62.9	1.006	0.05	0.370	0.520
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	55340	3560	17.82	19.50	1.472	62.9	1.006	0.08	0.415	0.615
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	56150	3641	17.86	19.50	1.459	62.9	1.006	0.07	0.343	0.503
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.299	0.430
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.02	19.50	1.406	62.9	1.006	-0.03	0.357	0.505
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	55830	3609	18.08	19.50	1.387	62.9	1.006	0.05	0.601	0.838
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	55340	3560	17.86	19.50	1.459	62.9	1.006	0.08	0.665	0.976
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	56150	3641	17.87	19.50	1.455	62.9	1.006	0.07	0.554	0.811
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.479	0.689
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	55830	3609	18.05	19.50	1.396	62.9	1.006	0.02	0.471	0.662
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	55340	3560	17.82	19.50	1.472	62.9	1.006	0.08	0.534	0.791
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	56150	3641	17.86	19.50	1.459	62.9	1.006	0.07	0.431	0.633
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	56640	3690	17.95	19.50	1.429	62.9	1.006	-0.18	0.378	0.543
	LTE Band 48	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 7	DSI 1	55830	3609	18.02	19.50	1.406	62.9	1.006	-0.03	0.455	0.644
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	17.15	18.00	1.216	62.9	1.006	0.08	0.167	0.204
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	17.12	18.00	1.225	62.9	1.006	0.05	0.164	0.202
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	17.15	18.00	1.216	62.9	1.006	-0.07	0.122	0.149
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	17.12	18.00	1.225	62.9	1.006	0.11	0.121	0.149
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	17.15	18.00	1.216	62.9	1.006	0.05	0.627	0.767
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	55340	3560	17.00	18.00	1.259	62.9	1.006	0.01	0.487	0.617
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	56150	3641	17.12	18.00	1.225	62.9	1.006	0.01	0.650	0.801
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	56640	3690	17.10	18.00	1.230	62.9	1.006	-0.04	0.646	0.800
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	17.12	18.00	1.225	62.9	1.006	-0.16	0.604	0.744
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	55340	3560	17.00	18.00	1.259	62.9	1.006	0.01	0.613	0.776
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	56150	3641	16.96	18.00	1.271	62.9	1.006	-0.04	0.631	0.807
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	56640	3690	16.92	18.00	1.282	62.9	1.006	-0.04	0.625	0.806
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	17.04	18.00	1.247	62.9	1.006	0.15	0.612	0.768
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	17.15	18.00	1.216	62.9	1.006	-0.11	0.302	0.369
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	17.12	18.00	1.225	62.9	1.006	-0.12	0.271	0.334
18	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	641666	3624.99	16.40	17.20	1.202	-	-	-0.11	0.908	1.092
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	638000	3570	16.32	17.20	1.225	-	-	0.08	0.845	1.035



FCC SAR Test Report

Report No. : FA420425

FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	645332	3679.98	16.34	17.20	1.219	-	-	0.01	0.861	1.050
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	641666	3624.99	16.39	17.20	1.205	-	-	0.01	0.895	1.079
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	638000	3570	16.36	17.20	1.213	-	-	0.03	0.881	1.069
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	645332	3679.98	16.31	17.20	1.227	-	-	-0.08	0.842	1.034
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	641666	3624.99	16.34	17.20	1.219	-	-	-0.08	0.867	1.057
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	641666	3624.99	16.40	17.20	1.202	-	-	0.14	0.717	0.862
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	638000	3570	16.32	17.20	1.225	-	-	-0.08	0.691	0.846
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	645332	3679.98	16.34	17.20	1.219	-	-	0.1	0.684	0.834
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	641666	3624.99	16.39	17.20	1.205	-	-	0.01	0.715	0.862
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	638000	3570	16.36	17.20	1.213	-	-	-0.18	0.703	0.853
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	645332	3679.98	16.31	17.20	1.227	-	-	0.1	0.695	0.853
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	641666	3624.99	16.34	17.20	1.219	-	-	-0.08	0.690	0.841
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	641666	3624.99	16.40	17.20	1.202	-	-	-0.18	0.242	0.291
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	641666	3624.99	16.39	17.20	1.205	-	-	0.01	0.242	0.292
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	641666	3624.99	16.40	17.20	1.202	-	-	-0.02	0.241	0.290
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	641666	3624.99	16.39	17.20	1.205	-	-	0.02	0.249	0.300
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	641666	3624.99	18.03	19.00	1.250	-	-	0.19	0.554	0.693
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	641666	3624.99	17.94	19.00	1.276	-	-	0.02	0.489	0.624
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	641666	3624.99	18.01	19.00	1.256	-	-	-0.15	0.467	0.587
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	641666	3624.99	18.03	19.00	1.250	-	-	0.07	0.095	0.119
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	641666	3624.99	17.94	19.00	1.276	-	-	0.07	0.091	0.116
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	641666	3624.99	18.03	19.00	1.250	-	-	0.11	0.688	0.860
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	638000	3570	17.87	19.00	1.297	-	-	0.12	0.661	0.857
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	645332	3679.98	17.91	19.00	1.285	-	-	0.08	0.655	0.842
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	641666	3624.99	17.94	19.00	1.276	-	-	0.1	0.564	0.720
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	641666	3624.99	18.01	19.00	1.256	-	-	-0.15	0.543	0.682
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	641666	3624.99	18.03	19.00	1.250	-	-	0.08	0.050	0.063
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	641666	3624.99	17.94	19.00	1.276	-	-	-0.18	0.044	0.056
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.87	18.50	1.455	-	-	0.06	0.657	0.956
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	638000	3570	16.75	18.50	1.496	-	-	-0.17	0.612	0.916
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	645332	3679.98	16.77	18.50	1.489	-	-	-0.03	0.631	0.940
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.77	18.50	1.489	-	-	0.06	0.585	0.871
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	638000	3570	16.72	18.50	1.507	-	-	0.14	0.577	0.869
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	645332	3679.98	16.70	18.50	1.514	-	-	0.11	0.569	0.861
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.75	18.50	1.496	-	-	0.08	0.688	1.029
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.87	18.50	1.455	-	-	0.03	0.749	1.090
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	638000	3570	16.75	18.50	1.496	-	-	-0.05	0.695	1.040
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	645332	3679.98	16.77	18.50	1.489	-	-	0.18	0.705	1.050
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.77	18.50	1.489	-	-	-0.12	0.714	1.063
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	638000	3570	16.72	18.50	1.507	-	-	0.14	0.700	1.055
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	645332	3679.98	16.70	18.50	1.514	-	-	-0.17	0.688	1.041
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.75	18.50	1.496	-	-	0.08	0.580	0.868
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.87	18.50	1.455	-	-	-0.04	0.508	0.739
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.77	18.50	1.489	-	-	0.07	0.494	0.736
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	16.75	18.50	1.496	-	-	0.08	0.500	0.748
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.87	18.50	1.455	-	-	-0.01	0.666	0.969
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	638000	3570	16.75	18.50	1.496	-	-	0.17	0.643	0.962
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	645332	3679.98	16.77	18.50	1.489	-	-	-0.05	0.630	0.938
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.77	18.50	1.489	-	-	0.11	0.637	0.949
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	638000	3570	16.72	18.50	1.507	-	-	0.01	0.611	0.921
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	645332	3679.98	16.70	18.50	1.514	-	-	0.1	0.624	0.944
FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	641666	3624.99	16.75	18.50	1.496	-	-	0.08	0.641	0.959
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	15.48	17.00	1.419	-	-	-0.08	0.183	0.260
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	15.45	17.00	1.429	-	-	-0.14	0.198	0.283
FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	15.48	17.00	1.419	-	-	0.15	0.146	0.207
FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	15.45	17.00	1.429	-	-	-0.08	0.143	0.204



FCC SAR Test Report

Report No. : FA420425

	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	15.48	17.00	1.419	-	-	0.13	0.691	0.981
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	638000	3570	15.28	17.00	1.486	-	-	-0.17	0.652	0.969
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	645332	3679.98	15.35	17.00	1.462	-	-	0.04	0.669	0.978
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	15.45	17.00	1.429	-	-	0.16	0.718	1.026
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	638000	3570	15.40	17.00	1.445	-	-	-0.01	0.705	1.019
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	645332	3679.98	15.37	17.00	1.455	-	-	-0.08	0.701	1.020
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	15.42	17.00	1.439	-	-	0.05	0.667	0.960
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	15.48	17.00	1.419	-	-	-0.01	0.364	0.517
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	15.45	17.00	1.429	-	-	0.11	0.373	0.533
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	16.95	17.20	1.059	-	-	-0.04	0.693	0.734
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	16.93	17.20	1.064	-	-	0.01	0.632	0.673
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	16.94	17.20	1.062	-	-	0.09	0.637	0.676
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	16.95	17.20	1.059	-	-	0.08	0.538	0.570
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	16.93	17.20	1.064	-	-	0.05	0.485	0.516
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	16.95	17.20	1.059	-	-	0.18	0.184	0.195
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	16.93	17.20	1.064	-	-	0.05	0.184	0.196
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	16.95	17.20	1.059	-	-	-0.04	0.180	0.191
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	16.93	17.20	1.064	-	-	-0.12	0.170	0.181
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	19.95	20.20	1.059	50	1.000	-0.02	0.657	0.696
	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	14.37	14.70	1.079	-	-	0.01	0.381	0.411
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	16.97	17.20	1.054	-	-	0.02	0.888	0.936
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	16.93	17.20	1.064	-	-	0.04	0.838	0.892
19	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	16.94	17.20	1.062	-	-	0.07	0.907	0.963
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	16.97	17.20	1.054	-	-	0.1	0.701	0.739
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	16.93	17.20	1.064	-	-	0.04	0.671	0.714
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	16.94	17.20	1.062	-	-	0.07	0.708	0.752
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	16.97	17.20	1.054	-	-	0.07	0.250	0.264
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	16.93	17.20	1.064	-	-	-0.15	0.230	0.245
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	16.97	17.20	1.054	-	-	0.12	0.233	0.246
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	16.93	17.20	1.064	-	-	-0.06	0.216	0.230
	FR1 n77 PC2	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	19.83	20.20	1.089	50	1.000	0.06	0.877	0.955
	FR1 n77 ENDC	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	14.27	14.70	1.104	-	-	0.05	0.483	0.533
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	17.59	18.00	1.099	-	-	0.08	0.128	0.141
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	17.58	18.00	1.102	-	-	0.01	0.089	0.098
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	17.54	18.00	1.112	-	-	-0.08	0.085	0.094
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	656000	3840	17.59	18.00	1.099	-	-	-0.14	0.040	0.044
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	656000	3840	17.58	18.00	1.102	-	-	-0.04	0.034	0.037
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	656000	3840	17.59	18.00	1.099	-	-	0.07	0.124	0.136
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	656000	3840	17.58	18.00	1.102	-	-	0.06	0.075	0.083
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	656000	3840	17.59	18.00	1.099	-	-	0.04	0.021	0.023
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	656000	3840	17.58	18.00	1.102	-	-	0.13	0.013	0.014
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	20.58	21.00	1.102	50	1.000	0.14	0.121	0.133
	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	15.57	16.00	1.104	-	-	0.05	0.076	0.084
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.50	18.00	1.122	-	-	-0.16	0.602	0.675
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.49	18.00	1.125	-	-	0.05	0.694	0.780
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.46	18.00	1.132	-	-	0.08	0.659	0.746
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.50	18.00	1.122	-	-	-0.16	0.107	0.120
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.49	18.00	1.125	-	-	-0.02	0.111	0.125
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.50	18.00	1.122	-	-	0.02	0.661	0.742
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.49	18.00	1.125	-	-	-0.12	0.731	0.822
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.46	18.00	1.132	-	-	0.08	0.656	0.743
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.50	18.00	1.122	-	-	0.08	0.047	0.053
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.49	18.00	1.125	-	-	0.02	0.056	0.063
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	20.46	21.00	1.132	50	1.000	0.04	0.675	0.764
	FR1 n77 ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	15.45	16.00	1.135	-	-	-0.02	0.458	0.520
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	656000	3840	15.58	17.00	1.387	-	-	-0.12	0.357	0.495



FCC SAR Test Report

Report No. : FA420425

FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	656000	3840	15.57	17.00	1.390	-	-	0.09	0.295	0.410
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	656000	3840	15.58	17.00	1.387	-	-	0.08	0.394	0.546
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	656000	3840	15.57	17.00	1.390	-	-	0.19	0.331	0.460
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	656000	3840	15.58	17.00	1.387	-	-	0.06	0.326	0.452
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	656000	3840	15.57	17.00	1.390	-	-	0.04	0.263	0.366
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	15.58	17.00	1.387	-	-	0.02	0.404	0.560
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	15.57	17.00	1.390	-	-	0.07	0.334	0.464
FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	18.55	20.00	1.396	50	1.000	0.17	0.393	0.549
FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	13.50	15.00	1.413	-	-	0.05	0.221	0.312
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.98	17.00	1.265	-	-	-0.06	0.616	0.779
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.85	17.00	1.303	-	-	0.05	0.588	0.766
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.98	17.00	1.265	-	-	-0.18	0.690	0.873
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.85	17.00	1.303	-	-	-0.13	0.656	0.855
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.83	17.00	1.309	-	-	0.03	0.665	0.871
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.98	17.00	1.265	-	-	0.05	0.452	0.572
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.85	17.00	1.303	-	-	0.02	0.469	0.611
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.98	17.00	1.265	-	-	-0.08	0.520	0.658
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.85	17.00	1.303	-	-	-0.06	0.496	0.646
FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	18.93	20.00	1.279	50	1.000	-0.15	0.634	0.811
FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	13.87	15.00	1.297	-	-	0.07	0.412	0.534
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	17.62	18.50	1.225	-	-	0.13	0.177	0.217
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	17.57	18.50	1.239	-	-	0.04	0.153	0.190
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	17.62	18.50	1.225	-	-	0.15	0.136	0.167
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	17.57	18.50	1.239	-	-	0.08	0.123	0.152
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	17.62	18.50	1.225	-	-	-0.06	0.690	0.845
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	17.57	18.50	1.239	-	-	0.09	0.602	0.746
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	17.57	18.50	1.239	-	-	0.08	0.637	0.789
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	17.62	18.50	1.225	-	-	0.07	0.358	0.438
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	17.57	18.50	1.239	-	-	-0.04	0.303	0.375
FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	20.59	21.50	1.233	50	1.000	0.04	0.631	0.778
FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	15.57	16.50	1.239	-	-	0.01	0.413	0.512
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	17.11	18.50	1.377	-	-	-0.14	0.110	0.151
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	17.06	18.50	1.393	-	-	0.07	0.147	0.205
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	17.11	18.50	1.377	-	-	-0.09	0.076	0.105
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	17.06	18.50	1.393	-	-	0.02	0.105	0.146
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	17.11	18.50	1.377	-	-	-0.03	0.420	0.578
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	17.06	18.50	1.393	-	-	0.09	0.542	0.755
FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	17.01	18.50	1.409	-	-	-0.06	0.586	0.826
FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	17.11	18.50	1.377	-	-	-0.02	0.203	0.280
FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	17.06	18.50	1.393	-	-	-0.1	0.273	0.380
FR1 n77 PC2	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	19.93	21.50	1.435	50	1.000	0.07	0.576	0.827
FR1 n77 ENDC	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	15.11	16.50	1.377	-	-	0.04	0.354	0.488



