

FCC SAR Test Report

APPLICANT : OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : OnePlus
MODEL NAME : CPH2771
FCC ID : 2ABZ2-OP24879
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Shenzhen), 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. (Shenzhen), the test report shall not be reproduced except in full.

Hank Huang



Approved by: Hank Huang

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People's Republic of China



Table of Contents

1. Statement of Compliance	4
2. Administration Data	6
3. Guidance Applied	6
4. Equipment Under Test (EUT) Information	7
4.1 General Information.....	7
4.2 General LTE SAR Test and Reporting Considerations	10
4.3 General 5G NR SAR Test and Reporting Considerations	14
5. Smart Transmit feature for RF Exposure compliance	18
6. RF Exposure Limits.....	23
6.1 Uncontrolled Environment	23
6.2 Controlled Environment.....	23
6.3 RF Exposure limit for above 6GHz	24
7. Specific Absorption Rate (SAR)	25
7.1 Introduction	25
7.2 SAR Definition	25
8. System Description and Setup.....	26
8.1 E-Field Probe	27
8.2 Data Acquisition Electronics (DAE)	27
8.3 Phantom.....	28
8.4 Device Holder.....	29
9. Measurement Procedures.....	30
9.1 Spatial Peak SAR Evaluation	30
9.2 Power Reference Measurement.....	31
9.3 Area Scan.....	31
9.4 Zoom Scan.....	32
9.5 Volume Scan Procedures	32
9.6 Power Drift Monitoring	32
10. Test Equipment List	33
11. System Verification	34
11.1 Tissue Simulating Liquids	34
11.2 Tissue Verification.....	35
11.3 System Performance Check Results	36
11.4 PD System Verification Results	37
12. RF Exposure Positions	38
12.1 Ear and handset reference point	38
12.2 Definition of the cheek position	39
12.3 Definition of the tilt position	40
12.4 Body Worn Accessory	41
12.5 Product Specific 10g SAR Exposure	42
12.6 Wireless Router.....	42
12.7 Miscellaneous Testing Considerations	42
13. Conducted RF Output Power (Unit: dBm)	43
14. Antenna Location	62
15. SAR Test Results	63
15.1 Head SAR	67
15.2 Hotspot SAR	84
15.3 Body Worn Accessory SAR	99
15.4 Product specific 10g SAR.....	107
15.5 6GHz PD Test Result	109
15.6 Repeated SAR Measurement	110
15.7 TDD LTE Linearity Data Analysis	111
16. Simultaneous Transmission Analysis	113
16.1 Sub6 Antenna Groups	114
16.2 Head Exposure Conditions.....	116
16.3 Hotspot Exposure Conditions.....	118
16.4 Body-Worn Accessory Exposure Conditions	120
16.5 Product specific 10g SAR Exposure Conditions.....	121
17. Uncertainty Assessment.....	122
18. References	125
Appendix	126
Appendix A. Plots of System Performance Check.....	126
Appendix B. Plots of High SAR and PD Measurement	126
Appendix C. DASY Calibration Certificate.....	126



Appendix D. Test Setup Photos..... 126

Appendix E. Conducted RF Output Power Table 126

Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table 126

Appendix G. Power reduction mechanism verification 126

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5O1021	Rev. 01	Initial issue of report.	Nov. 24, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **OnePlus Technology (Shenzhen) Co., Ltd., Mobile Phone, CPH2771**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 10mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.36	0.66	0.40	1.57
		GSM1900	0.87	0.58	0.58	
	WCDMA	WCDMA II	0.97	0.64	0.43	
		WCDMA IV	0.95	0.50	0.42	
		WCDMA V	0.57	0.59	0.38	
	LTE	LTE Band 66/4	0.93	0.91	0.58	
		LTE Band 7	1.08	0.80	0.54	
		LTE Band 12/17	0.50	0.66	0.34	
		LTE Band 13	0.59	0.61	0.37	
		LTE Band 25/2	1.07	1.02	0.62	
		LTE Band 26/5	0.43	0.47	0.23	
		LTE Band 30	0.96	0.70	0.54	
		LTE Band 71	0.45	0.55	0.32	
		LTE Band 38	1.03	0.88	0.51	
		LTE Band 41	0.59	0.40	0.27	
		LTE Band 48	1.14	0.29	0.27	
	5G NR	FR1 n7	1.05	0.79	0.53	
		FR1 n12	0.56	0.73	0.40	
		FR1 n13	0.73	0.61	0.42	
		FR1 n25/n2	1.19	1.06	0.66	
		FR1 n26/n5	0.55	0.54	0.29	
		FR1 n30	0.97	0.52	0.49	
		FR1 n66	1.11	0.79	0.52	
		FR1 n71	0.59	0.74	0.40	
		FR1 n41/38	0.94	0.60	0.38	
		FR1 n48	1.19	0.43	0.29	
		FR1 n77/78	1.17	0.66	0.36	
DTS	WLAN	2.4GHz WLAN	0.88	1.00	0.39	1.57
NII		5GHz WLAN	1.08	0.58	0.58	1.57
6CD/VLP		WLAN 6GHz	0.12	<0.10	<0.10	1.57
DSS	Bluetooth	2.4GHz Bluetooth	0.44	0.44	0.23	1.57

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
NII	WLAN	5GHz WLAN	1.94	1.94
6CD		WLAN 6GHz	<0.10	1.94

Equipment Class	Frequency Band	Measured APD				Reported PD
		Head (W/m ²)	Body Worn (W/m ²)	Hotspot (W/m ²)	Phablet (W/m ²)	psPD (W/m ²)
6CD/VLP	6GHz WLAN	0.45	<0.10	<0.10	1.30	3.22
Date of Testing:		2025/10/12 ~ 2025/11/5				

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 and B25 / B66 / B26 / B12. Since the supported frequency span for LTE B2 / B4 / B5 / B17 falls completely within the support's frequency span for LTE B25 / B66 / B26 / B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12.
2. This device supports 5GNR n2 / n5 / n38 / n78 and n25 / n26 / n41 / n77. Since the supported frequency span for 5GNR n2 / n5 / n38 / n78 falls completely within the support's frequency span for n25 / n26 / n41 / n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n25 / n26 / 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 Human Exposure to RF Radiation Limits (1.0 mW/cm²=10 W/m²) specified in FCC 47 CFR part 1.1310 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. (Shenzhen) 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. (Shenzhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR03-SZ SAR02-SZ	CN1256	421272

Applicant	
Company Name	OnePlus Technology (Shenzhen) Co., Ltd.
Address	18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.

Manufacturer	
Company Name	OnePlus Technology (Shenzhen) Co., Ltd.
Address	18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.

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
- IEC/IEEE 62209-1528:2020
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- IEC TR 63170:2018
- IEC 62479:2010
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Phone
Brand Name	OnePlus
Model Name	CPH2771
FCC ID	2ABZ2-OP24879
IMEI Code	863339080030032/863339080030024, 863339080028051/863339080028044 863339080031956/863339080031949, 863339080029091//863339080029083
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 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n13: 777 MHz ~ 787 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n30: 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz 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 ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN U-NII 5: 5925 MHz ~ 6425 MHz WLAN U-NII 6: 6425 MHz ~ 6525 MHz WLAN U-NII 7: 6525 MHz ~ 6875 MHz WLAN U-NII 8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS/DTM RMC/AMR 12.2Kbps HSDPA/HSUPA DC-HSDPA

	HSPA+(16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ac VHT20/VHT40 WLAN 2.4GHz 802.11ax/be HE20/HE40/EHT20/EHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 5GHz 802.11be EHT20/EHT40/EHT80/EHT160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11be EHT20/EHT40/EHT80/EHT160/EHT320 Bluetooth BR/EDR/LE NFC: ASK
HW Version	11
SW Version	OxygenOS 16.0
GSM / (E)GPRS Dual Transfer mode	Class A – EUT can support Packet Switched and Circuit Switched Network simultaneously.
EUT Stage	Production Unit
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 WLAN 2.4GHz and 6GHz VLP 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. This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 5. This device supports DTM operation up to multi-slot class 11 and supports GPRS/EGPRS mode up to multi-slot class 33. 6. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode. And 802.11b supports SISO mode for 2.4GHz WLAN. 7. The device implements receiver detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. It uses the receiver to indicate whether the user is making a call-in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E. 8. This device supports HPUE mode for LTE Band 41 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 power class 3 was chosen to perform full SAR testing and power class 2 verified the worst case of power class 3 SAR. 9. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. 10. This device supports HPUE mode for 5GNR n41/n77/n78 with higher power, so power class 2 was chosen to perform full SAR testing and power class 2 SAR can represent power class 3 SAR. 11. 5GNR n41 supports UL MIMO mode. 12. There are two samples, the different between them refer to the CPH2771_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, sample 1 was chosen to perform full SAR testing. 13. This device has NFC function and the NFC SAR report will be separately submitted. 14. 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	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n12	FDD	15	5, 10, 15
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n66	FDD	15	5, 10, 15, 20, 30, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 30, 40
	n41	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 20, 30, 40
	n77	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n12	FDD	15	5, 10, 15
	n13	FDD	15	5, 10
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 30, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 30, 40
	n41	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 20, 30, 40
	n77	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																							
FCC ID	2ABZ2-OP24879																																																																						
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 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																						
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																						
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																						
LTE Voice / Data requirements	Voice and Data																																																																						
LTE Release Version	R15																																																																						
CA Support	Supported, Uplink and Downlink																																																																						
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><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><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></table>	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
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256 QAM	≥ 1						≤ 5																																																																
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																						
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																						
Power reduction applied to satisfy SAR compliance	Yes, when operating in receiver/hotspot detect mechanism, head/body -worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 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 and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 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	20475	831.5	20500	834
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	20575	842.5	20550	840
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 25 MHz		Bandwidth 30 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	20875	2512.5	20900	2515
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21325	2557.5	21300	2555
LTE Band 12												
	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	23017	699.7	23025	700.5	23035	701.5	23060	704	23085	707	23110	710
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23105	708.5	23080	706
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709		23805		712	
M	23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23775		708.5	
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		785	
M	23230		782		23230		782		23230		782	
H	23255		784.5		23230		782		23230		782	
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		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	26765	821.5	26790	824
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	839
LTE Band 30												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	27685		2307.5		27710		2310		27735		2312.5	
M	27710		2310		27710		2310		27710		2310	
H	27735		2312.5		27710		2310		27710		2310	

LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 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 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

LTE Band 71								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673
M	133247	675.5	133272	678	133297	680.5	133322	683
H	133447	695.5	133422	693	133397	690.5	133372	688