Plot No.	Band	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)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	-0.01	0.318	0.355
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	0.07	0.334	0.373
20	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	-0.07	0.900	1.005
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	-0.02	0.781	0.872
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 9+8	standalone	6	2437	19.41	20.00	1.146	100	1.000	0.03	0.734	0.841
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 9+8	standalone	6	2437	19.41	20.00	1.146	100	1.000	0.05	0.848	0.971
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 9+8	simultaneous	11	2462	17.50	18.00	1.122	100	1.000	0.01	0.441	0.495
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 9	Full power	00	2402	16.46	18.00	1.425	76.87	1.084	-0.03	0.132	0.204
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 9	Full power	00	2402	16.46	18.00	1.425	76.87	1.084	0.02	0.150	0.232
21	Bluetooth	1Mbps	Left Cheek	0mm	Ant 9	Full power	00	2402	16.46	18.00	1.425	76.87	1.084	-0.01	0.293	0.453
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 9	Full power	00	2402	16.46	18.00	1.425	76.87	1.084	-0.01	0.233	0.360
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 9	simultaneous	00	2402	11.27	13.00	1.489	76.87	1.084	-0.04	0.117	0.189
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 8	Full power	00	2402	17.54	18.00	1.111	76.68	1.086	0.07	0.140	0.169
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 8	Full power	00	2402	17.54	18.00	1.111	76.68	1.086	-0.02	0.082	0.099
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 8	Full power	00	2402	17.54	18.00	1.111	76.68	1.086	0.02	0.200	0.241
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 8	Full power	00	2402	17.54	18.00	1.111	76.68	1.086	-0.04	0.203	0.245
5000MHz																
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	-0.04	0.345	0.408
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	0.01	0.440	0.521
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	0.07	0.543	0.642
22	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	-0.05	0.855	1.012
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 10+11	simultaneous	58	5290	12.25	13.00	1.189	100	1.000	-0.04	0.186	0.221
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	-0.07	0.408	0.462
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	0.04	0.460	0.521
23	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	-0.06	0.919	1.041
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 10+11	standalone	116	5580	20.47	21.00	1.130	98.97	1.010	0.01	0.860	0.981
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	-0.02	0.862	0.977
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 10+11	standalone	116	5580	20.47	21.00	1.130	98.97	1.010	0.08	0.822	0.938
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 10+11	simultaneous	106	5530	14.12	15.00	1.225	100	1.000	0.02	0.184	0.225
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 10+11	standalone	159	5795	18.96	19.50	1.132	100	1.000	-0.01	0.246	0.278
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 10+11	standalone	159	5795	18.96	19.50	1.132	100	1.000	0.07	0.325	0.368
24	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 10+11	standalone	159	5795	18.96	19.50	1.132	100	1.000	-0.05	0.771	0.873
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 10+11	standalone	159	5795	18.96	19.50	1.132	100	1.000	0.04	0.523	0.592
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 10+11	simultaneous	155	5775	13.78	14.50	1.180	100	1.000	-0.04	0.188	0.222



15.2 Hotspot SAR

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)	Reported 1g SAR (W/kg)
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 0	DSI 5	189	836.4	26.21	28.00	1.510	-	-	0.08	0.148	0.223
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 0	DSI 5	189	836.4	26.21	28.00	1.510	-	-	0.01	0.187	0.282
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	10mm	Ant 0	DSI 5	189	836.4	26.21	28.00	1.510	-	-	0.03	0.167	0.252
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 0	DSI 5	189	836.4	26.21	28.00	1.510	-	-	-0.08	0.132	0.199
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 1	DSI 5	189	836.4	24.95	26.50	1.429	-	-	-0.08	0.265	0.379
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 1	DSI 5	189	836.4	24.95	26.50	1.429	-	-	0.1	0.328	0.469
25	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 1	DSI 5	189	836.4	24.95	26.50	1.429	-	-	-0.02	0.581	0.830
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 1	DSI 5	128	824.2	24.88	26.50	1.452	-	-	0.12	0.453	0.658
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 1	DSI 5	251	848.8	24.92	26.50	1.439	-	-	0.08	0.495	0.712
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	10mm	Ant 1	DSI 5	189	836.4	24.95	26.50	1.429	-	-	0.1	0.000	0.000
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 5	4182	836.4	24.02	25.00	1.253	-	-	-0.17	0.190	0.238
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	4182	836.4	24.02	25.00	1.253	-	-	-0.03	0.256	0.321
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	DSI 5	4182	836.4	24.02	25.00	1.253	-	-	0.14	0.241	0.302
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	4182	836.4	24.02	25.00	1.253	-	-	0.11	0.162	0.203
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI 5	4182	836.4	21.12	22.50	1.374	-	-	-0.05	0.324	0.445
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 5	4182	836.4	21.12	22.50	1.374	-	-	0.18	0.412	0.566
26	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI 5	4182	836.4	21.12	22.50	1.374	-	-	0.02	0.628	0.863
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI 5	4132	826.4	21.10	22.50	1.380	-	-	-0.05	0.518	0.715
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI 5	4233	846.6	20.99	22.50	1.416	-	-	0.01	0.574	0.813
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 1	DSI 5	4182	836.4	21.12	22.50	1.374	-	-	0.1	0.000	0.000
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 5	26865	831.5	24.23	25.50	1.340	-	-	-0.17	0.185	0.248
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	DSI 5	26865	831.5	23.21	24.50	1.346	-	-	0.04	0.147	0.198
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	26865	831.5	24.23	25.50	1.340	-	-	-0.01	0.246	0.330
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	DSI 5	26865	831.5	23.21	24.50	1.346	-	-	-0.08	0.197	0.265
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 5	26865	831.5	24.23	25.50	1.340	-	-	0.05	0.268	0.359
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 0	DSI 5	26865	831.5	23.21	24.50	1.346	-	-	0.06	0.212	0.285
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	26865	831.5	24.23	25.50	1.340	-	-	-0.09	0.141	0.189
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 0	DSI 5	26865	831.5	23.21	24.50	1.346	-	-	-0.08	0.116	0.156
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	26865	831.5	21.63	23.00	1.371	-	-	0.13	0.266	0.365
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DSI 5	26865	831.5	21.54	23.00	1.400	-	-	0.12	0.233	0.326
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	26865	831.5	21.63	23.00	1.371	-	-	0.03	0.349	0.478
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI 5	26865	831.5	21.54	23.00	1.400	-	-	0.18	0.296	0.414
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	26865	831.5	21.63	23.00	1.371	-	-	0.16	0.617	0.846
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	26765	821.5	21.52	23.00	1.406	-	-	-0.1	0.612	0.861
27	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	26965	841.5	21.59	23.00	1.384	-	-	0.01	0.661	0.915
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI 5	26865	831.5	21.54	23.00	1.400	-	-	0.18	0.652	0.913
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI 5	26765	821.5	21.44	23.00	1.432	-	-	-0.1	0.614	0.879
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI 5	26965	841.5	21.35	23.00	1.462	-	-	0.01	0.605	0.885
	LTE Band 26	15M	QPSK	75	0	-	Left Side	10mm	Ant 1	DSI 5	26865	831.5	21.47	23.00	1.422	-	-	-0.15	0.606	0.862
	LTE Band 26	15M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	26865	831.5	21.63	23.00	1.371	-	-	0.19	0.000	0.000
	LTE Band 26	15M	QPSK	36	0	-	Top Side	10mm	Ant 1	DSI 5	26865	831.5	21.54	23.00	1.400	-	-	0.07	0.000	0.000
	LTE Band 5 ENDC	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	20525	836.5	19.57	21.00	1.390	-	-	-0.01	0.307	0.427
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	167300	836.5	24.45	25.50	1.274	-	-	-0.18	0.179	0.228
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	167300	836.5	24.37	25.50	1.297	-	-	0.03	0.191	0.248
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	167300	836.5	24.45	25.50	1.274	-	-	-0.15	0.252	0.321
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	167300	836.5	24.37	25.50	1.297	-	-	-0.15	0.268	0.348
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	167300	836.5	24.45	25.50	1.274	-	-	0.11	0.205	0.261
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	167300	836.5	24.37	25.50	1.297	-	-	-0.08	0.218	0.283
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	167300	836.5	24.45	25.50	1.274	-	-	-0.17	0.138	0.176
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	167300	836.5	24.37	25.50	1.297	-	-	-0.08	0.143	0.185



FCC SAR Test Report

Report No. : FA420425

	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	167300	836.5	21.47	22.50	1.268	-	-	-0.04	0.275	0.349
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	167300	836.5	21.38	22.50	1.294	-	-	-0.08	0.311	0.402
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	167300	836.5	21.47	22.50	1.268	-	-	0.17	0.353	0.447
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	167300	836.5	21.38	22.50	1.294	-	-	0.18	0.383	0.496
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	167300	836.5	21.47	22.50	1.268	-	-	-0.08	0.537	0.681
28	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	167300	836.5	21.38	22.50	1.294	-	-	-0.01	0.573	0.742
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	167300	836.5	21.47	22.50	1.268	-	-	0.06	0.000	0.000
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	167300	836.5	21.38	22.50	1.294	-	-	-0.03	0.000	0.000
	FR1 n5 ENDC	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	167300	836.5	19.21	20.50	1.346	-	-	0.07	0.293	0.394
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 2	DSI 5	1413	1732.6	18.92	20.00	1.282	-	-	0.08	0.141	0.181
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 2	DSI 5	1413	1732.6	18.92	20.00	1.282	-	-	0.04	0.261	0.335
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 2	DSI 5	1413	1732.6	18.92	20.00	1.282	-	-	-0.12	0.088	0.113
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 2	DSI 5	1413	1732.6	18.92	20.00	1.282	-	-	0.03	0.041	0.053
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	DSI 5	1413	1732.6	20.12	21.50	1.374	-	-	-0.16	0.231	0.317
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	DSI 5	1413	1732.6	20.12	21.50	1.374	-	-	-0.02	0.283	0.389
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	DSI 5	1413	1732.6	20.12	21.50	1.374	-	-	0.11	0.083	0.114
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 3	DSI 5	1413	1732.6	20.12	21.50	1.374	-	-	-0.04	0.441	0.606
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 4	DSI 5	1413	1732.6	18.33	20.00	1.469	-	-	-0.03	0.082	0.120
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 4	DSI 5	1413	1732.6	18.33	20.00	1.469	-	-	-0.15	0.120	0.176
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 4	DSI 5	1413	1732.6	18.33	20.00	1.469	-	-	0.1	0.217	0.319
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 4	DSI 5	1413	1732.6	18.33	20.00	1.469	-	-	0.07	0.023	0.034
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 5	DSI 5	1413	1732.6	20.93	22.50	1.435	-	-	0.16	0.223	0.320
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 5	DSI 5	1413	1732.6	20.93	22.50	1.435	-	-	0.13	0.242	0.347
29	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 5	DSI 5	1413	1732.6	20.93	22.50	1.435	-	-	0.01	0.481	0.690
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 5	132322	1745	18.52	19.50	1.253	-	-	-0.03	0.125	0.157
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 5	132322	1745	18.41	19.50	1.285	-	-	0.01	0.102	0.131
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	132322	1745	18.52	19.50	1.253	-	-	-0.06	0.210	0.263
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 5	132322	1745	18.41	19.50	1.285	-	-	-0.17	0.172	0.221
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	DSI 5	132322	1745	18.52	19.50	1.253	-	-	-0.04	0.059	0.074
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	DSI 5	132322	1745	18.41	19.50	1.285	-	-	-0.05	0.048	0.062
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	132322	1745	18.52	19.50	1.253	-	-	-0.01	0.236	0.296
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	DSI 5	132322	1745	18.41	19.50	1.285	-	-	-0.09	0.184	0.236
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 5	132322	1745	20.58	22.00	1.387	-	-	-0.06	0.233	0.323
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 5	132322	1745	20.54	22.00	1.400	-	-	-0.14	0.192	0.269
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 5	132322	1745	20.58	22.00	1.387	-	-	-0.19	0.297	0.412
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 5	132322	1745	20.54	22.00	1.400	-	-	0.02	0.245	0.343
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 5	132322	1745	20.58	22.00	1.387	-	-	-0.16	0.089	0.123
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 5	132322	1745	20.54	22.00	1.400	-	-	-0.12	0.073	0.102
30	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	132322	1745	20.58	22.00	1.387	-	-	0.02	0.545	0.756
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	132322	1745	20.54	22.00	1.400	-	-	-0.13	0.405	0.567
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 5	132322	1745	18.55	20.00	1.396	-	-	-0.15	0.076	0.106
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 5	132322	1745	18.53	20.00	1.403	-	-	0.03	0.061	0.086
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 5	132322	1745	18.55	20.00	1.396	-	-	-0.13	0.113	0.158
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 5	132322	1745	18.53	20.00	1.403	-	-	0.16	0.093	0.130
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	132322	1745	18.55	20.00	1.396	-	-	0.04	0.174	0.243
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 5	132322	1745	18.53	20.00	1.403	-	-	-0.02	0.141	0.198
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 5	132322	1745	18.55	20.00	1.396	-	-	-0.09	0.022	0.031
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 5	132322	1745	18.53	20.00	1.403	-	-	0.14	0.019	0.027
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	132322	1745	21.14	22.50	1.368	-	-	0.1	0.251	0.343
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	132322	1745	20.14	21.50	1.368	-	-	-0.09	0.194	0.265
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	132322	1745	21.14	22.50	1.368	-	-	0.07	0.288	0.394
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	132322	1745	20.14	21.50	1.368	-	-	-0.09	0.230	0.315
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	DSI 5	132322	1745	21.14	22.50	1.368	-	-	0.02	0.509	0.696
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	DSI 5	132322	1745	20.14	21.50	1.368	-	-	-0.16	0.405	0.554
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	349000	1745	19.34	20.00	1.164	-	-	0.03	0.142	0.165



FCC SAR Test Report

Report No. : FA420425

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	349000	1745	19.31	20.00	1.172	-	-	0.1	0.152	0.178
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	349000	1745	19.34	20.00	1.164	-	-	0.16	0.228	0.265
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	349000	1745	19.31	20.00	1.172	-	-	-0.06	0.258	0.302
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	349000	1745	19.34	20.00	1.164	-	-	0.02	0.068	0.079
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	349000	1745	19.31	20.00	1.172	-	-	-0.16	0.097	0.114
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	349000	1745	19.34	20.00	1.164	-	-	0.05	0.276	0.321
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	349000	1745	19.31	20.00	1.172	-	-	-0.05	0.279	0.327
	FR1 n66 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	349000	1745	19.17	20.00	1.211	-	-	-0.15	0.268	0.324
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	349000	1745	20.77	22.00	1.327	-	-	0.16	0.299	0.397
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	349000	1745	20.72	22.00	1.343	-	-	0.05	0.319	0.428
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	349000	1745	20.77	22.00	1.327	-	-	-0.06	0.367	0.487
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	349000	1745	20.72	22.00	1.343	-	-	-0.13	0.382	0.513
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	349000	1745	20.77	22.00	1.327	-	-	-0.01	0.112	0.149
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	349000	1745	20.72	22.00	1.343	-	-	-0.11	0.122	0.164
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	349000	1745	20.77	22.00	1.327	-	-	0.19	0.621	0.824
31	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	349000	1745	20.72	22.00	1.343	-	-	0.02	0.643	0.863
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	349000	1745	20.64	22.00	1.368	-	-	-0.18	0.624	0.853
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI 5	349000	1745	19.41	20.50	1.285	-	-	0.16	0.065	0.084
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI 5	349000	1745	19.37	20.50	1.297	-	-	0.01	0.107	0.139
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI 5	349000	1745	19.41	20.50	1.285	-	-	-0.04	0.097	0.125
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI 5	349000	1745	19.37	20.50	1.297	-	-	0.13	0.151	0.196
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI 5	349000	1745	19.41	20.50	1.285	-	-	0.12	0.146	0.188
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI 5	349000	1745	19.37	20.50	1.297	-	-	0.02	0.219	0.284
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI 5	349000	1745	19.41	20.50	1.285	-	-	0.08	0.021	0.027
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI 5	349000	1745	19.37	20.50	1.297	-	-	0.19	0.033	0.043
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	349000	1745	21.99	22.50	1.125	-	-	-0.06	0.163	0.183
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	349000	1745	21.95	22.50	1.135	-	-	0	0.179	0.203
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	349000	1745	21.99	22.50	1.125	-	-	-0.03	0.175	0.197
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	349000	1745	21.95	22.50	1.135	-	-	0.07	0.201	0.228
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	349000	1745	21.99	22.50	1.125	-	-	-0.12	0.364	0.409
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	349000	1745	21.95	22.50	1.135	-	-	0.02	0.444	0.504
	FR1 n66 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	349000	1745	21.96	22.50	1.132	-	-	0.12	0.427	0.484
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 2	DSI 5	661	1880	21.14	23.00	1.535	-	-	0.02	0.135	0.207
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 2	DSI 5	661	1880	21.14	23.00	1.535	-	-	-0.03	0.182	0.279
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 2	DSI 5	661	1880	21.14	23.00	1.535	-	-	0	0.086	0.132
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	10mm	Ant 2	DSI 5	661	1880	21.14	23.00	1.535	-	-	0.02	0.260	0.399
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 3	DSI 5	661	1880	22.97	24.50	1.422	-	-	0.13	0.280	0.398
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 3	DSI 5	661	1880	22.97	24.50	1.422	-	-	0.12	0.342	0.486
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 3	DSI 5	661	1880	22.97	24.50	1.422	-	-	0.03	0.128	0.182
32	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 3	DSI 5	661	1880	22.97	24.50	1.422	-	-	-0.09	0.583	0.829
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 3	DSI 5	512	1850.2	22.91	24.50	1.442	-	-	0.18	0.484	0.698
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 3	DSI 5	810	1909.8	22.70	24.50	1.514	-	-	0.16	0.518	0.784
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 2	DSI 5	9400	1880	18.40	19.50	1.288	-	-	0.05	0.127	0.164
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 2	DSI 5	9400	1880	18.40	19.50	1.288	-	-	0	0.185	0.238
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 2	DSI 5	9400	1880	18.40	19.50	1.288	-	-	-0.05	0.082	0.106
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 2	DSI 5	9400	1880	18.40	19.50	1.288	-	-	-0.01	0.278	0.358
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	DSI 5	9400	1880	20.28	22.00	1.486	-	-	-0.12	0.301	0.447
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	DSI 5	9400	1880	20.28	22.00	1.486	-	-	0.01	0.387	0.575
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	DSI 5	9400	1880	20.28	22.00	1.486	-	-	-0.01	0.144	0.214
33	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 3	DSI 5	9400	1880	20.28	22.00	1.486	-	-	-0.01	0.636	0.945
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 3	DSI 5	9262	1852.4	20.27	22.00	1.489	-	-	0.1	0.601	0.895
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 3	DSI 5	9538	1907.6	20.24	22.00	1.500	-	-	-0.04	0.591	0.886
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 5	18900	1880	18.67	20.00	1.358	-	-	0.05	0.122	0.166
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 5	18900	1880	18.53	20.00	1.403	-	-	0.08	0.098	0.137
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	18900	1880	18.67	20.00	1.358	-	-	-0.18	0.195	0.265



FCC SAR Test Report

Report No. : FA420425

	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 5	18900	1880	18.53	20.00	1.403	-	-	-0.09	0.158	0.222
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	DSI 5	18900	1880	18.67	20.00	1.358	-	-	-0.03	0.083	0.113
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	DSI 5	18900	1880	18.53	20.00	1.403	-	-	0.09	0.066	0.093
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	18900	1880	18.67	20.00	1.358	-	-	-0.03	0.268	0.364
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	DSI 5	18900	1880	18.53	20.00	1.403	-	-	0.17	0.211	0.296
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	18900	1880	18.78	20.00	1.324	-	-	-0.15	0.229	0.303
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 5	18900	1880	19.85	21.50	1.462	-	-	-0.05	0.325	0.475
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 5	18900	1880	19.74	21.50	1.500	-	-	0	0.262	0.393
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 5	18900	1880	19.85	21.50	1.462	-	-	0.02	0.403	0.589
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 5	18900	1880	19.74	21.50	1.500	-	-	-0.02	0.325	0.487
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 5	18900	1880	19.85	21.50	1.462	-	-	0.08	0.147	0.215
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 5	18900	1880	19.74	21.50	1.500	-	-	0	0.117	0.175
34	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	18900	1880	19.85	21.50	1.462	-	-	0.02	0.708	1.035
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	18700	1860	19.66	21.50	1.528	-	-	-0.1	0.612	0.935
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	19100	1900	19.71	21.50	1.510	-	-	-0.07	0.682	1.030
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	18900	1880	19.74	21.50	1.500	-	-	0.11	0.564	0.846
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	18700	1860	19.69	21.50	1.517	-	-	-0.17	0.517	0.784
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	19100	1900	19.72	21.50	1.507	-	-	0.01	0.541	0.815
	LTE Band 2 Main PA_SA	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 3	DSI 5	18900	1880	19.65	21.50	1.531	-	-	0.1	0.560	0.857
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	18900	1880	20.48	21.00	1.127	-	-	0.11	0.565	0.637
	LTE Band 2 Other PA_ENDC	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	18900	1880	19.45	20.00	1.135	-	-	0.11	0.441	0.501
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	376000	1880	19.01	20.00	1.256	-	-	0	0.163	0.205
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	376000	1880	18.98	20.00	1.265	-	-	-0.04	0.152	0.192
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	376000	1880	19.01	20.00	1.256	-	-	-0.15	0.241	0.303
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	376000	1880	18.98	20.00	1.265	-	-	-0.09	0.228	0.288
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	376000	1880	19.01	20.00	1.256	-	-	0.13	0.116	0.146
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	376000	1880	18.98	20.00	1.265	-	-	0	0.107	0.135
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	376000	1880	19.01	20.00	1.256	-	-	0.02	0.317	0.398
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	376000	1880	18.98	20.00	1.265	-	-	0.15	0.288	0.364
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	376000	1880	20.02	21.50	1.406	-	-	-0.11	0.318	0.447
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	376000	1880	20.01	21.50	1.409	-	-	-0.02	0.337	0.475
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	376000	1880	20.02	21.50	1.406	-	-	0.14	0.400	0.562
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	376000	1880	20.01	21.50	1.409	-	-	0.04	0.407	0.574
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	376000	1880	20.02	21.50	1.406	-	-	-0.04	0.137	0.193
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	376000	1880	20.01	21.50	1.409	-	-	0.14	0.138	0.194
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	376000	1880	20.02	21.50	1.406	-	-	0.03	0.633	0.890
35	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	376000	1880	20.01	21.50	1.409	-	-	0.02	0.687	0.968
	FR1 n2	40M	QPSK	216	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	376000	1880	19.98	21.50	1.419	-	-	-0.01	0.652	0.925
2600MHz																				
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 5	21100	2535	16.57	17.50	1.239	-	-	-0.09	0.110	0.136
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 5	21100	2535	16.55	17.50	1.245	-	-	-0.19	0.091	0.113
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	21100	2535	16.57	17.50	1.239	-	-	0.07	0.187	0.232
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 5	21100	2535	16.55	17.50	1.245	-	-	0.09	0.140	0.174
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	DSI 5	21100	2535	16.57	17.50	1.239	-	-	-0.06	0.063	0.078
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	DSI 5	21100	2535	16.55	17.50	1.245	-	-	0.08	0.053	0.066
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	21100	2535	16.57	17.50	1.239	-	-	-0.07	0.152	0.188
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	DSI 5	21100	2535	16.55	17.50	1.245	-	-	0.04	0.125	0.156
	LTE Band 7 Main PA-1	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	21100	2535	16.71	17.50	1.199	-	-	-0.15	0.151	0.181
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	21100	2560	12.47	13.00	1.130	-	-	0.18	0.083	0.094
	CA 7C	20M	QPSK	1	99	-	Back	10mm	Ant 2	DSI 5	21100+21298	2535+2554.8	15.40	16.00	1.148	-	-	0.08	0.175	0.201
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 5	21100	2535	19.57	21.00	1.390	-	-	0.13	0.268	0.373
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 5	21100	2535	19.45	21.00	1.429	-	-	-0.02	0.222	0.317
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 5	21100	2535	19.57	21.00	1.390	-	-	0	0.317	0.441
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 5	21100	2535	19.45	21.00	1.429	-	-	-0.04	0.258	0.369
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 5	21100	2535	19.57	21.00	1.390	-	-	-0.07	0.114	0.158
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 5	21100	2535	19.45	21.00	1.429	-	-	-0.03	0.095	0.136



FCC SAR Test Report

Report No. : FA420425

36	LTE Band 7 Main PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	21100	2535	19.57	21.00	1.390	-	-	0.02	0.376	0.523
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	21100	2535	19.45	21.00	1.429	-	-	-0.11	0.310	0.443
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	21100	2560	19.61	20.50	1.227	-	-	0.19	0.231	0.284
	LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	21100	2560	19.64	20.50	1.219	-	-	-0.01	0.245	0.299
	CA 7C	20M	QPSK	1	99	-	Bottom Side	10mm	Ant 3	DSI 5	21100+21298	2535+2554.8	17.65	19.50	1.531	-	-	0.12	0.322	0.493
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 5	21100	2535	18.77	20.00	1.327	-	-	-0.08	0.112	0.149
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 5	21100	2535	18.65	20.00	1.365	-	-	0.1	0.089	0.121
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 5	21100	2535	18.77	20.00	1.327	-	-	0.15	0.182	0.242
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 5	21100	2535	18.65	20.00	1.365	-	-	-0.15	0.155	0.212
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	21100	2535	18.77	20.00	1.327	-	-	0.15	0.233	0.309
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 5	21100	2535	18.65	20.00	1.365	-	-	0.03	0.153	0.209
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 5	21100	2535	18.77	20.00	1.327	-	-	-0.18	0.076	0.101
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 5	21100	2535	18.65	20.00	1.365	-	-	0.12	0.061	0.083
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	21100	2560	19.58	20.50	1.236	-	-	-0.19	0.174	0.215
	LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	21100	2560	19.52	20.50	1.253	-	-	-0.03	0.165	0.207
	CA 7C	20M	QPSK	1	99	-	Left Side	10mm	Ant 4	DSI 5	21100+21298	2535+2554.8	17.31	19.00	1.476	-	-	-0.17	0.196	0.289
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	21100	2535	18.68	20.00	1.355	-	-	0.02	0.117	0.159
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	21100	2535	18.57	20.00	1.390	-	-	0.12	0.090	0.125
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	18.68	20.00	1.355	-	-	0.02	0.319	0.432
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	18.57	20.00	1.390	-	-	-0.11	0.252	0.350
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	DSI 5	21100	2535	18.68	20.00	1.355	-	-	0.03	0.293	0.397
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	DSI 5	21100	2535	18.57	20.00	1.390	-	-	-0.06	0.228	0.317
	LTE Band 7 Main PA-1	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	18.85	20.00	1.303	-	-	0.03	0.296	0.386
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	19.21	20.50	1.346	-	-	-0.17	0.309	0.416
	CA 7C	20M	QPSK	1	99	-	Back	10mm	Ant 5	DSI 5	21100+21298	2535+2554.8	17.66	19.00	1.361	-	-	-0.03	0.302	0.411
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 5	40620	2593	18.37	19.50	1.297	62.9	1.006	0.02	0.136	0.177
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 5	40620	2593	18.34	19.50	1.306	62.9	1.006	-0.03	0.110	0.145
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 5	40620	2593	18.37	19.50	1.297	62.9	1.006	-0.06	0.202	0.264
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 5	40620	2593	18.34	19.50	1.306	62.9	1.006	0.02	0.159	0.209
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	DSI 5	40620	2593	18.37	19.50	1.297	62.9	1.006	0.13	0.099	0.129
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	DSI 5	40620	2593	18.34	19.50	1.306	62.9	1.006	-0.03	0.078	0.102
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	40620	2593	18.37	19.50	1.297	62.9	1.006	-0.01	0.208	0.271
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	DSI 5	40620	2593	18.34	19.50	1.306	62.9	1.006	-0.11	0.159	0.209
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	DSI 5	40620	2593	15.49	16.00	1.125	62.9	1.006	0.15	0.167	0.189
	CA 38C	20M	QPSK	1	99	-	Top Side	10mm	Ant 2	DSI 5	37901+38099	2585.1+2604.9	17.52	18.50	1.253	62.9	1.006	0.18	0.197	0.248
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 5	40620	2593	19.17	20.50	1.358	62.9	1.006	-0.08	0.146	0.200
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 5	40620	2593	19.15	20.50	1.365	62.9	1.006	-0.18	0.113	0.155
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 5	40620	2593	19.17	20.50	1.358	62.9	1.006	-0.13	0.184	0.251
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 5	40620	2593	19.15	20.50	1.365	62.9	1.006	-0.03	0.149	0.205
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 5	40620	2593	19.17	20.50	1.358	62.9	1.006	0.02	0.052	0.071
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 5	40620	2593	19.15	20.50	1.365	62.9	1.006	0.02	0.041	0.056
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	40620	2593	19.17	20.50	1.358	62.9	1.006	0.02	0.220	0.301
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	DSI 5	40620	2593	19.15	20.50	1.365	62.9	1.006	-0.17	0.184	0.253
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	DSI 5	40620	2593	20.17	20.50	1.079	62.9	1.006	-0.04	0.201	0.218
	CA 38C	20M	QPSK	1	99	-	Bottom Side	10mm	Ant 3	DSI 5	37901+38099	2585.1+2604.9	17.61	19.00	1.377	62.9	1.006	-0.05	0.203	0.281
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 5	40620	2593	17.51	19.00	1.409	62.9	1.006	-0.17	0.078	0.111
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 5	40620	2593	17.47	19.00	1.422	62.9	1.006	-0.07	0.062	0.089
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 5	40620	2593	17.51	19.00	1.409	62.9	1.006	0.04	0.124	0.176
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 5	40620	2593	17.47	19.00	1.422	62.9	1.006	0.01	0.100	0.143
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	40620	2593	17.51	19.00	1.409	62.9	1.006	0.09	0.161	0.228
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 5	40620	2593	17.47	19.00	1.422	62.9	1.006	0.09	0.122	0.175
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 5	40620	2593	17.51	19.00	1.409	62.9	1.006	0.07	0.031	0.044
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 5	40620	2593	17.47	19.00	1.422	62.9	1.006	0.11	0.025	0.036
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 5	40620	2593	18.65	19.50	1.216	62.9	1.006	-0.04	0.158	0.193
	CA 38C	20M	QPSK	1	99	-	Left Side	10mm	Ant 4	DSI 5	37901+38099	2585.1+2604.9	16.47	18.00	1.422	62.9	1.006	0.11	0.146	0.209