<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 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
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 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	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	Ant	Full	DSI4	DSI5
		Tune-up Limit	Tune-up Limit	Tune-up Limit
LTE Band 12	Ant 1	24.3	24.3	24.3
LTE Band 12	Ant 0	23.4	23.4	23.4
LTE Band 17	Ant 1	24.3	24.3	24.3
LTE Band 17	Ant 0	23.4	23.4	23.4
LTE Band 5	Ant 1	25.0	25.0	25.0
LTE Band 5	Ant 0	24.1	24.1	24.1
LTE Band 26	Ant 1	25.0	25.0	25.0
LTE Band 26	Ant 0	24.1	24.1	24.1
LTE Band 4	Ant 4	25.0	21.0	18.5
LTE Band 4	Ant 6	23.5	20.0	16.5
LTE Band 4	Ant 5	25.0	22.5	22.5
LTE Band 4	Ant 0	24.3	18.8	17.3
LTE Band 66	Ant 4	25.0	20.5	18.5
LTE Band 66	Ant 6	23.5	19.5	16.5
LTE Band 66	Ant 5	25.0	21.5	21.5
LTE Band 66	Ant 0	24.3	18.3	17.3
LTE Band 2	Ant 4	24.3	20.8	17.8
LTE Band 2	Ant 6	22.8	19.8	17.3
LTE Band 2	Ant 5	25.0	23.0	23.0
LTE Band 2	Ant 0	24.0	19.0	18.5
LTE Band 25	Ant 4	24.3	20.8	17.8
LTE Band 25	Ant 6	22.8	19.8	17.3
LTE Band 25	Ant 5	25.0	23.0	23.0
LTE Band 25	Ant 0	24.0	19.0	18.5
LTE Band 38	Ant 4	25.0	20.5	19.5
LTE Band 38	Ant 6	23.0	21.0	19.5
LTE Band 38	Ant 5	25.0	22.5	22.5
LTE Band 38	Ant 0	24.0	19.5	18.5
LTE Band 41(PC3)	Ant 4	25.3	17.2	17.7
LTE Band 41(PC2)	Ant 4	26.8	18.8	19.3
LTE Band 41(PC3)	Ant 6	23.3	19.7	17.2
LTE Band 41(PC2)	Ant 6	24.8	21.3	18.8
LTE Band 41(PC3)	Ant 5	25.3	18.7	18.7
LTE Band 41(PC2)	Ant 5	26.8	20.3	20.3
LTE Band 41(PC3)	Ant 0	24.3	16.7	16.2
LTE Band 41(PC2)	Ant 0	25.8	18.3	17.8

Note: For some bands/antennas at some exposure conditions which cannot be covered were fully tested for RF exposure compliance.

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 n12: 699 MHz ~ 716 MHz							
	5G NR n13: 777 MHz ~ 787 MHz							
	5G NR n25: 1850 MHz ~ 1915 MHz							
	5G NR n26: 814 MHz ~ 849 MHz							
	5G NR n30: 2305 MHz ~ 2315 MHz							
	5G NR n38: 2570 MHz ~ 2620 MHz							
	5G NR n41: 2496 MHz ~ 2690 MHz							
	5G NR n48: 3550 MHz ~ 3700 MHz							
	5G NR n66: 1710 MHz ~ 1780 MHz							
	5G NR n71: 663 MHz ~ 698 MHz							
	5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz							
	5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz							
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.							
SCS	FDD: SCS15KHz, TDD: SCS30KHz							
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM							
A-MPR (Additional MPR) disabled for SAR Testing?	Yes							
LTE Anchor Bands for n2	LTE B4/5/7/12/13/30/66/48/71							
LTE Anchor Bands for n5	LTE B2/4/7/48/66/30							
LTE Anchor Bands for n7	LTE B2/4/5/12/13/66/71							
LTE Anchor Bands for n12	LTE B2/7/66							
LTE Anchor Bands for n25	LTE B5/7/12/13/71/26/66							
LTE Anchor Bands for n38	LTE B2/4/5/12/66/71							
LTE Anchor Bands for n41	LTE B2/4/5/25/26/66/71/12							
LTE Anchor Bands for n48	LTE B71							
LTE Anchor Bands for n66	LTE B2/5/7/12/13/30/48/71							
LTE Anchor Bands for n71	LTE B2/7/48/66							
LTE Anchor Bands for n77	LTE B2/5/7/12/13/25/30/41/66/71							
LTE Anchor Bands for n78	LTE B2/4/5/7/12/13/25/26/38/41/66/71							

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band								
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900

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

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

NR Band 12						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300	701.5	140800	704	141300	706.5
M	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5

NR Band 13				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	155900	779.5	156400	782
M	156400	782		
H	156900	784.5		

NR Band 25														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870
M	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	378000	1890

NR Band 26								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	163300	816.5	163800	819	164300	821.5	164800	824
M	166300	831.5	166300	831.5	166300	831.5	166300	831.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 30				
	Bandwidth 5MHz		Bandwidth 10MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	461500	2307.5	462000	2310
M	462000	2310		
H	462500	2312.5		

NR Band 66												
	Bandwidth 5MHz		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)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	345000	1725	346000	1730
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353000	1765	352000	1760

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

	NR Band 38									
	Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515004	2575.02	515502	2577.51	516000	2580	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610	520998	2604.99	519996	2599.98

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

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



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

NR Band 78 SCS30KHz																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M 650000	3750	650000	3750	650000	3750	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H 653000	3795	652832	3792.48	652666	3789.99	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

NR Band 77 SCS30KHz																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78 SCS30KHz																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

<For NR Overlap Bands Description>

1) NR Bands BW

Band	Duplex	SCS(KHz)	Bandwidths(BW)
FR1 n5	TDD	15	5,10,15,20
FR1 n26	TDD	15	5,10,15,20
FR1 n2	TDD	15	5,10,15,20
FR1 n25	TDD	15	5,10,15,20,25,30,40
FR1 n38	TDD	30	10,15,20,30,40
FR1 n41	TDD	30	20,30,40,50,60,70,80,90,100
FR1 n77	TDD	30	10,15,20,25,30,40,50,60,70,80,90,100
FR1 n78	TDD	30	10,15,20,25,30,40,50,60,70,80,90,100

2) NR Bands Tune up:

Band	Ant	Full Tune-up Limit	ECI5 Tune-up Limit	ECI4 Tune-up Limit
FR1 n5	Ant 1	25.2	25.2	25.2
FR1 n5	Ant 0	24.3	24.3	24.3
FR1 n26	Ant 1	25.2	25.2	25.2
FR1 n26	Ant 0	24.3	24.3	24.3
FR1 n2	Ant 4	24.7	22.2	18.2
FR1 n2	Ant 6	23.2	21.2	18.7
FR1 n2	Ant 5	25.2	23.2	23.2
FR1 n2	Ant 0	24.2	19.2	17.7
FR1 n25	Ant 4	24.7	21.2	18.2
FR1 n25	Ant 6	23.2	20.2	18.7



FCC SAR Test Report

Report No. : FA5O1021

FR1 n25	Ant 5	25.2	22.2	22.2
FR1 n25	Ant 0	24.2	19.2	17.7
FR1 n38	Ant 4	25.2	17.7	16.7
FR1 n38	Ant 6	23.2	17.7	16.7
FR1 n38	Ant 5	25.2	17.7	17.7
FR1 n38	Ant 0	24.2	17.2	15.7
FR1 n41 PC3	Ant 4	25.2	17.7	17.2
FR1 n41 PC2	Ant 4	27.2	17.7	17.2
FR1 n41 PC3	Ant 6	23.2	17.2	16.2
FR1 n41 PC2	Ant 6	25.2	17.2	16.2
FR1 n41 PC3	Ant 5	25.2	18.7	18.7
FR1 n41 PC2	Ant 5	27.2	18.7	18.7
FR1 n41 PC3	Ant 0	24.2	16.7	16.7
FR1 n41 PC2	Ant 0	26.2	16.7	16.7
FR1 n77 PC3	Ant 9	25.2	19.2	16.7
FR1 n77 PC2	Ant 9	26.2	19.2	16.7
FR1 n77 PC3	Ant 8	23.8	19.3	17.3
FR1 n77 PC2	Ant 8	24.8	19.3	17.3
FR1 n77 PC3	Ant 10	21.0	16.5	14.5
FR1 n77 PC2	Ant 10	22.0	16.5	14.5
FR1 n77 PC3	Ant 4	20.2	18.2	15.2
FR1 n77 PC2	Ant 4	21.2	18.2	15.2
FR1 n78 PC3	Ant 9	25.2	18.2	16.7
FR1 n78 PC2	Ant 9	27.7	18.2	16.7
FR1 n78 PC3	Ant 8	24.0	18.5	17.0
FR1 n78 PC2	Ant 8	26.5	18.5	17.0
FR1 n78 PC3	Ant 10	21.2	16.2	13.7
FR1 n78 PC2	Ant 10	23.7	16.2	13.7
FR1 n78 PC3	Ant 4	20.5	19.0	15.5
FR1 n78 PC2	Ant 4	23.0	19.0	15.5

Note: For some bands/antennas at some exposure conditions which cannot be covered were fully tested for RF exposure compliance.

5. Smart Transmit feature for RF Exposure compliance

The Qualcomm® Smart Transmit™ Plus of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature. The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN and WLAN/BT transmitter to ensure the product in compliance with RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 24 to enable the Smart Transmit GEN2 Feature.

<Terminologies in this report>

P_{limit}	The time-averaged RF power which corresponds to SAR_design_target.
P_{max}	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory SAR limit to account for all device design related uncertainty.
SAR char	P _{limit} for all the technologies/bands for all applicable DSI

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at WWAN and WLAN/BT bands. It will then be used as input for Smart Transmit to control and manage RF exposure for WWAN and WLAN/BT bands.

To account for total uncertainty, SAR_design_target should be determined as:

$$SAR_{design_target} < SAR_{regulatory_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

Antenna Group:

Antenna Group 0 (AG0)	ANT4 & ANT8 & ANT9 & ANT10 & ANT13 & ANT6 & ANT0
Antenna Group 1 (AG1)	ANT5 & ANT1 & ANT0 & ANT6

Note: ANT0 and ANT6 as shared antennas (sAnt) among AG0 and AG1.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit, for each characterized technology and band.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