FCC SAR Test Report

Report No. : FA420425

											38099	2604.9								
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	40620	2593	18.91	20.50	1.442	62.9	1.006	-0.18	0.123	0.178
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	40620	2593	18.86	20.50	1.459	62.9	1.006	0.11	0.097	0.142
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	40620	2593	18.91	20.50	1.442	62.9	1.006	-0.01	0.272	0.395
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	40620	2593	18.86	20.50	1.459	62.9	1.006	-0.11	0.213	0.313
37	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	DSI 5	40620	2593	18.91	20.50	1.442	62.9	1.006	-0.04	0.286	0.415
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	DSI 5	40620	2593	18.86	20.50	1.459	62.9	1.006	0.04	0.229	0.336
	LTE Band 41 Other PA NSA	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	DSI 5	40620	2593	19.78	21.00	1.324	62.9	1.006	0.06	0.274	0.365
	CA 38C	20M	QPSK	1	99	-	Right Side	10mm	Ant 5	DSI 5	37901+ 38099	2585.1+ 2604.9	18.33	19.50	1.309	62.9	1.006	0.14	0.295	0.389
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	507000	2535	16.48	17.50	1.265	-	-	-0.18	0.092	0.116
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 5	507000	2535	16.45	17.50	1.274	-	-	0.06	0.099	0.126
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	507000	2535	16.48	17.50	1.265	-	-	-0.19	0.116	0.147
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 5	507000	2535	16.45	17.50	1.274	-	-	0.17	0.132	0.168
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	507000	2535	16.48	17.50	1.265	-	-	-0.08	0.059	0.075
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 2	DSI 5	507000	2535	16.45	17.50	1.274	-	-	0.03	0.060	0.076
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	507000	2535	16.48	17.50	1.265	-	-	0.12	0.121	0.153
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	507000	2535	16.45	17.50	1.274	-	-	0.02	0.146	0.186
	FR1 n7 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 2	DSI 5	507000	2535	16.39	17.50	1.291	-	-	0.02	0.107	0.138
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	507000	2535	20.13	21.50	1.371	-	-	-0.16	0.296	0.406
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 5	507000	2535	20.10	21.50	1.380	-	-	-0.03	0.297	0.410
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	507000	2535	20.13	21.50	1.371	-	-	0.1	0.344	0.472
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 5	507000	2535	20.10	21.50	1.380	-	-	0.03	0.365	0.504
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	507000	2535	20.13	21.50	1.371	-	-	0.12	0.106	0.145
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 5	507000	2535	20.10	21.50	1.380	-	-	-0.03	0.113	0.156
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	507000	2535	20.13	21.50	1.371	-	-	0.11	0.401	0.550
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 3	DSI 5	507000	2535	20.10	21.50	1.380	-	-	0.02	0.402	0.555
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI 5	507000	2535	18.24	19.50	1.337	-	-	0.09	0.105	0.140
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 4	DSI 5	507000	2535	18.23	19.50	1.340	-	-	-0.12	0.117	0.157
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI 5	507000	2535	18.24	19.50	1.337	-	-	0.1	0.171	0.229
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 4	DSI 5	507000	2535	18.23	19.50	1.340	-	-	-0.16	0.197	0.264
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI 5	507000	2535	18.24	19.50	1.337	-	-	0.17	0.213	0.285
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 4	DSI 5	507000	2535	18.23	19.50	1.340	-	-	0.04	0.238	0.319
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI 5	507000	2535	18.24	19.50	1.337	-	-	-0.12	0.038	0.051
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 4	DSI 5	507000	2535	18.23	19.50	1.340	-	-	-0.1	0.041	0.055
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	507000	2535	19.50	20.50	1.259	-	-	-0.09	0.156	0.196
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	507000	2535	19.49	20.50	1.262	-	-	-0.09	0.167	0.211
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	507000	2535	19.50	20.50	1.259	-	-	0.08	0.344	0.433
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	507000	2535	19.49	20.50	1.262	-	-	0.06	0.382	0.482
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	507000	2535	19.50	20.50	1.259	-	-	0.1	0.453	0.570
38	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	507000	2535	19.49	20.50	1.262	-	-	0.04	0.550	0.694
	FR1 n7 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 5	DSI 5	507000	2535	19.48	20.50	1.265	-	-	0.08	0.459	0.581
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 5	518598	2592.99	16.68	17.50	1.208	-	-	0.15	0.152	0.184
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 5	518598	2592.99	16.43	17.50	1.279	-	-	-0.11	0.155	0.198
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 5	518598	2592.99	16.68	17.50	1.208	-	-	0.02	0.189	0.228
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 5	518598	2592.99	16.43	17.50	1.279	-	-	-0.05	0.212	0.271
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI 5	518598	2592.99	16.68	17.50	1.208	-	-	0.03	0.086	0.104
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 2	DSI 5	518598	2592.99	16.43	17.50	1.279	-	-	0.05	0.075	0.096
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 2	DSI 5	518598	2592.99	16.68	17.50	1.208	-	-	-0.14	0.211	0.255
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 2	DSI 5	518598	2592.99	16.43	17.50	1.279	-	-	0.02	0.216	0.276
	FR1 n41 Main PA-1	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 2	DSI 5	518598	2592.99	16.60	17.50	1.230	-	-	0.13	0.159	0.196
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 5	518598	2592.99	20.84	22.00	1.306	-	-	-0.01	0.351	0.458
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 5	518598	2592.99	20.77	22.00	1.327	-	-	0.02	0.299	0.397
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 5	518598	2592.99	20.84	22.00	1.306	-	-	-0.18	0.415	0.542
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 5	518598	2592.99	20.77	22.00	1.327	-	-	0.06	0.394	0.523
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 5	518598	2592.99	20.84	22.00	1.306	-	-	-0.06	0.124	0.162
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 5	518598	2592.99	20.77	22.00	1.327	-	-	-0.15	0.110	0.146



FCC SAR Test Report

Report No. : FA420425

39	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 3	DSI 5	518598	2592.99	20.84	22.00	1.306	-	-	0.02	0.469	0.613
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 3	DSI 5	518598	2592.99	20.77	22.00	1.327	-	-	0.1	0.413	0.548
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 5	518598	2592.99	18.36	19.50	1.300	-	-	0.09	0.120	0.156
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 5	518598	2592.99	18.32	19.50	1.312	-	-	-0.02	0.121	0.159
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 5	518598	2592.99	18.36	19.50	1.300	-	-	0.08	0.200	0.260
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 5	518598	2592.99	18.32	19.50	1.312	-	-	0	0.212	0.278
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 5	518598	2592.99	18.36	19.50	1.300	-	-	-0.09	0.239	0.311
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 5	518598	2592.99	18.32	19.50	1.312	-	-	-0.16	0.212	0.278
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 5	518598	2592.99	18.36	19.50	1.300	-	-	-0.08	0.045	0.059
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 5	518598	2592.99	18.32	19.50	1.312	-	-	0.04	0.048	0.063
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	518598	2592.99	19.58	20.50	1.236	-	-	-0.07	0.168	0.208
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	518598	2592.99	19.52	20.50	1.253	-	-	0.13	0.144	0.180
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	518598	2592.99	19.58	20.50	1.236	-	-	-0.07	0.323	0.399
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	518598	2592.99	19.52	20.50	1.253	-	-	0.11	0.249	0.312
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 5	DSI 5	518598	2592.99	19.58	20.50	1.236	-	-	-0.12	0.493	0.609
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 5	DSI 5	518598	2592.99	19.52	20.50	1.253	-	-	-0.08	0.390	0.489
	FR1 n41 Main PA-1	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 5	DSI 5	518598	2592.99	19.51	20.50	1.256	-	-	-0.02	0.451	0.566
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 5	42590	3500	18.82	19.20	1.091	62.9	1.006	0.04	0.164	0.180
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 5	42590	3500	18.57	19.20	1.156	62.9	1.006	-0.14	0.130	0.151
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	42590	3500	18.82	19.20	1.091	62.9	1.006	0.18	0.336	0.369
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 5	42590	3500	18.57	19.20	1.156	62.9	1.006	0.04	0.270	0.314
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI 5	42590	3500	18.82	19.20	1.091	62.9	1.006	0.04	0.454	0.498
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 6	DSI 5	42590	3500	18.57	19.20	1.156	62.9	1.006	0.08	0.368	0.428
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 5	42590	3500	18.82	19.20	1.091	62.9	1.006	0.02	0.266	0.292
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 5	42590	3500	18.57	19.20	1.156	62.9	1.006	-0.08	0.220	0.256
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	42590	3500	20.17	21.00	1.211	62.9	1.006	0.1	0.225	0.274
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 5	42590	3500	20.11	21.00	1.227	62.9	1.006	-0.17	0.227	0.280
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	42590	3500	20.17	21.00	1.211	62.9	1.006	0.04	0.405	0.493
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	42590	3500	20.11	21.00	1.227	62.9	1.006	0.05	0.324	0.400
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	42590	3500	20.17	21.00	1.211	62.9	1.006	-0.09	0.769	0.937
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	42190	3460	20.02	21.00	1.253	62.9	1.006	-0.08	0.627	0.790
40	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	42990	3540	19.96	21.00	1.271	62.9	1.006	0.02	0.824	1.053
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 5	42590	3500	20.11	21.00	1.227	62.9	1.006	0.03	0.652	0.805
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 5	42190	3460	20.03	21.00	1.250	62.9	1.006	0.18	0.626	0.787
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 5	42990	3540	19.98	21.00	1.265	62.9	1.006	0.16	0.650	0.827
	LTE Band 42	20M	QPSK	100	0	-	Left Side	10mm	Ant 1	DSI 5	42590	3500	20.15	21.00	1.216	62.9	1.006	-0.1	0.679	0.831
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	42590	3500	20.17	21.00	1.211	62.9	1.006	0.07	0.068	0.083
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	DSI 5	42590	3500	20.11	21.00	1.227	62.9	1.006	0.18	0.054	0.067
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 7	DSI 5	42590	3500	18.24	19.50	1.337	62.9	1.006	-0.17	0.171	0.230
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 7	DSI 5	42590	3500	18.16	19.50	1.361	62.9	1.006	-0.03	0.139	0.190
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 5	42590	3500	18.24	19.50	1.337	62.9	1.006	0.14	0.294	0.395
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 7	DSI 5	42590	3500	18.16	19.50	1.361	62.9	1.006	0.18	0.235	0.322
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 7	DSI 5	42590	3500	18.24	19.50	1.337	62.9	1.006	-0.05	0.048	0.065
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 7	DSI 5	42590	3500	18.16	19.50	1.361	62.9	1.006	0.01	0.037	0.051
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 5	42590	3500	18.24	19.50	1.337	62.9	1.006	-0.15	0.477	0.641
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 5	42190	3460	17.97	19.50	1.422	62.9	1.006	-0.01	0.443	0.634
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 5	42990	3540	18.09	19.50	1.384	62.9	1.006	-0.08	0.457	0.636
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 5	42590	3500	18.16	19.50	1.361	62.9	1.006	0.05	0.379	0.519
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 5	42190	3460	18.12	19.50	1.374	62.9	1.006	0.06	0.352	0.487
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 5	42990	3540	17.95	19.50	1.429	62.9	1.006	-0.09	0.372	0.535
	LTE Band 42	20M	QPSK	100	0	-	Top Side	10mm	Ant 7	DSI 5	42590	3500	18.14	19.50	1.368	62.9	1.006	-0.08	0.376	0.517
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 5	42590	3500	20.77	21.50	1.183	62.9	1.006	-0.15	0.258	0.307
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 5	42590	3500	19.70	20.50	1.202	62.9	1.006	0.11	0.180	0.218
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	42590	3500	20.77	21.50	1.183	62.9	1.006	-0.08	0.266	0.317
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	42590	3500	19.70	20.50	1.202	62.9	1.006	-0.17	0.210	0.254



FCC SAR Test Report

Report No. : FA420425

Table with columns for LTE Band, Modulation, Power, and SAR values. Row 41 is highlighted in yellow.



FCC SAR Test Report

Report No. : FA420425

	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	541666	3624.99	16.40	17.20	1.202	-	-	0.07	0.235	0.283
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	541666	3624.99	16.39	17.20	1.205	-	-	0.08	0.223	0.269
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	541666	3624.99	18.03	19.00	1.250	-	-	0.05	0.176	0.220
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	541666	3624.99	17.94	19.00	1.276	-	-	0	0.165	0.211
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	541666	3624.99	18.03	19.00	1.250	-	-	0.07	0.307	0.384
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	541666	3624.99	17.94	19.00	1.276	-	-	0.15	0.250	0.319
42	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	541666	3624.99	18.03	19.00	1.250	-	-	0.02	0.513	0.641
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	541666	3624.99	17.94	19.00	1.276	-	-	-0.08	0.472	0.602
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	541666	3624.99	18.03	19.00	1.250	-	-	0.01	0.017	0.021
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	541666	3624.99	17.94	19.00	1.276	-	-	-0.11	0.018	0.023
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	541666	3624.99	16.87	18.50	1.455	-	-	-0.12	0.152	0.221
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	541666	3624.99	16.77	18.50	1.489	-	-	0.07	0.127	0.189
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	541666	3624.99	16.87	18.50	1.455	-	-	0.04	0.235	0.342
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	541666	3624.99	16.77	18.50	1.489	-	-	0.11	0.211	0.314
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	541666	3624.99	16.87	18.50	1.455	-	-	0.12	0.050	0.073
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	541666	3624.99	16.77	18.50	1.489	-	-	-0.11	0.049	0.073
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	541666	3624.99	16.87	18.50	1.455	-	-	-0.17	0.381	0.555
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	541666	3624.99	16.77	18.50	1.489	-	-	-0.07	0.397	0.592
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	541666	3624.99	15.48	17.00	1.419	-	-	0.08	0.147	0.209
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	541666	3624.99	15.45	17.00	1.429	-	-	0.01	0.152	0.217
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	541666	3624.99	15.48	17.00	1.419	-	-	0.02	0.158	0.224
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	541666	3624.99	15.45	17.00	1.429	-	-	-0.11	0.180	0.257
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	541666	3624.99	15.48	17.00	1.419	-	-	-0.01	0.273	0.387
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	541666	3624.99	15.45	17.00	1.429	-	-	-0.05	0.329	0.470
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	541666	3624.99	15.48	17.00	1.419	-	-	-0.04	0.054	0.077
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	541666	3624.99	15.45	17.00	1.429	-	-	0.15	0.050	0.071
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	556000	3840	16.95	17.20	1.059	-	-	-0.16	0.111	0.118
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	556000	3840	16.93	17.20	1.064	-	-	0.05	0.104	0.111
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	556000	3840	16.95	17.20	1.059	-	-	-0.18	0.211	0.224
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	556000	3840	16.93	17.20	1.064	-	-	-0.03	0.209	0.222
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	556000	3840	16.95	17.20	1.059	-	-	-0.05	0.260	0.275
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	556000	3840	16.93	17.20	1.064	-	-	0.18	0.240	0.255
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	556000	3840	16.95	17.20	1.059	-	-	0.07	0.151	0.160
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	556000	3840	16.93	17.20	1.064	-	-	-0.03	0.128	0.136
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	556000	3840	19.95	20.50	1.135	50	1.000	-0.08	0.235	0.267
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	533334	3500.01	16.97	17.20	1.054	-	-	0.18	0.154	0.162
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	533334	3500.01	16.93	17.20	1.064	-	-	-0.11	0.125	0.133
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	533334	3500.01	16.97	17.20	1.054	-	-	-0.04	0.297	0.313
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	533334	3500.01	16.93	17.20	1.064	-	-	-0.08	0.210	0.223
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	533334	3500.01	16.97	17.20	1.054	-	-	0.09	0.339	0.357
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	533334	3500.01	16.93	17.20	1.064	-	-	0.01	0.262	0.279
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	533334	3500.01	16.97	17.20	1.054	-	-	0.02	0.238	0.251
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 5	533334	3500.01	16.93	17.20	1.064	-	-	0.16	0.165	0.176
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	533334	3500.01	19.97	20.50	1.130	50	1.000	-0.02	0.308	0.348
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	556000	3840	17.59	18.00	1.099	-	-	-0.11	0.028	0.031
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	556000	3840	17.58	18.00	1.102	-	-	-0.02	0.020	0.022
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	556000	3840	17.59	18.00	1.099	-	-	-0.1	0.038	0.042
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	556000	3840	17.58	18.00	1.102	-	-	0.14	0.025	0.028
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	556000	3840	17.59	18.00	1.099	-	-	0.08	0.073	0.080
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	556000	3840	17.58	18.00	1.102	-	-	-0.05	0.058	0.064
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	556000	3840	17.59	18.00	1.099	-	-	-0.04	0.008	0.009
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	556000	3840	17.58	18.00	1.102	-	-	0.14	0.012	0.013
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	556000	3840	20.58	21.00	1.102	50	1.000	0.03	0.068	0.075
	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	556000	3840	16.52	17.00	1.117	-	-	0.04	0.051	0.057
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	533334	3500.01	17.50	18.00	1.122	-	-	0.16	0.136	0.153
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	533334	3500.01	17.49	18.00	1.125	-	-	0.01	0.167	0.188