Band	Antenna	Body/Hotspot/Extremity Standalone	Head Standalone	Total Uncertainty dB (k=2)	Pmax*
		DSI4	DSI5		
GSM850	Ant 1	26.80	29.50	1.2	24.3
GSM1900	Ant 4	19.50	17.50	1.2	21.3
GSM1900	Ant 6	16.00	15.00	1.2	19.8
WCDMA II	Ant 4	18.10	16.60	1.2	23.1
WCDMA II	Ant 6	17.60	17.10	1.2	21.6
WCDMA IV	Ant 4	18.30	17.30	1.2	23.8
WCDMA IV	Ant 6	16.80	15.30	1.2	22.3
WCDMA V	Ant 1	27.90	28.20	1.2	23.8
WCDMA V	Ant 0	26.00	26.10	1.2	22.9
LTE Band 2	Ant 4	19.60	16.60	1.2	23.1
LTE Band 2	Ant 6	18.60	16.10	1.2	21.6
LTE Band 2	Ant 5	21.80	21.80	1.2	23.8
LTE Band 2	Ant 0	17.80	17.30	1.2	22.8
LTE Band 4	Ant 4	19.80	17.30	1.2	23.8
LTE Band 4	Ant 6	18.80	15.30	1.2	22.3
LTE Band 4	Ant 5	21.30	21.30	1.2	23.8
LTE Band 4	Ant 0	17.60	16.10	1.2	23.1
LTE Band 5	Ant 1	29.00	29.20	1.2	23.8
LTE Band 5	Ant 0	26.90	27.30	1.2	22.9
LTE Band 7	Ant 4	18.30	16.30	1.2	23.8
LTE Band 7	Ant 6	18.80	16.30	1.2	21.8
LTE Band 7	Ant 5	18.80	18.80	1.2	23.8
LTE Band 7	Ant 0	18.60	15.10	1.2	22.6
LTE Band 12	Ant 1	31.10	35.20	1.2	23.1
LTE Band 12	Ant 0	24.70	26.00	1.2	22.2
LTE Band 13	Ant 1	27.70	29.60	1.2	23.6
LTE Band 13	Ant 0	25.60	25.70	1.2	22.7
LTE Band 17	Ant 1	31.10	35.20	1.2	23.1
LTE Band 17	Ant 0	24.70	26.00	1.2	22.2
LTE Band 25	Ant 4	19.60	16.60	1.2	23.1
LTE Band 25	Ant 6	18.60	16.10	1.2	21.6
LTE Band 25	Ant 5	21.80	21.80	1.2	23.8
LTE Band 25	Ant 0	17.80	17.30	1.2	22.8
LTE Band 26	Ant 1	29.00	29.20	1.2	23.8
LTE Band 26	Ant 0	26.90	27.30	1.2	22.9
LTE Band 30	Ant 4	20.10	17.10	1.2	23.1
LTE Band 30	Ant 6	19.40	18.40	1.2	21.4
LTE Band 66	Ant 4	19.30	17.30	1.2	23.8
LTE Band 66	Ant 6	18.30	15.30	1.2	22.3
LTE Band 66	Ant 5	20.30	20.30	1.2	23.8
LTE Band 66	Ant 0	17.10	16.10	1.2	23.1



FCC SAR Test Report

Report No. : FA5O1021

LTE Band 71	Ant 1	28.70	33.90	1.2	23.1
LTE Band 71	Ant 0	25.60	26.40	1.2	22.2
LTE Band 38	Ant 4	17.30	16.30	1.2	21.8
LTE Band 38	Ant 6	17.80	16.30	1.2	19.8
LTE Band 38	Ant 5	19.30	19.30	1.2	21.8
LTE Band 38	Ant 0	16.30	15.30	1.2	20.8
LTE Band 41(PC3)	Ant 4	14.00	14.50	1.2	22.1
LTE Band 41(PC2)	Ant 4	14.00	14.50	1.2	22.0
LTE Band 41(PC3)	Ant 6	16.50	14.00	1.2	20.1
LTE Band 41(PC2)	Ant 6	16.50	14.00	1.2	20.0
LTE Band 41(PC3)	Ant 5	15.50	15.50	1.2	22.1
LTE Band 41(PC2)	Ant 5	15.50	15.50	1.2	22.0
LTE Band 41(PC3)	Ant 0	13.50	13.00	1.2	21.1
LTE Band 41(PC2)	Ant 0	13.50	13.00	1.2	21.0
LTE Band 48	Ant 9	17.80	16.30	1.2	21.8
LTE Band 48	Ant 8	17.10	16.60	1.2	20.6
LTE Band 48	Ant 10	15.80	14.30	1.2	17.8
LTE Band 48	Ant 4	24.80	13.60	1.2	17.1
FR1 n2	Ant 4	21.00	17.00	1.2	23.5
FR1 n2	Ant 6	20.00	17.50	1.2	22.0
FR1 n2	Ant 5	22.00	22.00	1.2	24.0
FR1 n2	Ant 0	18.00	16.50	1.2	23.0
FR1 n5	Ant 1	26.50	28.40	1.2	24.0
FR1 n5	Ant 0	26.50	26.40	1.2	23.1
FR1 n7	Ant 4	18.50	16.50	1.2	24.0
FR1 n7	Ant 6	18.50	16.50	1.2	22.0
FR1 n7	Ant 5	18.50	18.50	1.2	24.0
FR1 n7	Ant 0	18.80	15.30	1.2	22.8
FR1 n12	Ant 1	30.60	35.10	1.2	23.5
FR1 n12	Ant 0	24.70	25.80	1.2	22.6
FR1 n13	Ant 1	27.10	29.50	1.2	24.0
FR1 n13	Ant 0	26.00	25.20	1.2	23.1
FR1 n25	Ant 4	20.00	17.00	1.2	23.5
FR1 n25	Ant 6	19.00	17.50	1.2	22.0
FR1 n25	Ant 5	21.00	21.00	1.2	24.0
FR1 n25	Ant 0	18.00	16.50	1.2	23.0
FR1 n26	Ant 1	26.50	28.40	1.2	24.0
FR1 n26	Ant 0	26.50	26.40	1.2	23.1
FR1 n30	Ant 4	20.20	17.20	1.2	23.2
FR1 n30	Ant 6	18.20	18.20	1.2	21.2
FR1 n66	Ant 4	19.00	17.50	1.2	24.0
FR1 n66	Ant 6	18.50	15.50	1.2	22.5
FR1 n66	Ant 5	20.50	20.50	1.2	24.0
FR1 n66	Ant 0	17.00	16.00	1.2	23.0
FR1 n71	Ant 1	27.60	33.00	1.2	23.5
FR1 n71	Ant 0	24.70	25.60	1.2	22.6
FR1 n38	Ant 4	16.50	15.50	1.2	24.0
FR1 n38	Ant 6	16.50	15.50	1.2	22.0
FR1 n38	Ant 5	16.50	16.50	1.2	24.0
FR1 n38	Ant 0	16.00	14.50	1.2	23.0



FCC SAR Test Report

Report No. : FA5O1021

FR1 n41 PC3	Ant 4	16.50	16.00	1.2	24.0
FR1 n41 PC2	Ant 4	16.50	16.00	1.2	26.0
FR1 n41 PC3	Ant 6	16.00	15.00	1.2	22.0
FR1 n41 PC2	Ant 6	16.00	15.00	1.2	24.0
FR1 n41 PC3	Ant 5	17.50	17.50	1.2	24.0
FR1 n41 PC2	Ant 5	17.50	17.50	1.2	26.0
FR1 n41 PC3	Ant 0	15.50	15.50	1.2	23.0
FR1 n41 PC2	Ant 0	15.50	15.50	1.2	25.0
FR1 n48	Ant 9	16.50	16.00	1.2	24.0
FR1 n48	Ant 8	16.60	16.60	1.2	22.6
FR1 n48	Ant 10	16.00	13.50	1.2	20.0
FR1 n48	Ant 4	19.00	17.50	1.2	20.0
FR1 n77 PC3	Ant 9	18.00	15.50	1.2	24.0
FR1 n77 PC2	Ant 9	18.00	15.50	1.2	25.0
FR1 n77 PC3	Ant 8	18.10	16.10	1.2	22.6
FR1 n77 PC2	Ant 8	18.10	16.10	1.2	23.6
FR1 n77 PC3	Ant 10	15.30	13.30	1.2	19.8
FR1 n77 PC2	Ant 10	15.30	13.30	1.2	20.8
FR1 n77 PC3	Ant 4	17.00	14.00	1.2	19.0
FR1 n77 PC2	Ant 4	17.00	14.00	1.2	20.0
FR1 n78 PC3	Ant 9	17.00	15.50	1.2	24.0
FR1 n78 PC2	Ant 9	17.00	15.50	1.2	26.5
FR1 n78 PC3	Ant 8	17.30	15.80	1.2	22.8
FR1 n78 PC2	Ant 8	17.30	15.80	1.2	25.3
FR1 n78 PC3	Ant 10	15.00	12.50	1.2	20.0
FR1 n78 PC2	Ant 10	15.00	12.50	1.2	22.5
FR1 n78 PC3	Ant 4	17.80	14.30	1.2	19.3
FR1 n78 PC2	Ant 4	17.80	14.30	1.2	21.8
Bluetooth	Ant 13	16.70	13.70	1.2	17.7
Bluetooth	Ant 6	15.20	14.70	1.2	17.7
WLAN_2.4GHz	Ant 13	17.80	15.80	1.2	18.3
WLAN_2.4GHz	Ant 6	16.30	14.80	1.2	18.3
WLAN_2.4GHz	Ant 13+6	14.8,14.8	14.8,14.8	1.2	20.3
WLAN_5.2GHz	Ant 9	14.30	13.30	1.2	18.8
WLAN_5.2GHz	Ant 8	16.30	13.80	1.2	18.8
WLAN_5.2GHz	Ant 9+8	14.3,14.3	12.3,12.3	1.2	18.8
WLAN_5.3GHz	Ant 9	14.30	13.30	1.2	18.8
WLAN_5.3GHz	Ant 8	16.30	13.80	1.2	18.8
WLAN_5.3GHz	Ant 9+8	14.3,14.3	12.3,12.3	1.2	18.8
WLAN_5.5GHz	Ant 9	14.80	12.80	1.2	18.8
WLAN_5.5GHz	Ant 8	12.80	15.80	1.2	18.8
WLAN_5.5GHz	Ant 9+8	14.3,14.3	12.8,12.8	1.2	18.8
WLAN_5.8GHz	Ant 9	16.80	17.30	1.2	21.3
WLAN_5.8GHz	Ant 8	15.80	16.80	1.2	21.3
WLAN_5.8GHz	Ant 9+8	14.8,14.8	16.8,16.8	1.2	21.8
WLAN_6GHz(UNII 5) / dualclient	Ant 9	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 5) / dualclient	Ant 8	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 5) / dualclient	Ant 9+8	20.4,20.4	18.5,18.5	1.2	11.3
WLAN_6GHz(UNII 6)) / dualclient	Ant 9	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 6)) / dualclient	Ant 8	20.40	18.50	1.2	8.3

WLAN_6GHz(UNII 6)) / dualclient	Ant 9+8	20.4,20.4	18.5,18.5	1.2	11.3
WLAN_6GHz(UNII 7)) / dualclient	Ant 9	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 7)) / dualclient	Ant 8	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 7)) / dualclient	Ant 9+8	20.4,20.4	18.5,18.5	1.2	11.3
WLAN_6GHz(UNII 8)) / dualclient	Ant 9	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 8)) / dualclient	Ant 8	20.40	18.50	1.2	8.3
WLAN_6GHz(UNII 8)) / dualclient	Ant 9+8	20.4,20.4	18.5,18.5	1.2	11.3
WLAN_6GHz(UNII 5) / VLP	Ant 9	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 5) / VLP	Ant 8	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 5) / VLP	Ant 9+8	7.3,7.3	7.3,7.3	1.2	10.3
WLAN_6GHz(UNII 6)) / VLP	Ant 9	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 6)) / VLP	Ant 8	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 6)) / VLP	Ant 9+8	7.3,7.3	7.3,7.3	1.2	10.3
WLAN_6GHz(UNII 7)) / VLP	Ant 9	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 7)) / VLP	Ant 8	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 7)) / VLP	Ant 9+8	7.3,7.3	7.3,7.3	1.2	10.3
WLAN_6GHz(UNII 8)) / VLP	Ant 9	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 8)) / VLP	Ant 8	7.30	7.30	1.2	7.3
WLAN_6GHz(UNII 8)) / VLP	Ant 9+8	7.3,7.3	7.3,7.3	1.2	10.3
FR1 n41 UL MIMO	Ant 4+5	16.5,16.5	16,16	1.2	25.5
FR1 n41 UL MIMO	Ant 4+0	15.5,15.5	15.5,15.5	1.2	25.5
FR1 n41 UL MIMO	Ant 6+5	16,16	15,15	1.2	25.5
FR1 n41 UL MIMO	Ant 6+0	15.5,15.5	15,15	1.2	25.5

Note:

- 1) *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1.2 dB device uncertainty.
- 2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD&WLAN/BT).
- 3) The max allowed output power is the Plimit + 1.2 dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

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.

6.3 RF Exposure limit for above 6GHz

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310. The unit of power density evaluation is W/m² or mW/cm².

Peak Spatially Averaged Power Density was evaluated over a square area of 4cm² per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Note: 1.0 mW/cm² is 10 W/m²

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:

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

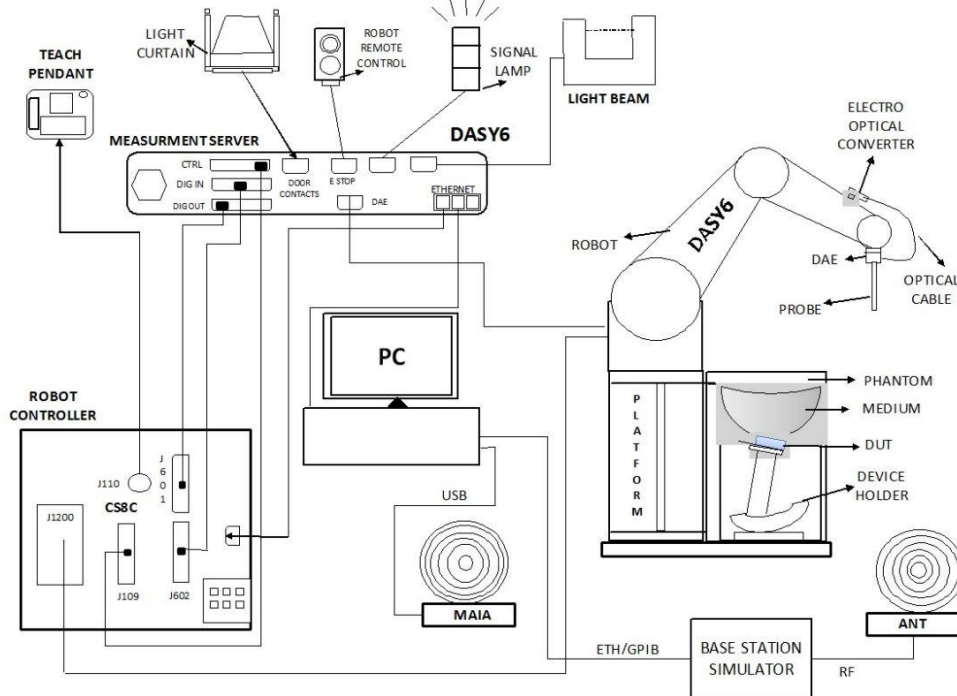
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 or Win10 and the DASY5 or DASY6⁽¹⁾ 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.

Note: 1. DASY6 software used: cDASY6 mmWave_3.2.0.1840 and older generations and used the developed Plane-to-Plane Phase Reconstruction (PTP-PR) Algorithm which was used in PD 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	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz – 10 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ± 0.2 dB (30 MHz – 4 GHz)	
Directivity	± 0.2 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 μ W/g – >100 mW/g; Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 2.0 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 dB) 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: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	≤ 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.

			$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ 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 DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 13, 2024	Dec. 12, 2025
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 13, 2024	Dec. 12, 2025
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 16, 2024	Dec. 15, 2025
SPEAG	2300MHz System Validation Kit	D2300V2	1055	Aug. 21, 2023	Aug. 19, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 08, 2024	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 13, 2024	Dec. 12, 2025
SPEAG	3500MHz System Validation Kit	D3500V2	1037	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3700MHz System Validation Kit	D3700V2	1008	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Aug. 13, 2025	Aug. 12, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1341	Dec. 12, 2024	Dec. 11, 2025
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1026	Jan. 28, 2025	Jan. 27, 2026
SPEAG	5G Verification Source	10GHz	2002	Feb. 20, 2025	Feb. 19, 2026
SPEAG	Data Acquisition Electronics	DAE4	1696	Sep. 10, 2025	Sep. 09, 2026
SPEAG	Data Acquisition Electronics	DAE4	1437	Apr. 16, 2025	Apr. 15, 2026
SPEAG	Data Acquisition Electronics	DAE4	1664	Jul. 30, 2025	Jul. 29, 2026
SPEAG	Dosimetric E-Field Probe	ES3DV3	3282	Jan. 23, 2025	Jan. 22, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7641	Jun. 26, 2025	Jun. 25, 2026
SPEAG	EUmmWV Probe Tip Protection	EUmmWV3	9432	Jan. 08, 2025	Jan. 07, 2026
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1795	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P41 AA	2033	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201300653	Jul. 03, 2025	Jul. 02, 2026
Anritsu	Radio communication analyzer	MT8820C	6201341952	Dec. 26, 2024	Dec. 25, 2025
Anritsu	Radio communication analyzer	MT8821C	6262314715	Jul. 03, 2025	Jul. 02, 2026
Anritsu	Radio communication analyzer	MT8821C	6272278319	Jul. 03, 2025	Jul. 02, 2026
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 15, 2024	Oct. 14, 2025
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 14, 2025	Oct. 13, 2026
Speag	Dielectric Assessment KIT	DAK-3.5	1171	Feb. 24, 2025	Feb. 23, 2026
Agilent	Signal Generator	N5181A	MY50145381	Dec. 26, 2024	Dec. 25, 2025
R&S	Signal Generator	SMB100A	175779	Dec. 26, 2024	Dec. 25, 2025
R&S	Power Sensor	NRP50S	101254	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP50S	101548	Jan. 11, 2025	Jan. 10, 2026
R&S	Power Sensor	NRPZ51	103113	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP8S	109228	Apr. 01, 2025	Mar. 31, 2026
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 26, 2024	Dec. 25, 2025
R&S	Spectrum Analyzer	FSP7	100818	Jul. 03, 2025	Jul. 02, 2026
R&S	Spectrum Analyzer	FSV40	101164	Dec. 25, 2024	Dec. 24, 2025
TES	Hygrometer	1310	200505600	Jul. 05, 2025	Jul. 04, 2026
Anymetre	Thermo-Hygrometer	JR593	2015030903	Dec. 28, 2024	Dec. 27, 2025
Anymetre	Thermo-Hygrometer	JR593	2015102801	Dec. 28, 2024	Dec. 27, 2025
SPEAG	Device Holder	N/A	N/A	N/A	N/A
AR	Amplifier	5S1G4	0333096	Note 1	
Mini-Circuits	Amplifier	ZVE-3W-83+	599201528	Note 1	
Mini-Circuits	Amplifier	ZVA-183W-S+	726202215	Note 1	

ARRA	Power Divider	A3200-2	N/A	Note 1
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1
Jinkexinhua	Attenuator	10db-8G	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.

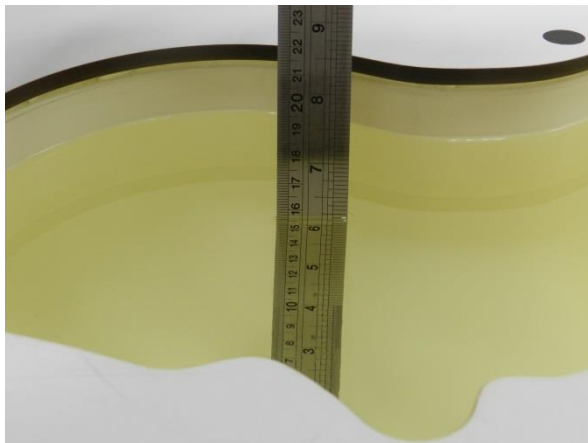


Fig 11.1 Photo of Liquid Height for Head SAR



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)	Head	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	Head	22.7	0.904	42.735	0.89	41.90	1.57	1.99	±5	2025/10/12
750	Head	22.3	0.923	42.926	0.89	41.90	3.71	2.45	±5	2025/10/15
835	Head	22.1	0.944	42.522	0.90	41.50	4.89	2.46	±5	2025/10/14
835	Head	22.3	0.927	42.011	0.90	41.50	3.00	1.23	±5	2025/10/16
1750	Head	22.5	1.381	40.790	1.37	40.10	0.80	1.72	±5	2025/10/13
1750	Head	22.2	1.395	40.593	1.37	40.10	1.82	1.23	±5	2025/10/18
1900	Head	22.2	1.451	40.410	1.40	40.00	3.64	1.02	±5	2025/10/17
1900	Head	22.5	1.387	41.327	1.40	40.00	-0.93	3.32	±5	2025/10/24
2300	Head	22.7	1.633	40.288	1.67	39.50	-2.22	1.99	±5	2025/10/20
2300	Head	22.4	1.729	40.058	1.67	39.50	3.53	1.41	±5	2025/10/29
2450	Head	22.3	1.740	39.886	1.80	39.20	-3.33	1.75	±5	2025/10/23
2450	Head	22.5	1.851	38.679	1.80	39.20	2.83	-1.33	±5	2025/10/30
2600	Head	22.6	1.969	39.563	1.96	39.00	0.46	1.44	±5	2025/10/25
2600	Head	22.2	1.992	39.374	1.96	39.00	1.63	0.96	±5	2025/11/1
3500	Head	22.8	2.853	37.176	2.91	37.90	-1.96	-1.91	±5	2025/10/21
3500	Head	22.6	2.80	37.5	2.91	37.90	-3.78	-1.06	±5	2025/10/31
3700	Head	22.9	3.009	36.93	3.12	37.70	-3.56	-2.04	±5	2025/10/19
3700	Head	22.3	2.98	37.1	3.12	37.70	-4.49	-1.59	±5	2025/11/2
3900	Head	22.6	3.171	36.698	3.33	37.51	-4.77	-2.16	±5	2025/10/22
3900	Head	22.4	3.17	36.8	3.33	37.51	-4.80	-1.89	±5	2025/10/31
5250	Head	22.7	4.557	34.827	4.71	35.95	-3.25	-3.12	±5	2025/10/27
5250	Head	22.2	4.54	35.1	4.71	35.95	-3.61	-2.36	±5	2025/11/3
5600	Head	22.1	4.941	34.210	5.07	35.50	-2.54	-3.63	±5	2025/10/28
5600	Head	22.4	4.93	34.5	5.07	35.50	-2.76	-2.82	±5	2025/11/4
5800	Head	22.3	5.160	33.877	5.27	35.30	-2.09	-4.03	±5	2025/10/29
5800	Head	22.6	5.14	34.2	5.27	35.30	-2.47	-3.12	±5	2025/11/5
6500	Head	22.4	5.97	33.5	6.07	34.50	-1.65	-2.90	±5	2025/10/26