FCC SAR Test Report

Report No. : FA420425

	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	833334	3500.01	17.50	18.00	1.122	-	-	0.14	0.178	0.200
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	833334	3500.01	17.49	18.00	1.125	-	-	-0.09	0.243	0.273
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	833334	3500.01	17.50	18.00	1.122	-	-	-0.12	0.368	0.413
43	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	833334	3500.01	17.49	18.00	1.125	-	-	0.03	0.556	0.625
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	833334	3500.01	17.50	18.00	1.122	-	-	0.09	0.030	0.034
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	833334	3500.01	17.49	18.00	1.125	-	-	0.13	0.015	0.017
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	833334	3500.01	20.46	21.00	1.132	50	1.000	-0.08	0.508	0.575
	FR1 n77 ENDC	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	833334	3500.01	16.45	17.00	1.135	-	-	0.07	0.453	0.514
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	856000	3840	15.58	17.00	1.387	-	-	-0.13	0.088	0.122
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	856000	3840	15.57	17.00	1.390	-	-	0.05	0.073	0.101
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	856000	3840	15.58	17.00	1.387	-	-	-0.15	0.158	0.219
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	856000	3840	15.57	17.00	1.390	-	-	-0.11	0.137	0.190
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	856000	3840	15.58	17.00	1.387	-	-	0.07	0.033	0.046
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	856000	3840	15.57	17.00	1.390	-	-	0	0.034	0.047
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	856000	3840	15.58	17.00	1.387	-	-	0.1	0.178	0.247
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	856000	3840	15.57	17.00	1.390	-	-	-0.19	0.150	0.208
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	856000	3840	18.55	20.00	1.396	50	1.000	-0.08	0.171	0.239
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	833334	3500.01	15.98	17.00	1.265	-	-	0.1	0.160	0.202
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	833334	3500.01	15.85	17.00	1.303	-	-	-0.1	0.140	0.182
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	833334	3500.01	15.98	17.00	1.265	-	-	-0.04	0.240	0.304
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	833334	3500.01	15.85	17.00	1.303	-	-	0.01	0.204	0.266
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	833334	3500.01	15.98	17.00	1.265	-	-	0.03	0.033	0.042
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 7	DSI 5	833334	3500.01	15.85	17.00	1.303	-	-	-0.11	0.034	0.044
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	833334	3500.01	15.98	17.00	1.265	-	-	-0.15	0.224	0.283
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	833334	3500.01	15.85	17.00	1.303	-	-	-0.04	0.343	0.447
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	833334	3500.01	18.86	20.00	1.300	50	1.000	-0.1	0.332	0.432
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	856000	3840	17.62	18.50	1.225	-	-	-0.15	0.194	0.238
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	856000	3840	17.57	18.50	1.239	-	-	0.18	0.201	0.249
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	856000	3840	17.62	18.50	1.225	-	-	0.05	0.266	0.326
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	856000	3840	17.57	18.50	1.239	-	-	0.04	0.245	0.304
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	856000	3840	17.62	18.50	1.225	-	-	0.04	0.436	0.534
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	856000	3840	17.57	18.50	1.239	-	-	0.03	0.397	0.492
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	856000	3840	17.62	18.50	1.225	-	-	-0.1	0.066	0.081
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	856000	3840	17.57	18.50	1.239	-	-	0.14	0.075	0.093
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	856000	3840	20.59	21.50	1.233	50	1.000	-0.02	0.419	0.517
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	833334	3500.01	17.11	18.50	1.377	-	-	-0.06	0.143	0.197
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	833334	3500.01	17.06	18.50	1.393	-	-	0.08	0.208	0.290
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	833334	3500.01	17.11	18.50	1.377	-	-	-0.07	0.391	0.538
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	833334	3500.01	17.06	18.50	1.393	-	-	0.11	0.252	0.351
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	833334	3500.01	17.11	18.50	1.377	-	-	-0.13	0.270	0.372
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	833334	3500.01	17.06	18.50	1.393	-	-	0.04	0.385	0.536
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	833334	3500.01	17.11	18.50	1.377	-	-	0.17	0.030	0.041
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	833334	3500.01	17.06	18.50	1.393	-	-	-0.1	0.052	0.072
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	833334	3500.01	20.07	21.50	1.390	50	1.000	0.17	0.376	0.523



Plot No.	Band	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)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	-0.01	0.287	0.315
44	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	-0.08	0.514	0.564
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	0.05	0.246	0.270
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	-0.04	0.207	0.227
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 9+8	Full power	11	2462	19.52	20.00	1.117	100	1.000	0.04	0.427	0.477
	Bluetooth	1Mbps	Front	10mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	-0.01	0.102	0.158
	Bluetooth	1Mbps	Back	10mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	0.04	0.117	0.181
	Bluetooth	1Mbps	Right Side	10mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	0.02	0.002	0.003
	Bluetooth	1Mbps	Top Side	10mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	-0.01	0.183	0.283
	Bluetooth	1Mbps	Front	10mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	0.07	0.099	0.119
	Bluetooth	1Mbps	Back	10mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	-0.07	0.167	0.201
45	Bluetooth	1Mbps	Right Side	10mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	0.07	0.259	0.312
	Bluetooth	1Mbps	Top Side	10mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	0.02	0.033	0.040
5000MHz																
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 10+11	standalone	46	5230	18.61	19.50	1.227	100	1.000	-0.04	0.246	0.302
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 10+11	standalone	46	5230	18.61	19.50	1.227	100	1.000	0.07	0.472	0.579
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 10+11	standalone	46	5230	18.61	19.50	1.227	100	1.000	-0.1	0.363	0.446
46	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 10+11	standalone	46	5230	18.61	19.50	1.227	100	1.000	-0.02	0.790	0.970
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 10+11	standalone	38	5190	18.52	19.50	1.253	100	1.000	-0.02	0.712	0.892
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 10+11	simultaneous	42	5210	14.27	15.00	1.183	100	1.000	0.04	0.187	0.221
	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	-0.07	0.289	0.341
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	0.01	0.562	0.662
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	0.05	0.796	0.938
47	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 10+11	Full power	157	5785	21.23	22.00	1.194	98.97	1.010	-0.01	0.846	1.020
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	-0.01	0.379	0.447
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 10+11	simultaneous	155	5775	14.77	15.50	1.183	100	1.000	0.01	0.181	0.214



15.3 Body Worn Accessory SAR

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)	Reported 1g SAR (W/kg)
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 0	DSI 4	189	836.4	26.21	28.00	1.510	-	-	0.09	0.127	0.192
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 0	DSI 4	189	836.4	26.21	28.00	1.510	-	-	0.01	0.141	0.213
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 1	DSI 4	189	836.4	26.20	28.00	1.514	-	-	0.05	0.245	0.371
48	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 1	DSI 4	189	836.4	26.20	28.00	1.514	-	-	-0.05	0.310	0.469
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	DSI 4	4182	836.4	24.02	25.00	1.253	-	-	0.02	0.153	0.192
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	4182	836.4	24.02	25.00	1.253	-	-	0.05	0.196	0.246
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 1	DSI 4	4182	836.4	21.12	22.50	1.374	-	-	0.02	0.183	0.251
49	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	DSI 4	4182	836.4	21.12	22.50	1.374	-	-	-0.05	0.233	0.320
	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 0	DSI 4	26865	831.5	24.23	25.50	1.340	-	-	-0.1	0.163	0.218
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 0	DSI 4	26865	831.5	23.21	24.50	1.346	-	-	0.03	0.133	0.179
	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 0	DSI 4	26865	831.5	24.23	25.50	1.340	-	-	0.04	0.193	0.259
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 0	DSI 4	26865	831.5	23.21	24.50	1.346	-	-	0.08	0.160	0.215
	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	26865	831.5	22.57	24.00	1.390	-	-	0.08	0.188	0.261
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 1	DSI 4	26865	831.5	22.55	24.00	1.396	-	-	-0.07	0.163	0.228
50	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	26865	831.5	22.57	24.00	1.390	-	-	-0.1	0.244	0.339
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 1	DSI 4	26865	831.5	22.55	24.00	1.396	-	-	0.17	0.211	0.295
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	24.45	25.50	1.274	-	-	0.05	0.157	0.200
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	24.37	25.50	1.297	-	-	0.06	0.159	0.206
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	24.45	25.50	1.274	-	-	0.15	0.187	0.238
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	24.37	25.50	1.297	-	-	0.03	0.194	0.252
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	22.06	23.00	1.242	-	-	0.1	0.179	0.222
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	21.95	23.00	1.274	-	-	0.08	0.203	0.259
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	22.06	23.00	1.242	-	-	-0.08	0.234	0.291
51	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	21.95	23.00	1.274	-	-	-0.07	0.245	0.312
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 2	DSI 4	1413	1732.6	23.70	25.00	1.349	-	-	-0.1	0.248	0.335
52	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 2	DSI 4	1413	1732.6	23.70	25.00	1.349	-	-	0.02	0.384	0.518
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	DSI 4	1413	1732.6	23.11	24.50	1.377	-	-	-0.16	0.229	0.315
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	DSI 4	1413	1732.6	23.11	24.50	1.377	-	-	-0.07	0.303	0.417
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 4	DSI 4	1413	1732.6	19.81	21.50	1.476	-	-	-0.1	0.085	0.125
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 4	DSI 4	1413	1732.6	19.81	21.50	1.476	-	-	-0.14	0.118	0.174
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 5	DSI 4	1413	1732.6	20.93	22.50	1.435	-	-	0.06	0.090	0.129
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 5	DSI 4	1413	1732.6	20.93	22.50	1.435	-	-	0.13	0.100	0.144
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	132322	1745	24.38	25.50	1.294	-	-	0.16	0.324	0.419
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	132322	1745	23.22	24.50	1.343	-	-	-0.05	0.264	0.354
53	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	132322	1745	24.38	25.50	1.294	-	-	-0.05	0.440	0.569
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	132322	1745	23.22	24.50	1.343	-	-	0.09	0.364	0.489
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	132322	1745	23.41	25.00	1.442	-	-	0.08	0.247	0.356
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	132322	1745	22.31	24.00	1.476	-	-	0.04	0.197	0.291
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	132322	1745	23.41	25.00	1.442	-	-	0.08	0.322	0.464
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	132322	1745	22.31	24.00	1.476	-	-	0.04	0.263	0.388
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 4	DSI 4	132322	1745	19.87	21.50	1.455	-	-	0.03	0.111	0.162
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 4	DSI 4	132322	1745	19.75	21.50	1.496	-	-	-0.17	0.089	0.133
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	132322	1745	19.87	21.50	1.455	-	-	0.02	0.151	0.220
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 4	DSI 4	132322	1745	19.75	21.50	1.496	-	-	-0.1	0.119	0.178
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	132322	1745	21.14	22.50	1.368	-	-	0.03	0.083	0.114
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	132322	1745	20.14	21.50	1.368	-	-	0.07	0.066	0.090
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	132322	1745	21.14	22.50	1.368	-	-	0.08	0.089	0.122
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	132322	1745	20.14	21.50	1.368	-	-	0.05	0.075	0.103
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	349000	1745	24.82	25.50	1.169	-	-	0.04	0.315	0.368