11.3 System Performance Check Results

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

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2025/10/12	750	Head	250	1099	3282	1437	2.220	8.280	8.88	7.25	1.390	5.370	5.56	3.54
2025/10/15	750	Head	250	1099	3282	1437	2.160	8.280	8.64	4.35	1.360	5.370	5.44	1.30
2025/10/14	835	Head	250	4d162	3282	1437	2.410	9.080	9.64	6.17	1.590	5.850	6.36	8.72
2025/10/16	835	Head	250	4d162	3282	1437	2.190	9.080	8.76	-3.52	1.490	5.850	5.96	1.88
2025/10/13	1750	Head	250	1090	3282	1437	9.760	36.600	39.04	6.67	5.250	19.500	21	7.69
2025/10/18	1750	Head	250	1090	3282	1437	9.170	36.600	36.68	0.22	4.720	19.500	18.88	-3.18
2025/10/17	1900	Head	250	5d182	3282	1437	9.870	39.800	39.48	-0.80	5.150	21.000	20.6	-1.90
2025/10/24	1900	Head	250	5d182	3282	1437	10.000	39.800	40	0.50	5.250	21.000	21	0.00
2025/10/20	2300	Head	250	1055	3282	1437	11.900	48.400	47.6	-1.65	5.650	23.700	22.6	-4.64
2025/10/29	2300	Head	250	1055	3282	1437	12.500	48.400	50	3.31	5.900	23.700	23.6	-0.42
2025/10/23	2450	Head	250	1095	3282	1437	13.300	52.600	53.2	1.14	6.180	24.700	24.72	0.08
2025/10/30	2450	Head	250	1095	3282	1437	12.600	52.600	50.4	-4.18	5.820	24.700	23.28	-5.75
2025/10/25	2600	Head	250	1070	3282	1437	13.200	56.500	52.8	-6.55	5.920	25.200	23.68	-6.03
2025/11/1	2600	Head	250	1070	3282	1437	13.300	56.500	53.2	-5.84	6.120	25.200	24.48	-2.86
2025/10/21	3500	Head	100	1037	7641	1696	6.100	65.400	61	-6.73	2.320	24.700	23.2	-6.07
2025/10/31	3500	Head	100	1037	7641	1696	6.710	65.400	67.1	2.60	2.610	24.700	26.1	5.67
2025/10/19	3700	Head	100	1008	7641	1696	6.800	67.200	68	1.19	2.510	24.400	25.1	2.87
2025/11/2	3700	Head	100	1008	7641	1696	6.620	67.200	66.2	-1.49	2.420	24.400	24.2	-0.82
2025/10/22	3900	Head	100	1022	7641	1696	6.720	70.100	67.2	-4.14	2.250	24.600	22.5	-8.54
2025/10/31	3900	Head	100	1022	7641	1696	6.770	70.100	67.7	-3.42	2.340	24.600	23.4	-4.88
2025/10/27	5250	Head	100	1341	7641	1696	7.590	79.100	75.9	-4.05	2.090	22.400	20.9	-6.70
2025/11/3	5250	Head	100	1341	7641	1696	8.230	79.100	82.3	4.05	2.260	22.400	22.6	0.89
2025/10/28	5600	Head	100	1341	7641	1696	7.840	82.800	78.4	-5.31	2.150	23.800	21.5	-9.66
2025/11/4	5600	Head	100	1341	7641	1696	8.270	82.800	82.7	-0.12	2.330	23.800	23.3	-2.10
2025/10/29	5800	Head	100	1341	7641	1696	8.000	79.900	80	0.13	2.170	22.900	21.7	-5.24
2025/11/5	5800	Head	100	1341	7641	1696	8.360	79.900	83.6	4.63	2.410	22.900	24.1	5.24
2025/10/26	6500	Head	100	1026	7641	1696	28.500	296.000	285	-3.72	5.180	54.800	51.8	-5.47

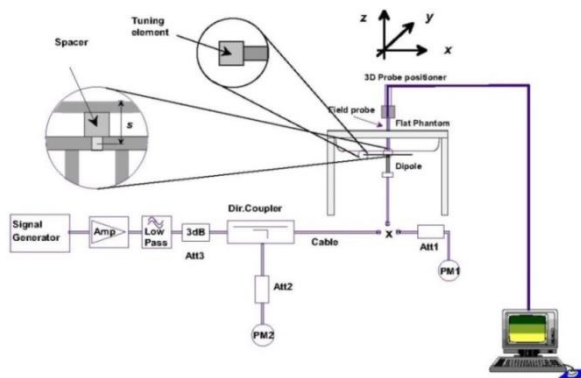


Fig 11.3.1 System Performance Check Setup

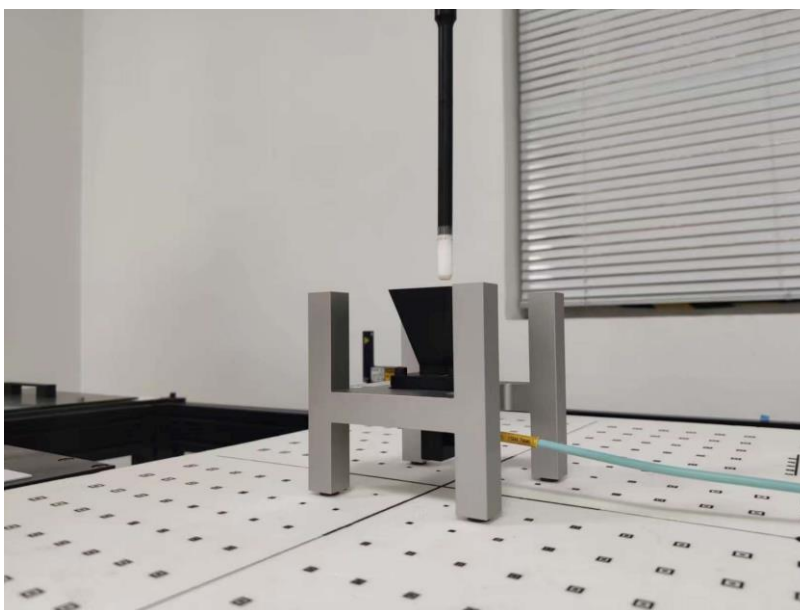


Fig 11.3.2 Setup Photo

11.4 PD System Verification Results

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Prad (mW)	Measured psPDn+ 4 cm ² (W/m ²)	Targeted psPDn+ 4 cm ² (W/m ²)	Deviation (dB)	Measured psPDtot+ 4 cm ² (W/m ²)	Targeted psPDtot+ 4 cm ² (W/m ²)	Deviation (dB)	Measured psPDmod+ 4 cm ² (W/m ²)	Targeted psPDmod+ 4 cm ² (W/m ²)	Deviation (dB)	Date
10	10GHz_2002	9432	1664	10	138	167	166	0.03	168	167	0.03	171	172	-0.03	2025/10/23



System Verification 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.

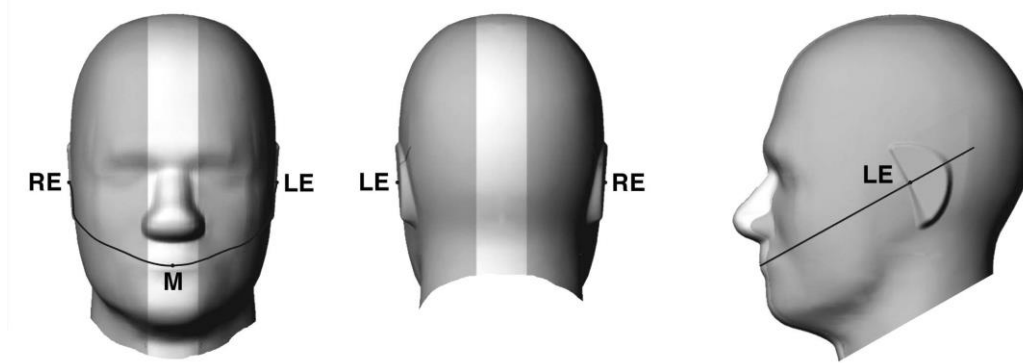


Fig 12.1.1 Front, back, and side views of SAM twin phantom

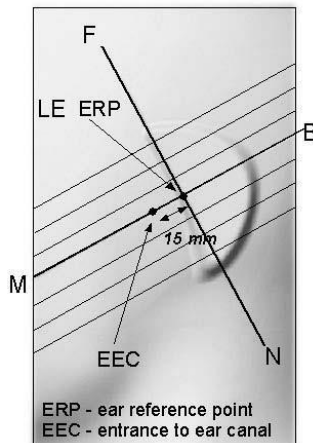


Fig 12.1.2 Close-up side view of phantom showing the ear region.

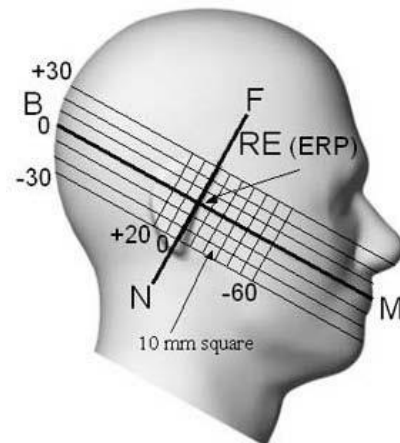


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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 handset. 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.

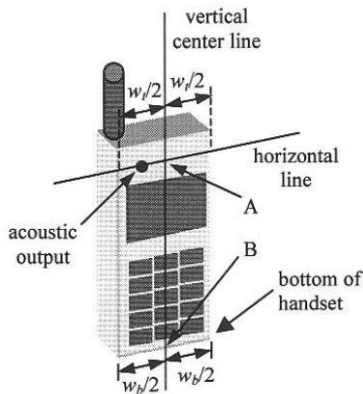


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

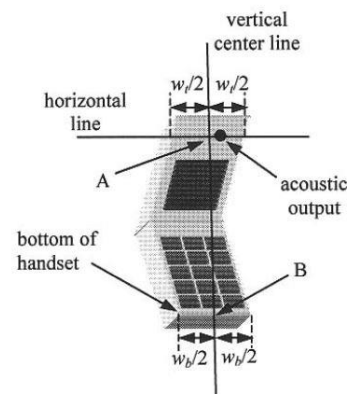


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

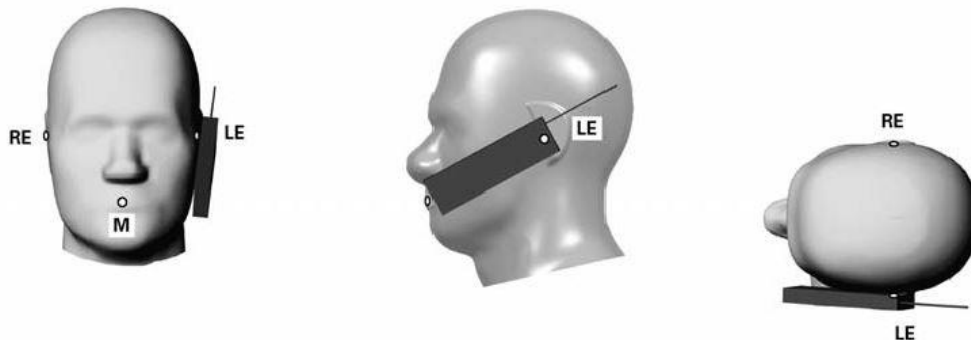


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

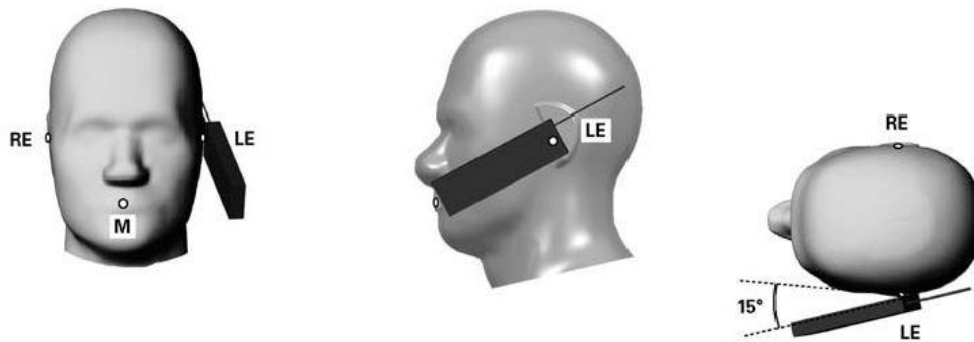


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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 handset 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-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

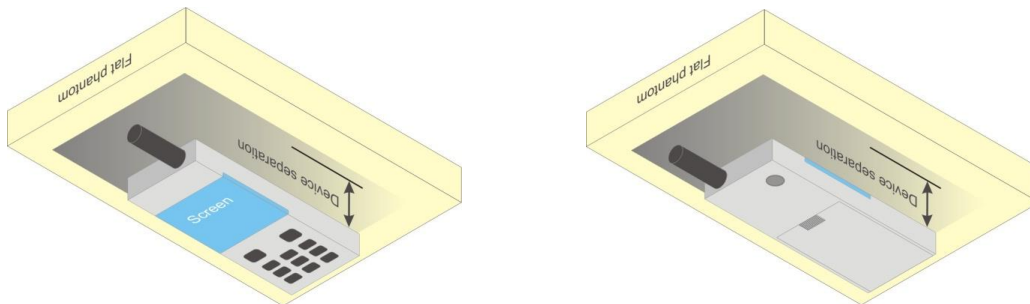


Fig 12.4 Body Worn Position

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 ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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

12.7 Miscellaneous Testing Considerations

- Evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020.
- Per procedures of KDB Pubs. 447498 and 248227, and applicable product-specific procedures among KDB Pubs. 648474 (handsets/phablets).
- Where supported by the test system, also report estimated absorbed (epithelial) power density (for reference purposes only, not specifically for compliance) and estimated incident PD, derived from measured SAR.
- In addition, for the highest SAR test configurations evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method (2 mm closest meas. plane)
 - Adjust measured results per amount that measurement uncertainty exceeds 30 % (see e.g. IEC 62479:2010)

13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. For DTM multi-slot class mode, the device was linked with base station simulator (Agilent E5515C) and transmit maximum power on maximum number of TX slots, i.e. one CS timeslot, and additional PS timeslots (1 for DTM class 5 and 9, 2 for DTM class 11) in one TDMA frame.
2. Agilent E5515C was used to setup the device operated under DTM mode for power measurement and SAR testing. For conducted power, the power of the burst for voice and the power of the bursts for data was reported separately in the table below, and the frame-average power is derived below to determine SAR testing.

$$DTM \text{ frame average power (dBm)} = 10 * \log [\sum (\text{power of each slot, in mW}) / 8]$$

3. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
4. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE / DTM 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.
5. Other configurations of GSM / GPRS / EDGE / DTM 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 Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.
4. 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.

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:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Base Station with following setting * :
 - Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - 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
 - Set Cell Power = -86 dBm
 - Set Channel Type = 12.2k + HSPA
 - Set UE Target Power
 - Power Ctrl Mode= Alternating bits
 - Set and observe the E-TFCI
 - Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- 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} (Note 1)	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 $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

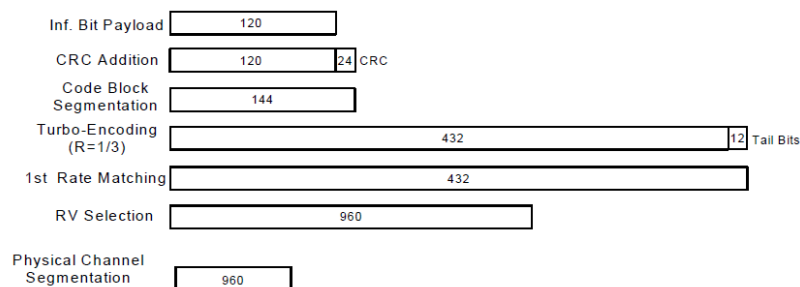


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

1. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.4, quoted from the TS 34.121-1 s5.2E
 - iii. Set Channel Params
 - 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-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
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 (Note 3)	β_d	β_{HS} (Note 1)	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-TFCI (Note 5)	E-TFCI (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: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{fs} = 30/15 * \beta_c$.
 Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
 Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.
 Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
 Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

Setup Configuration

<WCDMA Conducted Power>

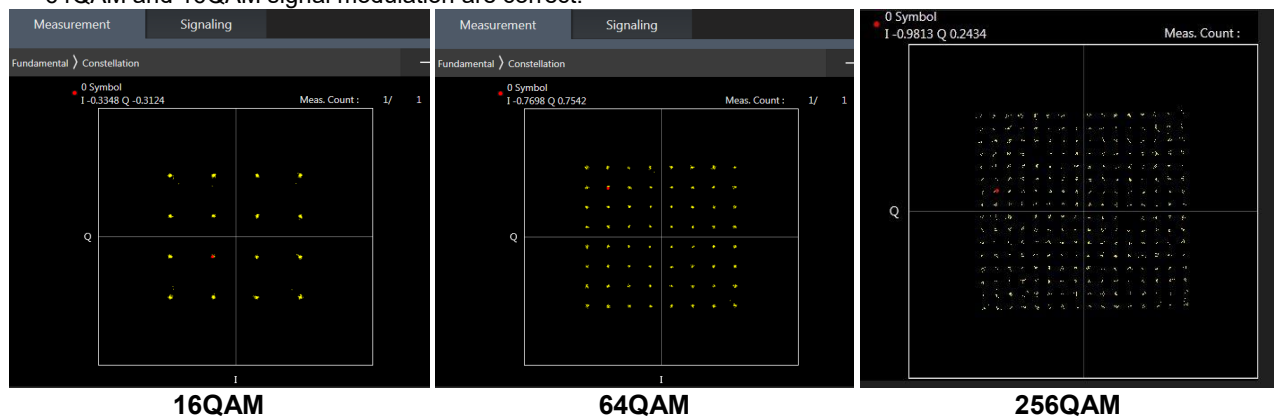
General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA / HSPA+ is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

<LTE Conducted Power>

General Note:

1. Anritsu MT8821C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 /B71 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 B2 / B4 / B5 / B17 SAR test was covered by B25 / B66 / B26 / B12; 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.

- 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- “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
- Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

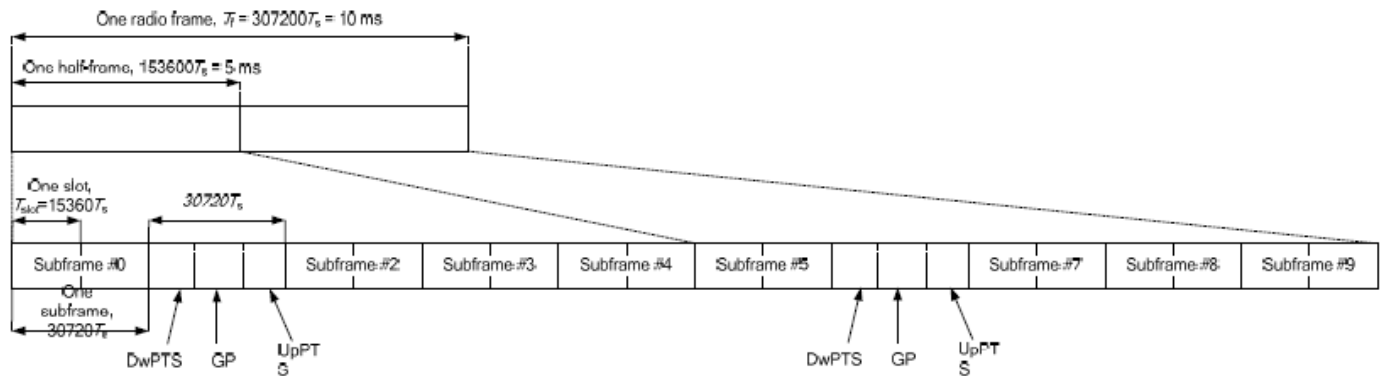


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 2

- Uplink-downlink configuration: 1. In a half-frame consisted of 5 subframes, uplink operation is in 2 uplink subframes and 1 special subframe.
- special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(2+0.167)/5 = 43.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(2+0.143)/5 = 42.9\%$
- For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $43.3\%/42.9\% = 1.009$ is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

For LTE TDD Power class 3

- Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.167)/5 = 63.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.143)/5 = 62.9\%$
- For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

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

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

<LTE Carrier Aggregation>

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

General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
3. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.
4. This device supports LTE carrier aggregation in the downlink. All 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.

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Intra CA	Ant	
CA_7C	Ant 4	Ant 6
CA_12B	Ant 1	Ant 0
CA_66B	Ant 4	Ant 6
CA_66C	Ant 4	Ant 6
CA_38C	Ant 4	Ant 6
CA_41C	Ant 4	Ant 6

<Intra-band>
General Note:

- The device supports intra-band uplink carrier aggregation for LTE B12/66/41/38/7 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.
- 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.
- 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.
- LTE CA_66B test was covered by CA_66C; therefore, SAR was only assessed for CA_66C.

<Inter-band>

LTE Inter CA	Band	Ant	
CA_2A-5A	B2	Ant 5	Ant 0
	B5	Ant 1	Ant 0
CA_2A-7A	B2	Ant 4	Ant 6
	B7	Ant 5	Ant 0
CA_2A-12A	B2	Ant 5	Ant 0
	B12	Ant 1	Ant 0
CA_2A-13A	B2	Ant 5	Ant 0
	B13	Ant 1	Ant 0
CA_2A-71A	B2	Ant 5	Ant 0
	B71	Ant 1	Ant 0
CA_4A-5A	B4	Ant 5	Ant 0
	B5	Ant 1	Ant 0
CA_4A-7A	B4	Ant 4	Ant 6
	B7	Ant 5	Ant 0
CA_4A-12A	B4	Ant 5	Ant 0
	B12	Ant 1	Ant 0
CA_4A-13A	B4	Ant 5	Ant 0
	B13	Ant 1	Ant 0
CA_4A-17A	B4	Ant 5	Ant 0
	B17	Ant 1	Ant 0
CA_4A-71A	B4	Ant 5	Ant 0
	B71	Ant 1	Ant 0
CA_5A-7A	B5	Ant 1	Ant 0
	B7	Ant 5	Ant 0
CA_5A-30A	B5	Ant 1	Ant 0
	B30	Ant 4	Ant 6
CA_5A-66A	B5	Ant 1	Ant 0
	B66	Ant 5	Ant 0
CA_7A-12A	B7	Ant 5	Ant 0
	B12	Ant 1	Ant 0
CA_7A-26A	B7	Ant 5	Ant 0
	B26	Ant 1	Ant 0
CA_7A-66A	B7	Ant 4	Ant 6
	B66	Ant 5	Ant 0
CA_12A-66A	B12	Ant 1	Ant 0
	B66	Ant 5	Ant 0
CA_13A-66A	B13	Ant 1	Ant 0
	B66	Ant 5	Ant 0
CA_66A-71A	B66	Ant 5	Ant 0
	B71	Ant 1	Ant 0

General Note:

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.
3. For LTE inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. Smart Transmit algorithm controls the total RF exposure base on LTE inter CA bands to not exceed FCC limit.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n12/n25 /n38/n41/n48/n66/n71/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n12/n13/n25/n26/n30/n38/n41/n48/n66 /n71/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 test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
5. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
6. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
7. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
8. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
9. 5G NR n41 supports UL MIMO mode, MIMO SAR base on standalone SAR summed together as MIMO SAR.
10. This device supports HPUE for 5G NR n41/n77/n78 with higher power, so HPUE mode was chosen to perform full SAR testing and HPUE SAR can represent power class 3 level SAR.
11. For NR inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two NR bands. Smart Transmit algorithm controls the total RF exposure base on NR inter band ULCA bands to not exceed FCC limit.