FCC SAR Test Report

Report No. : FA420425

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	349000	1745	24.79	25.50	1.178	-	-	0.02	0.303	0.357
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	349000	1745	24.82	25.50	1.169	-	-	-0.03	0.441	0.516
54	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	349000	1745	24.79	25.50	1.178	-	-	-0.01	0.486	0.572
	FR1 n66 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	349000	1745	24.70	25.50	1.202	-	-	-0.16	0.472	0.567
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	349000	1745	23.75	25.00	1.334	-	-	-0.14	0.236	0.315
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	349000	1745	23.69	25.00	1.352	-	-	-0.06	0.245	0.331
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	349000	1745	23.75	25.00	1.334	-	-	-0.06	0.300	0.400
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	349000	1745	23.69	25.00	1.352	-	-	0.04	0.288	0.389
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 4	DSI 4	349000	1745	23.92	25.00	1.282	-	-	-0.02	0.073	0.094
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 4	DSI 4	349000	1745	23.89	25.00	1.291	-	-	-0.09	0.105	0.136
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 4	DSI 4	349000	1745	23.92	25.00	1.282	-	-	-0.08	0.108	0.138
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 4	DSI 4	349000	1745	23.89	25.00	1.291	-	-	0.06	0.158	0.204
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	21.99	22.50	1.125	-	-	0.11	0.066	0.074
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	21.95	22.50	1.135	-	-	0.05	0.082	0.093
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	21.99	22.50	1.125	-	-	0.07	0.079	0.089
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	21.95	22.50	1.135	-	-	-0.1	0.090	0.102
	FR1 n66 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	21.96	22.50	1.132	-	-	-0.16	0.088	0.100
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 2	DSI 4	661	1880	23.46	25.00	1.426	-	-	0.18	0.093	0.133
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 2	DSI 4	661	1880	23.46	25.00	1.426	-	-	0.13	0.126	0.180
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 3	DSI 4	661	1880	23.46	25.00	1.426	-	-	0.16	0.128	0.182
55	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 3	DSI 4	661	1880	23.46	25.00	1.426	-	-	0.07	0.158	0.225
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 2	DSI 4	9400	1880	23.40	25.00	1.445	-	-	0.02	0.237	0.343
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 2	DSI 4	9400	1880	23.40	25.00	1.445	-	-	0.07	0.342	0.494
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	DSI 4	9400	1880	22.67	24.50	1.524	-	-	-0.18	0.326	0.497
56	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	DSI 4	9400	1880	22.67	24.50	1.524	-	-	0.15	0.440	0.671
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	18900	1880	23.87	25.50	1.455	-	-	0.11	0.249	0.362
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	18900	1880	22.92	24.50	1.439	-	-	0.03	0.197	0.283
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	23.87	25.50	1.455	-	-	0.13	0.401	0.584
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	22.92	24.50	1.439	-	-	-0.06	0.285	0.410
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	24.29	25.50	1.321	-	-	0.03	0.356	0.470
	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	18900	1880	23.45	25.00	1.429	-	-	0.15	0.348	0.497
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	18900	1880	22.33	24.00	1.469	-	-	0.01	0.281	0.413
57	LTE Band 2 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	18900	1880	23.45	25.00	1.429	-	-	0.07	0.465	0.664
	LTE Band 2 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	18900	1880	22.33	24.00	1.469	-	-	-0.08	0.371	0.545
	LTE Band 2 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	18900	1880	24.02	24.50	1.117	-	-	0.19	0.317	0.354
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	376000	1880	24.53	25.50	1.250	-	-	-0.16	0.264	0.330
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	376000	1880	24.46	25.50	1.271	-	-	0.02	0.253	0.321
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	376000	1880	24.53	25.50	1.250	-	-	0.09	0.366	0.458
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	376000	1880	24.46	25.50	1.271	-	-	0.04	0.336	0.427
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	376000	1880	23.51	25.00	1.409	-	-	0.03	0.404	0.569
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	376000	1880	23.48	25.00	1.419	-	-	-0.04	0.432	0.613
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	376000	1880	23.51	25.00	1.409	-	-	0.06	0.516	0.727
58	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	376000	1880	23.48	25.00	1.419	-	-	-0.06	0.550	0.780
2600MHz																				
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	21100	2535	24.56	25.50	1.242	-	-	0.19	0.405	0.503
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	21100	2535	23.34	24.50	1.306	-	-	0.08	0.329	0.430
59	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	24.56	25.50	1.242	-	-	-0.13	0.609	0.756
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	23.34	24.50	1.306	-	-	-0.16	0.459	0.600
	LTE Band 7 Main PA-1	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	24.65	25.50	1.216	-	-	0.03	0.378	0.460
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	20.47	21.00	1.130	-	-	0.03	0.311	0.351
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	22.55	23.50	1.245	-	-	0.01	0.402	0.500
	CA 7C	20M	QPSK	1	99	-	Back	15mm	Ant 2	DSI 4	21100+21298	2535+2554.8	23.38	24.00	1.153	-	-	0.09	0.581	0.670
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	21100	2535	23.63	25.00	1.371	-	-	0.08	0.277	0.380
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	21100	2535	22.40	24.00	1.445	-	-	0.14	0.219	0.317



FCC SAR Test Report

Report No. : FA420425

	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	23.63	25.00	1.371	-	-	0.01	0.301	0.413
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	22.40	24.00	1.445	-	-	0.05	0.244	0.353
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	23.65	24.50	1.216	-	-	0.04	0.206	0.251
	LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	23.67	24.50	1.211	-	-	0.04	0.200	0.242
	CA 7C	20M	QPSK	1	99	-	Back	15mm	Ant 3	DSI 4	21100+21298	2535+2554.8	21.65	23.50	1.531	-	-	0.07	0.257	0.393
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	15mm	Ant 4	DSI 4	21100	2535	19.82	21.00	1.312	-	-	0.08	0.193	0.253
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	15mm	Ant 4	DSI 4	21100	2535	19.75	21.00	1.334	-	-	0.03	0.155	0.207
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	21100	2535	19.82	21.00	1.312	-	-	0.09	0.334	0.438
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	15mm	Ant 4	DSI 4	21100	2535	19.75	21.00	1.334	-	-	0.03	0.267	0.356
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	21100	2535	20.58	21.50	1.236	-	-	-0.13	0.207	0.256
	LTE Band 7 Other PA-1	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	21100	2535	20.57	21.50	1.239	-	-	-0.13	0.177	0.219
	CA 7C	20M	QPSK	1	99	-	Back	15mm	Ant 4	DSI 4	21100+21298	2535+2554.8	18.44	20.00	1.432	-	-	-0.07	0.274	0.392
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	21100	2535	18.68	20.00	1.355	-	-	0.16	0.107	0.145
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	21100	2535	18.57	20.00	1.390	-	-	-0.11	0.088	0.122
	LTE Band 7 Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	18.68	20.00	1.355	-	-	0.07	0.282	0.382
	LTE Band 7 Main PA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	18.57	20.00	1.390	-	-	0.08	0.221	0.307
	LTE Band 7 Main PA-1	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	18.85	20.00	1.303	-	-	0.17	0.231	0.301
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	19.21	20.50	1.346	-	-	0.17	0.258	0.347
	CA 7C	20M	QPSK	1	99	-	Back	15mm	Ant 5	DSI 4	21100+21298	2535+2554.8	17.66	19.00	1.361	-	-	-0.08	0.265	0.361
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	40620	2593	24.05	25.50	1.396	62.9	1.006	0.05	0.284	0.399
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	40620	2593	23.07	24.50	1.390	62.9	1.006	0.14	0.218	0.305
60	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	24.05	25.50	1.396	62.9	1.006	-0.17	0.405	0.569
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	23.07	24.50	1.390	62.9	1.006	0.15	0.327	0.457
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	21.47	22.00	1.130	62.9	1.006	-0.14	0.340	0.386
	CA 38C	20M	QPSK	1	99	-	Back	15mm	Ant 2	DSI 4	37901+38099	2585.1+2604.9	23.49	24.50	1.262	62.9	1.006	-0.08	0.412	0.523
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	40620	2593	23.48	25.00	1.419	62.9	1.006	0.05	0.165	0.236
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	40620	2593	22.39	24.00	1.449	62.9	1.006	0.06	0.139	0.203
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	40620	2593	23.48	25.00	1.419	62.9	1.006	0.03	0.201	0.287
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	40620	2593	22.39	24.00	1.449	62.9	1.006	0.02	0.165	0.240
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	40620	2593	24.55	25.00	1.109	62.9	1.006	0.06	0.234	0.261
	CA 38C	20M	QPSK	1	99	-	Back	15mm	Ant 3	DSI 4	37901+38099	2585.1+2604.9	22.07	23.50	1.390	62.9	1.006	0.1	0.176	0.246
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 4	DSI 4	40620	2593	19.60	21.00	1.380	62.9	1.006	-0.15	0.166	0.231
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 4	DSI 4	40620	2593	19.58	21.00	1.387	62.9	1.006	-0.18	0.126	0.176
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	19.60	21.00	1.380	62.9	1.006	0.02	0.274	0.380
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	19.58	21.00	1.387	62.9	1.006	0.08	0.218	0.304
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	20.54	21.50	1.247	62.9	1.006	-0.12	0.227	0.285
	CA 38C	20M	QPSK	1	99	-	Back	15mm	Ant 4	DSI 4	37901+38099	2585.1+2604.9	18.46	20.00	1.426	62.9	1.006	-0.18	0.255	0.366
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	40620	2593	18.91	20.50	1.442	62.9	1.006	0.01	0.069	0.100
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	40620	2593	18.86	20.50	1.459	62.9	1.006	0.15	0.045	0.066
	LTE Band 41 Main PA_SA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	18.91	20.50	1.442	62.9	1.006	-0.12	0.141	0.205
	LTE Band 41 Main PA_SA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	18.86	20.50	1.459	62.9	1.006	0.14	0.115	0.169
	LTE Band 41 Other PA_NSA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	19.78	21.00	1.324	62.9	1.006	-0.17	0.140	0.187
	CA 38C	20M	QPSK	1	99	-	Back	15mm	Ant 5	DSI 4	37901+38099	2585.1+2604.9	18.33	19.50	1.309	62.9	1.006	0.1	0.138	0.182
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	507000	2535	24.52	25.50	1.253	-	-	0.03	0.435	0.545
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	507000	2535	24.47	25.50	1.268	-	-	0.02	0.495	0.627
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	507000	2535	24.52	25.50	1.253	-	-	0.02	0.500	0.627
61	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	507000	2535	24.47	25.50	1.268	-	-	-0.04	0.566	0.717
	FR1 n7 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	507000	2535	24.37	25.50	1.297	-	-	0.08	0.540	0.700
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	507000	2535	23.62	25.00	1.374	-	-	0.05	0.286	0.393
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	507000	2535	23.55	25.00	1.396	-	-	0.02	0.285	0.398
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	507000	2535	23.62	25.00	1.374	-	-	0.07	0.329	0.452
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	507000	2535	23.55	25.00	1.396	-	-	0.19	0.345	0.482
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 4	DSI 4	507000	2535	23.75	25.00	1.334	-	-	-0.13	0.198	0.264
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 4	DSI 4	507000	2535	23.73	25.00	1.340	-	-	-0.11	0.216	0.289
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 4	DSI 4	507000	2535	23.75	25.00	1.334	-	-	-0.12	0.304	0.405



FCC SAR Test Report

Report No. : FA420425

	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 4	DSI 4	507000	2535	23.73	25.00	1.340	-	-	0.12	0.334	0.447
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	21.02	22.00	1.253	-	-	-0.17	0.102	0.128
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	20.97	22.00	1.268	-	-	0.1	0.101	0.128
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	21.02	22.00	1.253	-	-	0.04	0.151	0.189
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	20.97	22.00	1.268	-	-	-0.18	0.191	0.242
	FR1 n7 Main PA-1	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	20.94	22.00	1.276	-	-	0.01	0.183	0.234
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	518598	2592.99	24.65	25.50	1.216	-	-	0.07	0.449	0.546
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	518598	2592.99	24.59	25.50	1.233	-	-	-0.03	0.413	0.509
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	24.65	25.50	1.216	-	-	-0.14	0.521	0.634
62	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	24.59	25.50	1.233	-	-	-0.09	0.561	0.692
	FR1 n41 Main PA-1	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	24.61	25.50	1.227	-	-	0.03	0.553	0.679
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	518598	2592.99	23.83	25.00	1.309	-	-	-0.12	0.312	0.408
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	518598	2592.99	23.78	25.00	1.324	-	-	0.03	0.274	0.363
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	23.83	25.00	1.309	-	-	0.07	0.361	0.473
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	23.78	25.00	1.324	-	-	0.05	0.347	0.460
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	518598	2592.99	23.85	25.00	1.303	-	-	0.08	0.230	0.300
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	518598	2592.99	23.81	25.00	1.315	-	-	0.02	0.237	0.312
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	518598	2592.99	23.85	25.00	1.303	-	-	-0.08	0.363	0.473
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	518598	2592.99	23.81	25.00	1.315	-	-	0.05	0.407	0.535
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	21.05	22.00	1.245	-	-	0.01	0.094	0.117
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	20.98	22.00	1.265	-	-	0.03	0.096	0.121
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	21.05	22.00	1.245	-	-	-0.18	0.178	0.222
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	20.98	22.00	1.265	-	-	0.06	0.151	0.191
	FR1 n41 Main PA-1	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	21.01	22.00	1.256	-	-	-0.08	0.175	0.220
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 6	DSI 4	42590	3500	19.62	20.20	1.143	62.9	1.006	0.06	0.383	0.440
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 6	DSI 4	42590	3500	19.50	20.20	1.175	62.9	1.006	0.02	0.314	0.371
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42590	3500	19.62	20.20	1.143	62.9	1.006	-0.13	0.779	0.896
63	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42190	3460	19.34	20.20	1.219	62.9	1.006	-0.14	0.885	1.085
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42990	3540	19.28	20.20	1.236	62.9	1.006	0.08	0.756	0.940
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	42590	3500	19.50	20.20	1.175	62.9	1.006	0.07	0.716	0.846
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	42190	3460	19.12	20.20	1.282	62.9	1.006	-0.14	0.778	1.004
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	42990	3540	19.24	20.20	1.247	62.9	1.006	0.08	0.731	0.917
	LTE Band 42	20M	QPSK	100	0	-	Back	15mm	Ant 6	DSI 4	42590	3500	19.42	20.20	1.197	62.9	1.006	0.01	0.705	0.849
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	42590	3500	20.62	21.50	1.225	62.9	1.006	0.04	0.166	0.205
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 1	DSI 4	42590	3500	20.56	21.50	1.242	62.9	1.006	0.07	0.140	0.175
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	42590	3500	20.62	21.50	1.225	62.9	1.006	0.11	0.256	0.315
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 1	DSI 4	42590	3500	20.56	21.50	1.242	62.9	1.006	0.06	0.212	0.265
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 7	DSI 4	42590	3500	23.06	24.50	1.393	62.9	1.006	0.05	0.290	0.406
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 7	DSI 4	42590	3500	21.97	23.50	1.422	62.9	1.006	-0.04	0.239	0.342
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 7	DSI 4	42590	3500	23.06	24.50	1.393	62.9	1.006	-0.14	0.450	0.631
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 7	DSI 4	42590	3500	21.97	23.50	1.422	62.9	1.006	0.06	0.363	0.519
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 8	DSI 4	42590	3500	20.77	21.50	1.183	62.9	1.006	-0.08	0.080	0.095
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 8	DSI 4	42590	3500	19.70	20.50	1.202	62.9	1.006	0.1	0.063	0.076
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	42590	3500	20.77	21.50	1.183	62.9	1.006	0.05	0.065	0.077
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	42590	3500	19.70	20.50	1.202	62.9	1.006	-0.17	0.052	0.063
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 6	DSI 4	55830	3609	19.45	20.20	1.189	62.9	1.006	-0.14	0.363	0.434
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 6	DSI 4	55830	3609	19.39	20.20	1.205	62.9	1.006	-0.14	0.294	0.356
64	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	55830	3609	19.45	20.20	1.189	62.9	1.006	0.1	0.774	0.925
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	55340	3560	19.11	20.20	1.285	62.9	1.006	0.09	0.707	0.914
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	56150	3641	19.20	20.20	1.259	62.9	1.006	0.14	0.708	0.897
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	56640	3690	19.07	20.20	1.297	62.9	1.006	-0.03	0.682	0.890
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	55830	3609	19.39	20.20	1.205	62.9	1.006	-0.14	0.684	0.829
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	55340	3560	19.24	20.20	1.247	62.9	1.006	0.09	0.675	0.847
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	56150	3641	19.07	20.20	1.297	62.9	1.006	0.14	0.688	0.898
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	56640	3690	19.05	20.20	1.303	62.9	1.006	-0.03	0.702	0.920



FCC SAR Test Report

Report No. : FA420425

	LTE Band 48	20M	QPSK	100	0	-	Back	15mm	Ant 6	DSI 4	55830	3609	19.37	20.20	1.211	62.9	1.006	0.03	0.681	0.829
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	55830	3609	22.22	23.50	1.343	62.9	1.006	0.17	0.191	0.258
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 1	DSI 4	55830	3609	22.18	23.50	1.355	62.9	1.006	0.09	0.148	0.202
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	55830	3609	22.22	23.50	1.343	62.9	1.006	-0.02	0.309	0.417
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 1	DSI 4	55830	3609	22.18	23.50	1.355	62.9	1.006	0.01	0.245	0.334
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 7	DSI 4	55830	3609	22.94	24.50	1.432	62.9	1.006	-0.17	0.206	0.297
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 7	DSI 4	55830	3609	21.87	23.50	1.455	62.9	1.006	0.06	0.156	0.228
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 7	DSI 4	55830	3609	22.94	24.50	1.432	62.9	1.006	-0.11	0.310	0.447
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 7	DSI 4	55830	3609	21.87	23.50	1.455	62.9	1.006	0.07	0.252	0.369
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 8	DSI 4	55830	3609	20.52	21.50	1.253	62.9	1.006	0.08	0.139	0.175
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 8	DSI 4	55830	3609	19.45	20.50	1.274	62.9	1.006	0.06	0.112	0.143
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	55830	3609	20.52	21.50	1.253	62.9	1.006	0.05	0.133	0.168
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	55830	3609	19.45	20.50	1.274	62.9	1.006	-0.12	0.108	0.138
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	641666	3624.99	17.43	18.20	1.194	-	-	-0.08	0.114	0.136
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	641666	3624.99	17.40	18.20	1.202	-	-	-0.19	0.109	0.131
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	641666	3624.99	17.43	18.20	1.194	-	-	0.02	0.219	0.261
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	641666	3624.99	17.40	18.20	1.202	-	-	0.06	0.205	0.246
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	641666	3624.99	17.36	18.20	1.213	-	-	0.05	0.199	0.241
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	641666	3624.99	21.00	22.00	1.259	-	-	-0.05	0.288	0.363
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	641666	3624.99	20.96	22.00	1.271	-	-	0.07	0.243	0.309
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	641666	3624.99	21.00	22.00	1.259	-	-	-0.06	0.385	0.485
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	641666	3624.99	20.96	22.00	1.271	-	-	0.03	0.373	0.474
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	641666	3624.99	22.79	24.50	1.483	-	-	0.08	0.345	0.511
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	641666	3624.99	22.77	24.50	1.489	-	-	0.11	0.309	0.460
65	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	641666	3624.99	22.79	24.50	1.483	-	-	0.1	0.485	0.719
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	641666	3624.99	22.77	24.50	1.489	-	-	-0.02	0.451	0.672
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	17.83	19.50	1.469	-	-	-0.14	0.149	0.219
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	17.83	19.50	1.469	-	-	0.1	0.142	0.209
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	17.83	19.50	1.469	-	-	0.05	0.138	0.203
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	17.83	19.50	1.469	-	-	0.03	0.144	0.212
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000	3840	18.45	18.70	1.059	-	-	0.03	0.099	0.105
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000	3840	18.43	18.70	1.064	-	-	0.19	0.090	0.096
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	18.45	18.70	1.059	-	-	0.07	0.187	0.198
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	18.43	18.70	1.064	-	-	0.05	0.180	0.192
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	21.48	22.00	1.127	50	1.000	0.01	0.174	0.196
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	18.46	18.70	1.057	-	-	-0.05	0.124	0.131
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	18.44	18.70	1.062	-	-	-0.12	0.121	0.128
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	18.46	18.70	1.057	-	-	-0.03	0.244	0.258
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	18.44	18.70	1.062	-	-	-0.06	0.224	0.238
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	18.43	18.70	1.064	-	-	0.03	0.239	0.254
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	21.42	22.00	1.143	50	1.000	0.03	0.225	0.257
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	656000	3840	20.56	21.00	1.107	-	-	0.09	0.071	0.079
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	656000	3840	20.54	21.00	1.112	-	-	-0.07	0.054	0.060
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	20.56	21.00	1.107	-	-	0.01	0.104	0.115
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	20.54	21.00	1.112	-	-	0.12	0.098	0.109
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	23.58	24.00	1.102	50	1.000	0.03	0.108	0.119
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	20.53	21.00	1.114	-	-	0.08	0.291	0.324
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	20.46	21.00	1.132	-	-	-0.07	0.364	0.412
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	20.53	21.00	1.114	-	-	-0.05	0.420	0.468
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	20.46	21.00	1.132	-	-	0.06	0.466	0.528
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	23.44	24.00	1.138	50	1.000	0.06	0.447	0.509
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	656000	3840	23.08	24.50	1.387	-	-	0.02	0.193	0.268
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	656000	3840	23.03	24.50	1.403	-	-	0.11	0.166	0.233
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	23.08	24.50	1.387	-	-	-0.08	0.321	0.445
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	23.03	24.50	1.403	-	-	-0.06	0.290	0.407
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	25.06	26.50	1.393	50	1.000	-0.12	0.271	0.378



FCC SAR Test Report

Report No. : FA420425

	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	20.10	21.50	1.380	-	-	0.02	0.151	0.208
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	23.43	24.50	1.279	-	-	0.01	0.556	0.711
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	23.39	24.50	1.291	-	-	0.03	0.506	0.653
66	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	23.43	24.50	1.279	-	-	0.01	0.735	0.940
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	23.39	24.50	1.291	-	-	0.05	0.686	0.886
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	23.33	24.50	1.309	-	-	0.04	0.692	0.906
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	25.45	26.50	1.274	50	1.000	-0.18	0.634	0.807
	FR1 n77 ENDC	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	20.41	21.50	1.285	-	-	0.05	0.392	0.504
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000	3840	19.60	20.50	1.230	-	-	-0.13	0.111	0.137
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000	3840	19.56	20.50	1.242	-	-	-0.16	0.106	0.132
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	19.60	20.50	1.230	-	-	0.06	0.142	0.175
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	19.56	20.50	1.242	-	-	-0.1	0.131	0.163
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	22.54	23.50	1.247	50	1.000	0.06	0.130	0.162
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	19.06	20.50	1.393	-	-	-0.05	0.067	0.093
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	19.04	20.50	1.400	-	-	0.03	0.093	0.130
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	19.06	20.50	1.393	-	-	0.02	0.122	0.170
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	19.04	20.50	1.400	-	-	0.06	0.092	0.129
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	22.04	23.50	1.400	50	1.000	-0.03	0.109	0.153

Plot No.	Band	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)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	-0.05	0.170	0.187
67	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 9+8	Full power	11	2462	20.59	21.00	1.098	100	1.000	0.01	0.280	0.307
	Bluetooth	1Mbps	Front	15mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	0.07	0.029	0.045
68	Bluetooth	1Mbps	Back	15mm	Ant 9	Full power	0	2402	16.46	18.00	1.425	76.87	1.084	-0.06	0.062	0.096
	Bluetooth	1Mbps	Front	15mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	0.01	0.047	0.057
	Bluetooth	1Mbps	Back	15mm	Ant 8	Full power	0	2402	17.54	18.00	1.111	76.68	1.086	-0.09	0.076	0.092
5000MHz																
	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 10+11	Full power	56	5280	21.62	22.50	1.225	98.97	1.010	-0.04	0.304	0.376
69	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	Full power	56	5280	21.62	22.50	1.225	98.97	1.010	0.05	0.484	0.599
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	simultaneous	56	5280	20.57	21.50	1.239	98.97	1.010	0.01	0.327	0.409
	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	0.07	0.275	0.311
70	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	0.11	0.408	0.461
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	simultaneous	124	5620	20.88	21.50	1.153	98.97	1.010	0.04	0.324	0.377
	WLAN5.8GHz	802.11a 6Mbps	Front	15mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	-0.01	0.261	0.308
71	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	Full power	149	5745	21.33	22.00	1.167	98.97	1.010	-0.06	0.403	0.475
	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 10+11	simultaneous	149	5745	20.75	21.50	1.189	98.97	1.010	0.07	0.318	0.382



15.4 Product specific 10g SAR

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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	42590	3500	20.62	21.50	1.225	62.9	1.006	-0.1	1.66	2.045
72	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	42190	3460	20.48	21.50	1.265	62.9	1.006	-0.15	1.81	2.303
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	42990	3540	20.46	21.50	1.271	62.9	1.006	0.19	1.43	1.828
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	42590	3500	20.56	21.50	1.242	62.9	1.006	0.07	1.41	1.761
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	42190	3460	20.53	21.50	1.250	62.9	1.006	-0.18	1.52	1.912
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	42990	3540	20.43	21.50	1.279	62.9	1.006	0.03	1.45	1.866
	LTE Band 42	20M	QPSK	100	0	-	Left Side	0mm	Ant 1	DSI 4	42590	3500	20.52	21.50	1.253	62.9	1.006	-0.15	1.31	1.651
	LTE Band 48	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	55830	3609	22.22	23.50	1.343	62.9	1.006	0.1	1.57	2.121
73	LTE Band 48	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	55340	3560	21.88	23.50	1.452	62.9	1.006	0.02	1.63	2.381
	LTE Band 48	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	56150	3641	22.19	23.50	1.352	62.9	1.006	-0.01	1.34	1.823
	LTE Band 48	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 4	56640	3690	22.17	23.50	1.358	62.9	1.006	0	1.05	1.435
	LTE Band 48	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	55830	3609	22.18	23.50	1.355	62.9	1.006	-0.11	1.61	2.195
	LTE Band 48	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	55340	3560	21.76	23.50	1.493	62.9	1.006	-0.06	1.57	2.358
	LTE Band 48	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	56150	3641	22.08	23.50	1.387	62.9	1.006	-0.15	1.50	2.093
	LTE Band 48	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 4	56640	3690	22.03	23.50	1.403	62.9	1.006	0.03	1.55	2.187
	LTE Band 48	20M	QPSK	100	0	-	Left Side	0mm	Ant 1	DSI 4	55830	3609	22.16	23.50	1.361	62.9	1.006	-0.13	1.47	2.013
74	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	541666	3624.99	20.96	22.00	1.271	-	-	0.02	1.63	2.071
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	538000	3570	20.92	22.00	1.282	-	-	0.03	1.58	2.026
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	545332	3679.98	20.99	22.00	1.262	-	-	0.05	1.56	1.968
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	541666	3624.99	21.00	22.00	1.259	-	-	0.14	1.48	1.863
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	541666	3624.99	20.96	22.00	1.271	-	-	-0.01	1.48	1.880
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	533334	3500.01	20.56	21.00	1.107	-	-	0.09	1.48	1.638
75	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	533334	3500.01	20.54	21.00	1.112	-	-	-0.01	1.56	1.734
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 1	DSI 4	533334	3500.01	23.54	24.00	1.112	50	1.000	-0.03	1.50	1.668

Plot No.	Band	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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
5000MHz																
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 10+11	standalone	56	5280	20.57	21.50	1.239	98.97	1.010	-0.04	0.719	0.900
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 10+11	standalone	56	5280	20.57	21.50	1.239	98.97	1.010	0.07	0.774	0.968
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 10+11	standalone	56	5280	20.57	21.50	1.239	98.97	1.010	0.01	1.11	1.389
76	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 10+11	standalone	56	5280	20.57	21.50	1.239	98.97	1.010	-0.09	1.86	2.327
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 10+11	standalone	52	5260	20.52	21.50	1.253	98.97	1.010	-0.02	1.83	2.316
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	-0.01	0.985	1.112
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	0.07	0.885	0.999
77	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	-0.01	1.81	2.044
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 10+11	Full power	116	5580	21.50	22.00	1.122	98.97	1.010	0.08	1.71	1.938
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 10+11	Full power	124	5620	21.52	22.00	1.118	98.97	1.010	0.05	1.27	1.434



15.5 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	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	18.50	19.50	1.259	-	-	0.01	0.859	1	1.081
2nd	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	18.50	19.50	1.259	-	-	0.05	0.812	1.058	1.022
1st	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	0.09	0.854	1	1.073
2nd	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	19.01	20.00	1.256	-	-	0.07	0.836	1.022	1.050
1st	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	16.54	17.50	1.247	-	-	0.05	0.871	1	1.086
2nd	LTE Band 7 Main PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	16.54	17.50	1.247	-	-	0.07	0.852	1.022	1.063
1st	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	55340	3560	18.45	19.20	1.189	62.9	1.006	-0.16	0.910	1	1.088
2nd	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	55340	3560	18.45	19.20	1.189	62.9	1.006	0.04	0.886	1.027	1.059
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	-0.07	0.900	1	1.005
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 9+8	standalone	11	2462	19.52	20.00	1.117	100	1.000	-0.06	0.846	1.064	0.945
1st	WLAN5.3GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	ANT 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	-0.05	0.855	1	1.012
2nd	WLAN5.3GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	ANT 10+11	standalone	58	5290	17.27	18.00	1.183	100	1.000	0.07	0.832	1.028	0.984
1st	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Left Cheek	0mm	ANT 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	-0.06	0.919	1	1.041
2nd	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Left Cheek	0mm	ANT 10+11	standalone	124	5620	20.50	21.00	1.122	98.97	1.010	-0.06	0.894	1.028	1.013
1st	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Right Side	10mm	ANT 10+11	Full power	157	5785	21.23	22.00	1.194	98.97	1.010	-0.01	0.846	1	1.020
2nd	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Right Side	10mm	ANT 10+11	Full power	157	5785	21.23	22.00	1.194	98.97	1.010	0.02	0.822	1.029	0.991
1st	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42190	3460	19.34	20.20	1.219	62.9	1.006	-0.14	0.885	1	1.085
2nd	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42190	3460	19.34	20.20	1.219	62.9	1.006	0.03	0.851	1.040	1.044

General Note:

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



15.6 NR Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for 5GNR n77/n78. 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 5GNR 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.

Table with 10 sections: FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Head, FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Head, FR1 n77(HPUE) Part270 Ant 1-Linearity Data for Head, FR1 n77(HPUE) Part27Q Ant 1-Linearity Data for Head, FR1 n77(HPUE) Part270 Ant 7-Linearity Data for Head, FR1 n77(HPUE) Part27Q Ant 7-Linearity Data for Head. Each section contains metrics like Maximum Tune up Power, Reported 1g SAR, Duty Cycle, Frame Averaged, Linearity SAR, and % deviation from expected linearity.

Table with 10 sections: FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Hotspot, FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Hotspot, FR1 n77(HPUE) Part270 Ant 1-Linearity Data for Hotspot, FR1 n77(HPUE) Part27Q Ant 1-Linearity Data for Hotspot, FR1 n77(HPUE) Part270 Ant 7-Linearity Data for Hotspot, FR1 n77(HPUE) Part27Q Ant 7-Linearity Data for Hotspot. Each section contains metrics like Maximum Tune up Power, Reported 1g SAR, Duty Cycle, Frame Averaged, Linearity SAR, and % deviation from expected linearity.