<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>

ENDC	Band	Ant			
DC_30A_n2A	B30	Ant 4	Ant 6		
	n2	Ant 5	Ant 0		
DC_4A_n2A	B4	Ant 5	Ant 0		
	n2	Ant 4	Ant 6		
DC_5A_n2A	B5	Ant 1	Ant 0		
	n2	Ant 5	Ant 0		
DC_7A_n2A	B7	Ant 5	Ant 0		
	n2	Ant 4	Ant 6		
DC_12A_n2A	B12	Ant 1	Ant 0		
	n2	Ant 5	Ant 0		
DC_13A_n2A	B13	Ant 1	Ant 0		
	n2	Ant 5	Ant 0		
DC_48A_n2A	B48	Ant 9	Ant 8	Ant 10	Ant 4
	n2	Ant 4	Ant 6		
DC_66A_n2A	B66	Ant 5	Ant 0		
	n2	Ant 4	Ant 6		
DC_71A_n2A	B71	Ant 1	Ant 0		
	n2	Ant 5	Ant 0		
DC_2A_n5A	B2	Ant 5	Ant 0		
	n5	Ant 1	Ant 0		
DC_4A_n5A	B4	Ant 5	Ant 0		
	n5	Ant 1	Ant 0		
DC_7A_n5A	B7	Ant 5	Ant 0		
	n5	Ant 1	Ant 0		
DC_30A_n5A	B30	Ant 4	Ant 6		
	n5	Ant 1	Ant 0		
DC_48A_n5A	B48	Ant 9	Ant 8	Ant 10	Ant 4



	n5	Ant 1	Ant 0		
DC_66A_n5A	B66	Ant 5	Ant 0		
	n5	Ant 1	Ant 0		
DC_2A_n7A	B2	Ant 5	Ant 0		
	n7	Ant 4	Ant 6		
DC_4A_n7A	B4	Ant 5	Ant 0		
	n7	Ant 4	Ant 6		
DC_5A_n7A	B5	Ant 1	Ant 0		
	n7	Ant 5	Ant 0		
DC_12A_n7A	B12	Ant 1	Ant 0		
	n7	Ant 5	Ant 0		
DC_13A_n7A	B13	Ant 1	Ant 0		
	n7	Ant 5	Ant 0		
DC_66A_n7A	B66	Ant 5	Ant 0		
	n7	Ant 4	Ant 6		
DC_71A_n7A	B71	Ant 1	Ant 0		
	n7	Ant 5	Ant 0		
DC_2A_n12A	B2	Ant 5	Ant 0		
	n12	Ant 1	Ant 0		
DC_7A_n12A	B7	Ant 5	Ant 0		
	n12	Ant 1	Ant 0		
DC_66A_n12A	B66	Ant 5	Ant 0		
	n12	Ant 1	Ant 0		
DC_5A_n25A	B5	Ant 1	Ant 0		
	n25	Ant 5	Ant 0		
DC_7A_n25A	B7	Ant 5	Ant 0		
	n25	Ant 4	Ant 6		
DC_12A_n25A	B12	Ant 1	Ant 0		
	n25	Ant 5	Ant 0		
DC_13A_n25A	B13	Ant 1	Ant 0		
	n25	Ant 5	Ant 0		
DC_26A_n25A	B26	Ant 1	Ant 0		
	n25	Ant 5	Ant 0		
DC_66A_n25A	B66	Ant 5	Ant 0		
	n25	Ant 4	Ant 6		
DC_71A_n25A	B71	Ant 1	Ant 0		
	n25	Ant 5	Ant 0		
DC_2A_n38A	B2	Ant 5	Ant 0		
	n38	Ant 4	Ant 6		
DC_4A_n38A	B4	Ant 5	Ant 0		
	n38	Ant 4	Ant 6		
DC_5A_n38A	B5	Ant 1	Ant 0		
	n38	Ant 5	Ant 0		
DC_12A_n38A	B12	Ant 1	Ant 0		
	n38	Ant 5	Ant 0		
DC_66A_n38A	B66	Ant 5	Ant 0		
	n38	Ant 4	Ant 6		
DC_71A_n38A	B71	Ant 1	Ant 0		
	n38	Ant 5	Ant 0		
DC_2A_n41A	B2	Ant 5	Ant 0		
	n41	Ant 4	Ant 6		
DC_4A_n41A	B4	Ant 5	Ant 0		
	n41	Ant 4	Ant 6		
DC_5A_n41A	B5	Ant 1	Ant 0		



	n41	Ant 5	Ant 0		
DC_12A_n41A	B5	Ant 1	Ant 0		
	n41	Ant 5	Ant 0		
DC_25A_n41A	B25	Ant 5	Ant 0		
	n41	Ant 4	Ant 6		
DC_26A_n41A	B26	Ant 1	Ant 0		
	n41	Ant 5	Ant 0		
DC_66A_n41A	B66	Ant 5	Ant 0		
	n41	Ant 4	Ant 6		
DC_71A_n41A	B71	Ant 1	Ant 0		
	n41	Ant 5	Ant 0		
DC_71A_n48A	B71	Ant 1	Ant 0		
	n48	Ant 9	Ant 8	Ant 10	Ant 4
DC_30A_n66A	B30	Ant 4	Ant 6		
	n66	Ant 5	Ant 0		
DC_2A_n66A	B2	Ant 5	Ant 0		
	n66	Ant 4	Ant 6		
DC_5A_n66A	B5	Ant 1	Ant 0		
	n66	Ant 5	Ant 0		
DC_7A_n66A	B7	Ant 5	Ant 0		
	n66	Ant 4	Ant 6		
DC_12A_n66A	B12	Ant 1	Ant 0		
	n66	Ant 5	Ant 0		
DC_13A_n66A	B13	Ant 1	Ant 0		
	n66	Ant 5	Ant 0		
DC_48A_n66A	B48	Ant 9	Ant 8	Ant 10	Ant 4
	n66	Ant 4	Ant 6		
DC_71A_n66A	B71	Ant 1	Ant 0		
	n66	Ant 5	Ant 0		
DC_2A_n71A	B2	Ant 5	Ant 0		
	n71	Ant 1	Ant 0		
DC_7A_n71A	B7	Ant 5	Ant 0		
	n71	Ant 1	Ant 0		
DC_48A_n71A	B48	Ant 9	Ant 8	Ant 10	Ant 4
	n71	Ant 1	Ant 0		
DC_66A_n71A	B66	Ant 5	Ant 0		
	n71	Ant 1	Ant 0		
DC_2A_n77A	B2	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_5A_n77A	B5	Ant 1	Ant 0		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_7A_n77A	B7	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_12A_n77A	B13	Ant 1	Ant 0		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_13A_n77A	B71	Ant 1	Ant 0		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_25A_n77A	B25	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_30A_n77A	B30	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_41A_n77A	B41	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_66A_n77A	B66	Ant 4	Ant 6		



	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_71A_n77A	B71	Ant 1	Ant 0		
	n77	Ant 9	Ant 8	Ant 10	Ant 4
DC_2A_n78A	B2	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_4A_n78A	B4	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_5A_n78A	B5	Ant 1	Ant 0		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_7A_n78A	B7	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_12A_n78A	B12	Ant 1	Ant 0		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_13A_n78A	B13	Ant 1	Ant 0		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_25A_n78A	B25	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_26A_n78A	B26	Ant 1	Ant 0		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_38A_n78A	B38	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_41A_n78A	B41	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_66A_n78A	B66	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4
DC_71A_n78A	B71	Ant 1	Ant 0		
	n78	Ant 9	Ant 8	Ant 10	Ant 4

Inter-Band CA Configuration:

NR Inter CA	Band	Ant				nR Inter CA	Band	Ant			
CA_n2A-n5A	n2	Ant 5	Ant 0			CA_n25A-n41A	n25	Ant 4	Ant 6		
	n5	Ant 1	Ant 0				n41	Ant 5	Ant 0		
CA_n2A-n41A	n2	Ant 4	Ant 6			CA_n25A-n66A	n25	Ant 4	Ant 6		
	n41	Ant 5	Ant 0				n66	Ant 5	Ant 0		
CA_n2A-n66A	n2	Ant 4	Ant 6			CA_n25A-n71A	n25	Ant 5	Ant 0		
	n66	Ant 5	Ant 0				n71	Ant 1	Ant 0		
CA_n2A-n71A	n2	Ant 5	Ant 0			CA_n25A-n77A	n25	Ant 4	Ant 6		
	n71	Ant 1	Ant 0				n77	Ant 9	Ant 8	Ant 10	Ant 4
CA_n2A-n77A	n2	Ant 4	Ant 6			CA_n25A-n78A	n25	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4		n78	Ant 9	Ant 8	Ant 10	Ant 4
CA_n2A-n78A	n2	Ant 4	Ant 6			CA_n30A-n77A	n30	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4		n77	Ant 9	Ant 8	Ant 10	Ant 4
CA_n5A-n7A	n5	Ant 1	Ant 0			CA_n38A-n66A	n38	Ant 4	Ant 6		
	n7	Ant 5	Ant 0				n66	Ant 5	Ant 0		
CA_n5A-n66A	n5	Ant 1	Ant 0			CA_n38A-n71A	n38	Ant 5	Ant 0		
	n66	Ant 5	Ant 0				n71	Ant 1	Ant 0		
CA_n5A-n77A	n5	Ant 1	Ant 0			CA_n38A-n78A	n38	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4		n78	Ant 9	Ant 8	Ant 10	Ant 4
CA_n5A-n78A	n5	Ant 1	Ant 0			CA_n41A-n66A	n41	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4		n66	Ant 5	Ant 0		
CA_n7A-n66A	n7	Ant 4	Ant 6			CA_n41A-n71A	n41	Ant 5	Ant 0		
	n66	Ant 5	Ant 0				n71	Ant 1	Ant 0		
CA_n7A-n77A	n7	Ant 4	Ant 6			CA_n41A-n77A	n41	Ant 4	Ant 6		

	n77	Ant 9	Ant 8	Ant 10	Ant 4		n77	Ant 9	Ant 8	Ant 10	Ant 4
CA_n7A-n78A	n7	Ant 4	Ant 6			CA_n41A-n78A	n41	Ant 4	Ant 6		
	n78	Ant 9	Ant 8	Ant 10	Ant 4		n78	Ant 9	Ant 8	Ant 10	Ant 4
CA_n12A-n25A	n12	Ant 1	Ant 0			CA_n66A-n71A	n66	Ant 5	Ant 0		
	n25	Ant 5	Ant 0				n71	Ant 1	Ant 0		
CA_n12A-n77A	n12	Ant 1	Ant 0			CA_n66A-n77A	n66	Ant 4	Ant 6		
	n77	Ant 9	Ant 8	Ant 10	Ant 4		n77	Ant 9	Ant 8	Ant 10	Ant 4
CA_n13A-n66A	n13	Ant 1	Ant 0			CA_n66A-n78A	n66	Ant 4	Ant 6		
	n66	Ant 5	Ant 0				n78	Ant 9	Ant 8	Ant 10	Ant 4
CA_n13A-n77A	n13	Ant 1	Ant 0			CA_n71A-n77A	n71	Ant 1	Ant 0		
	n77	Ant 9	Ant 8	Ant 10	Ant 4		n77	Ant 9	Ant 8	Ant 10	Ant 4
CA_n25A-n38A	n25	Ant 4	Ant 6			CA_n71A-n78A	n71	Ant 1	Ant 0		
	n38	Ant 5	Ant 0				n78	Ant 9	Ant 8	Ant 10	Ant 4