	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17.00	20.00
Reported 1g SAR (W/kg)	0.873	0.811
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	50.12	50.00
Linearity SAR (W/kg)	0.871	
% deviation from expected linearity		-6.88%

FR1 n77(HPUE) Part270 Ant 8-Linearity Data for Head

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.845	0.778
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.843	
% deviation from expected linearity		-7.71%

FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Head

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.826	0.827
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.824	
% deviation from expected linearity		0.36%

	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17.00	20.00
Reported 1g SAR (W/kg)	0.447	0.432
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	50.12	50.00
Linearity SAR (W/kg)	0.446	
% deviation from expected linearity		-3.13%

FR1 n77(HPUE) Part270 Ant 8-Linearity Data for Hotspot

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.534	0.517
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.533	
% deviation from expected linearity		-2.95%

FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Hotspot

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.573	0.557
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR (W/kg)	0.572	
% deviation from expected linearity		-2.56%

FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Body-worn

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.70	22.00
Reported 1g SAR (W/kg)	0.198	0.196
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	74.13	79.24
Linearity SAR (W/kg)	0.212	
% deviation from expected linearity		-7.40%

FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Body-worn

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.70	22.00
Reported 1g SAR (W/kg)	0.258	0.257
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	74.13	79.24
Linearity SAR (W/kg)	0.276	
% deviation from expected linearity		-6.82%

FR1 n77(HPUE) Part270 Ant 1-Linearity Data for Body-worn

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	0.115	0.119
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.115	
% deviation from expected linearity		3.72%

FR1 n77(HPUE) Part27Q Ant 1-Linearity Data for Body-worn

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)

FR1 n77(HPUE) Part27Q Ant 1-Linearity Data for Extremity

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00
Reported 10g SAR (W/kg)	1.734	1.668
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	1.730	
% deviation from expected linearity		-3.58%



	3)	2)
Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	0.528	0.509
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.527	
% deviation from expected linearity		-3.37%
FR1 n77(HPUE) Part27O Ant 7-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.50	26.50
Reported 1g SAR (W/kg)	0.445	0.378
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	281.84	223.34
Linearity SAR (W/kg)	0.353	
% deviation from expected linearity		7.19%
FR1 n77(HPUE) Part27Q Ant 7-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.50	26.50
Reported 1g SAR (W/kg)	0.940	0.807
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	281.84	223.34
Linearity SAR (W/kg)	0.745	
% deviation from expected linearity		8.34%
FR1 n77(HPUE) Part27O Ant 8-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.50	23.50
Reported 1g SAR (W/kg)	0.175	0.162
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	112.20	111.94
Linearity SAR (W/kg)	0.175	
% deviation from expected linearity		-7.21%
FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	20.50	23.50
Reported 1g SAR (W/kg)	0.170	0.153
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	112.20	111.94
Linearity SAR (W/kg)	0.170	
% deviation from expected linearity		-9.79%

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN 2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN 5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WWAN + WLAN 5GHz + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + WLAN 6GHz + Bluetooth	Yes	Yes	Yes	Yes
6.	WWAN + WLAN 2.4GHz + NFC				Yes
7.	WWAN + WLAN 5GHz + NFC				Yes
8.	WWAN + Bluetooth + NFC				Yes
9.	WWAN + WLAN 5GHz + Bluetooth + NFC				Yes
10.	WWAN + WLAN 6GHz + Bluetooth + NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- WLAN2.4GHz/WLAN5GHz MIMO SAR can represent SISO SAR to do co-located SAR analysis.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- 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). WLAN 6GHz has no hotspot function.
- According to the EUT characteristic, WLAN5GHz/6GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
- According to the EUT characteristic, WLAN2.4GHz and WLAN5GHz/6GHz cannot transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- For standalone WWAN, always choose the highest SAR among all WWAN bands within all antennas for each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
- For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among all LTE Bands within the selected antenna per each test position and also the worst SAR of all 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 bands.
- The maximum SAR summation is calculated based on the same configuration and test position.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{separation distance, mm})$, 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.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
- The WLAN6GHz Sim-Tx analysis guidance with other transmitters was based on SAR test results. The simultaneous transmission and test exemption analysis were compliant with KDB 447498 D01. For the device does not support FR2 or other MPE field measurement, therefore section 17 in the SAR report has no TER analysis according to KDB 987594 requirement.



16.1 Head Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+5	1+3+6	1+4+5	1+4+6
		WWAN	WLAN2.4GHz Ant 9+8	WLAN5GHz ANT 10+11	WLAN6GHz ANT 10+11	Bluetooth Ant 9	Bluetooth Ant 8					
		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)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All bands	Right Cheek	1.094	0.495	0.225	0.222	0.189	0.245	1.59	1.51	1.56	1.51	1.56
	Right Tilted	1.090	0.495	0.225	0.222	0.189	0.245	1.59	1.50	1.56	1.50	1.56
	Left Cheek	1.086	0.495	0.225	0.222	0.189	0.245	1.58	1.50	1.56	1.50	1.55
	Left Tilted	0.976	0.495	0.225	0.222	0.189	0.245	1.47	1.39	1.45	1.39	1.44

<EN-DC>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	7	1+2+3	1+2+4+6	1+2+4+7	1+2+5+6	1+2+5+7
			WWAN	FR1	WLAN2.4GHz Ant 9+8	WLAN5GHz ANT 10+11	WLAN6GHz ANT 10+11	Bluetooth Ant 9	Bluetooth Ant 8					
			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 band5 Ant1	FR1 n(77/78) Ant1	Right Cheek	0.489	0.520	0.495	0.225	0.222	0.189	0.245	1.50	1.42	1.48	1.42	1.48
		Right Tilted	0.489	0.520	0.495	0.225	0.222	0.189	0.245	1.50	1.42	1.48	1.42	1.48
		Left Cheek	0.489	0.520	0.495	0.225	0.222	0.189	0.245	1.50	1.42	1.48	1.42	1.48
		Left Tilted	0.489	0.520	0.495	0.225	0.222	0.189	0.245	1.50	1.42	1.48	1.42	1.48
LTE band5 Ant0	FR1 n(77/78) All Ant	Right Cheek	0.252	0.534	0.495	0.225	0.222	0.189	0.245	1.28	1.20	1.26	1.20	1.25
		Right Tilted	0.151	0.534	0.495	0.225	0.222	0.189	0.245	1.18	1.10	1.16	1.10	1.15
		Left Cheek	0.224	0.534	0.495	0.225	0.222	0.189	0.245	1.25	1.17	1.23	1.17	1.23
		Left Tilted	0.119	0.534	0.495	0.225	0.222	0.189	0.245	1.15	1.07	1.12	1.06	1.12
LTE band(2/7/38/41) All Ant	FR1 n(77/78)All Ant	Right Cheek	0.550	0.534	0.495	0.225	0.222	0.189	0.245	1.58	1.50	1.55	1.50	1.55
		Right Tilted	0.550	0.534	0.495	0.225	0.222	0.189	0.245	1.58	1.50	1.55	1.50	1.55
		Left Cheek	0.550	0.534	0.495	0.225	0.222	0.189	0.245	1.58	1.50	1.55	1.50	1.55
		Left Tilted	0.550	0.534	0.495	0.225	0.222	0.189	0.245	1.58	1.50	1.55	1.50	1.55
LTE band7 All Ant	FR1 n5 All Ant	Right Cheek	0.550	0.518	0.495	0.225	0.222	0.189	0.245	1.56	1.48	1.54	1.48	1.54
		Right Tilted	0.550	0.518	0.495	0.225	0.222	0.189	0.245	1.56	1.48	1.54	1.48	1.54
		Left Cheek	0.550	0.518	0.495	0.225	0.222	0.189	0.245	1.56	1.48	1.54	1.48	1.54
		Left Tilted	0.550	0.518	0.495	0.225	0.222	0.189	0.245	1.56	1.48	1.54	1.48	1.54
LTE band7 All Ant	FR1 n66 Ant2&5	Right Cheek	0.550	0.508	0.495	0.225	0.222	0.189	0.245	1.55	1.47	1.53	1.47	1.53
		Right Tilted	0.550	0.508	0.495	0.225	0.222	0.189	0.245	1.55	1.47	1.53	1.47	1.53
		Left Cheek	0.550	0.508	0.495	0.225	0.222	0.189	0.245	1.55	1.47	1.53	1.47	1.53
		Left Tilted	0.550	0.508	0.495	0.225	0.222	0.189	0.245	1.55	1.47	1.53	1.47	1.53

16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	1+2	1+3+4	1+3+5
		WWAN	WLAN2.4GHz Ant 9+8	WLAN5GHz Ant 10+11	Bluetooth Ant 9	Bluetooth Ant 8	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)
WWAN All Bands	Front	0.475	0.315	0.221	0.158	0.119	0.79	0.85	0.82
	Back	0.589	0.477	0.221	0.181	0.201	1.07	0.99	1.01
	Left side	1.053					1.05	1.05	1.05
	Right side	0.696	0.270	0.221	0.003	0.312	0.97	0.92	1.23
	Top side	0.722	0.227	0.221	0.283	0.040	0.95	1.23	0.98
	Bottom side	1.035					1.04	1.04	1.04

<EN-DC>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	1+2+3	1+2+4+5	1+2+4+6
			WWAN	FR1	WLAN2.4GHz Ant 9+8	WLAN5GHz Ant 10+11	Bluetooth Ant 9	Bluetooth Ant 8	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)	1g SAR (W/kg)
LTE band5 Ant1	FR1 n(77/78) Ant1	Front	0.427	0.514	0.315	0.221	0.158	0.119	1.26	1.32	1.28
		Back	0.427	0.514	0.477	0.221	0.181	0.201	1.42	1.34	1.36
		Left side							0.00	0.00	0.00
		Right side	0.427	0.514	0.270	0.221	0.003	0.312	1.21	1.17	1.47
		Top side	0.427	0.514	0.227	0.221	0.283	0.040	1.17	1.45	1.20
		Bottom side							0.00	0.00	0.00
LTE band5 Ant0	FR1 n(77/78) All Ant	Front	0.248	0.538	0.315	0.221	0.158	0.119	1.10	1.17	1.13
		Back	0.330	0.538	0.477	0.221	0.181	0.201	1.35	1.27	1.29
		Left side		0.538					0.54	0.54	0.54
		Right side	0.359	0.538	0.270	0.221	0.003	0.312	1.17	1.12	1.43
		Top side		0.538	0.227	0.221	0.283	0.040	0.77	1.04	0.80
		Bottom side	0.189	0.538					0.73	0.73	0.73
LTE band(2/7/38/41) All Ant	FR1 n(77/78) All Ant	Front	0.523	0.538	0.315	0.221	0.158	0.119	1.38	1.44	1.40
		Back	0.523	0.538	0.477	0.221	0.181	0.201	1.54	1.46	1.48
		Left side	0.523	0.538					1.06	1.06	1.06
		Right side	0.523	0.538	0.270	0.221	0.003	0.312	1.33	1.29	1.59
		Top side	0.523	0.538	0.227	0.221	0.283	0.040	1.29	1.57	1.32
		Bottom side	0.523	0.538					1.06	1.06	1.06
LTE band7 All Ant	FR1 n5 All Ant	Front	0.523	0.394	0.315	0.221	0.158	0.119	1.23	1.30	1.26
		Back	0.523	0.394	0.477	0.221	0.181	0.201	1.39	1.32	1.34
		Left side	0.523	0.394					0.92	0.92	0.92
		Right side	0.523	0.394	0.270	0.221	0.003	0.312	1.19	1.14	1.45
		Top side	0.523	0.394	0.227	0.221	0.283	0.040	1.14	1.42	1.18
		Bottom side	0.523	0.394					0.92	0.92	0.92
LTE band7 All Ant	FR1 n66 Ant2&5	Front	0.523	0.504	0.315	0.221	0.158	0.119	1.34	1.41	1.37
		Back	0.523	0.504	0.477	0.221	0.181	0.201	1.50	1.43	1.45
		Left side	0.523	0.504					1.03	1.03	1.03
		Right side	0.523	0.504	0.270	0.221	0.003	0.312	1.30	1.25	1.56
		Top side	0.523	0.504	0.227	0.221	0.283	0.040	1.25	1.53	1.29
		Bottom side	0.523	0.504					1.03	1.03	1.03



16.3 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+5	1+3+6	1+4+5	1+4+6
		WWAN	WLAN2.4GHz Ant 9+8	WLAN5GHz ANT 10+11	WLAN6GHz ANT 10+11	Bluetooth Ant 9	Bluetooth Ant 8	Summed	Summed	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)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN All bands	Front	0.711	0.187	0.376	0.061	0.045	0.057	0.90	1.13	1.14	0.82	0.83
	Back	1.085	0.307	0.409	0.218	0.096	0.092	1.39	1.59	1.59	1.40	1.40

<EN-DC>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	7	1+2+3	1+2+4+6	1+2+4+7	1+2+5+6	1+2+5+7
			WWAN	FR1	WLAN2.4GHz Ant 9+8	WLAN5GHz ANT 10+11	WLAN6GHz ANT 10+11	Bluetooth Ant 9	Bluetooth Ant 8	Summed	Summed	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)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE band5 Ant1	FR1 n(77/78) Ant1	Front	0.261	0.412	0.187	0.376	0.061	0.045	0.057	0.86	1.09	1.11	0.78	0.79
		Back	0.339	0.528	0.307	0.409	0.218	0.096	0.092	1.17	1.37	1.37	1.18	1.18
LTE band5 Ant0	FR1 n(77/78) All Ant	Front	0.218	0.528	0.187	0.376	0.061	0.045	0.057	0.93	1.17	1.18	0.85	0.86
		Back	0.259	0.528	0.307	0.409	0.218	0.096	0.092	1.09	1.29	1.29	1.10	1.10
LTE band(2/7/38/41) All Ant	FR1 n(77/78) All Ant	Front	0.500	0.528	0.187	0.376	0.061	0.045	0.057	1.22	1.45	1.46	1.13	1.15
		Back	0.500	0.528	0.307	0.409	0.218	0.096	0.092	1.34	1.53	1.53	1.34	1.34
LTE band7 All Ant	FR1 n5 All Ant	Front	0.488	0.312	0.187	0.376	0.061	0.045	0.057	0.99	1.22	1.23	0.91	0.92
		Back	0.488	0.312	0.307	0.409	0.218	0.096	0.092	1.11	1.31	1.30	1.11	1.11
LTE band7 All Ant	FR1 n66 Ant2&5	Front	0.500	0.572	0.187	0.376	0.061	0.045	0.057	1.26	1.49	1.51	1.18	1.19
		Back	0.500	0.572	0.307	0.409	0.218	0.096	0.092	1.38	1.58	1.57	1.39	1.38



16.4 Product specific 10g SAR Exposure Conditions

Remark:

- 1. 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	3	4	1+2+3+4
		WWAN 10g SAR (W/kg)	WLAN5GHz Ant 10+11 10g SAR (W/kg)	WLAN6GHz Ant 10+11 10g SAR (W/kg)	NFC 10g SAR (W/kg)	Summed 10g SAR (W/kg)
WWAN All Bands	Front		1.112	0.173	0.010	1.30
	Back		0.999	0.162	0.040	1.20
	Left side	2.381			0.001	2.38
	Right side		2.044	0.395	0.001	2.44
	Top side		2.327	0.488	0.001	2.82
	Bottom side				0.001	0.00

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



17. 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.

18. References

- [1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”
- [2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992
- [3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 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.
- [9] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015
- [10] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015
- [11] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015
- [12] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015
- [13] FCC KDB 941225 D06 v02r01, “SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities”, Oct 2015.
- [14] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

-----THE END-----