Intra -Band CA Configuration:

Intra CA	Ant			
CA_n41C	Ant 4	Ant 6		
CA_n77C	Ant 9	Ant 8	Ant 10	Ant 4

NR UL MIMO Bands Configuration:

Band	Antenna Tx			
FR1 n41	Ant 4+0	Ant 4+5	Ant 6+0	Ant 6+5

<WLAN Conducted Power>

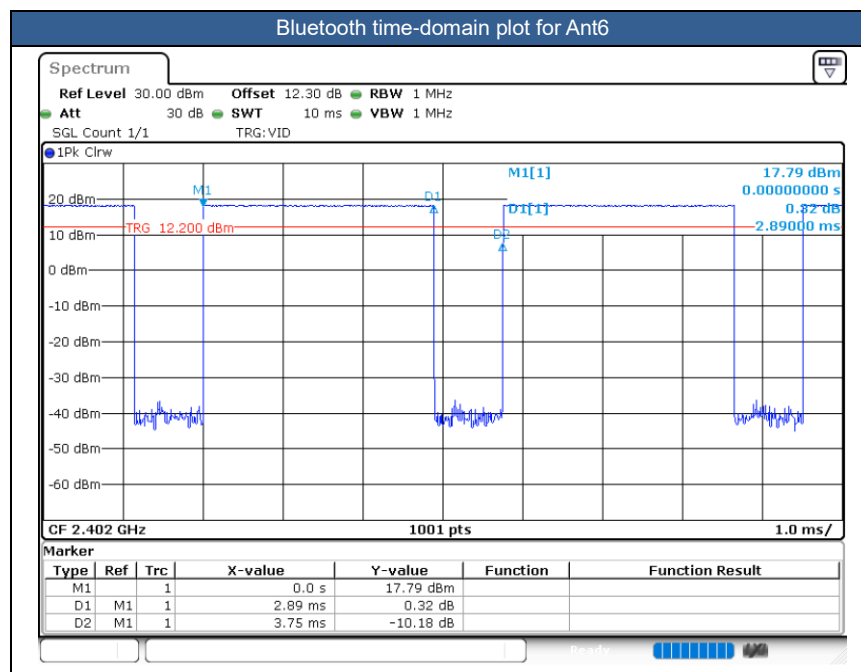
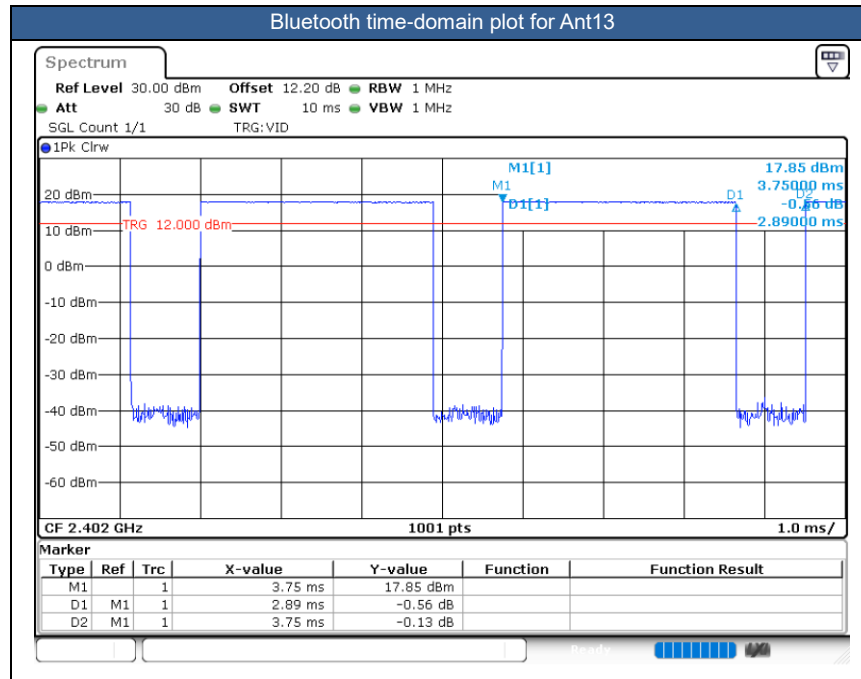
General Note:

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/be 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. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode.
8. SISO and MIMO all supported by WLAN6GHz, 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.
9. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, due to RF power in SISO mode is larger or equal to per single antenna RF power in MIMO mode, and for RF exposure assessment of MIMO mode simultaneous transmission exclusion analysis was performed with SAR test results of each antenna in SISO mode. And additional MIMO mode was chosen to perform SAR testing;
10. 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 77.07% as following figure, for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 77.6%, therefore the actual duty cycle will be scaled up to 77.6% 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 77.6% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *77.6%".
 - 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.
 - g. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements receiver detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
6. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of WLAN 5.2GHz 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. For 6GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is >16 cm.
 - d. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
7. 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).
8. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
9. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.

10. Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors.
11. Per October 2020 TCB Workshop Interim procedures, start instead with a minimum of 5 test channels across the full band, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub. 248227 v02r02.
12. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
13. For testing the WLAN 6GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WLAN 6GHz Bands. For the U-NII-5/U-NII-7 band supporting Standard AP mode and indoor Client mode, the higher output mode was measured among the selected channels.
14. Per October 2022 TCB Workshop, IPD and SAR test frequencies for 5.85-7.125 GHz portable devices, continue with adapt and apply conducted power-based channel picks and test reduction procedures of KDB 248227 (v02r02), also in case of 320 MHz (pre-802.11be).
15. The following table "n/a" in the result means the SAR cube is too small to be detected.

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 / DTM are considered as secondary modes. Both primary and secondary modes must be in the same frequency band. 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 or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, 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 ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+ , and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17/ B26 / B38 / B71 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 B2 / B4 / B5 / B17 SAR test was covered by B25 / B66 / B26 / B12; 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 n2/n5/n7/n12/n25/n26/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. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

Power Density General Notes:

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements.
3. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
4. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
7. Per April 2021 TCB Workshop and KDB 388624 D02v18r08, For the highest SAR test configurations also measure incident PD (total) using power-density reconstruction method in 2 mm closest measurement plane.
8. Per October 2020 TCB Workshop, PTP-PR algorithm was used during psPD measurement and calculations.
9. Since this device is considered a phablet and there is no different PD limit on different exposure conditions, therefore select highest phablet SAR at 0 mm test distance and configurations evaluate power density. Since there is no different PD limit on different exposure conditions, therefore the PD test was performed of a 2mm separation between Probe sensor and EUT surface to cover r all exposure conditions of phablet.
10. The measurement procedure consists of measuring the PD_{inc} at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPD_n fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

$$10 \cdot \log_{10} \frac{iPD_n(2mm)}{iPD_n(\lambda/5)} \geq -1$$

DSI status description:

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

This WWAN/WLAN/BT bands enabled with Qualcomm Smart Transmit feature which located at chapter 5. The default power is P_{max} power, When P_{limit} power higher than P_{max} power, the output power will be limited at P_{max}, and so the SAR will use P_{max} power to do the testing.

Exposure Condition	DSI	Trigger Conditions
Head SAR- Standalone	DSI 5	Receiver on
Hotspot /Body worn/Extremity SAR - Standalone	DSI 4	Receiver Off



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)
750MHz																				
01	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 5	133297	680.5	24.18	24.30	1.028	-	-	0.17	0.096	0.099
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 5	133297	680.5	24.18	24.30	1.028	-	-	-0.03	0.061	0.063
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 5	133297	680.5	24.18	24.30	1.028	-	-	0.01	0.088	0.090
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 5	133297	680.5	24.18	24.30	1.028	-	-	-0.10	0.052	0.053
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 5	133297	680.5	22.87	23.30	1.104	-	-	-0.17	0.075	0.083
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 5	133297	680.5	22.87	23.30	1.104	-	-	0.15	0.047	0.052
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 5	133297	680.5	22.87	23.30	1.104	-	-	0.12	0.069	0.076
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 5	133297	680.5	22.87	23.30	1.104	-	-	-	n/a	n/a
	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	133297	680.5	23.33	23.40	1.016	-	-	-0.18	0.250	0.254
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	133297	680.5	23.33	23.40	1.016	-	-	-0.06	0.050	0.051
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	133297	680.5	23.33	23.40	1.016	-	-	0.13	0.439	0.446
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	133297	680.5	23.33	23.40	1.016	-	-	0.13	0.074	0.075
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	133297	680.5	22.26	22.40	1.033	-	-	-0.06	0.213	0.220
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	133297	680.5	22.26	22.40	1.033	-	-	-	n/a	n/a
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	133297	680.5	22.26	22.40	1.033	-	-	0.00	0.391	0.404
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	133297	680.5	22.26	22.40	1.033	-	-	-0.15	0.057	0.059
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 5	23095	707.5	23.79	24.30	1.125	-	-	0.17	0.065	0.073
	LTE Band 12B	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 5	23048+23120	702.8+710	23.68	23.80	1.028	-	-	0.10	0.054	0.056
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 5	23095	707.5	23.79	24.30	1.125	-	-	-	n/a	n/a
02	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 5	23095	707.5	23.79	24.30	1.125	-	-	0.08	0.045	0.051
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 5	23095	707.5	23.79	24.30	1.125	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 5	23095	707.5	22.82	23.30	1.117	-	-	0.14	0.060	0.067
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 5	23095	707.5	22.82	23.30	1.117	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 5	23095	707.5	22.82	23.30	1.117	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 5	23095	707.5	22.82	23.30	1.117	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	23095	707.5	22.97	23.40	1.104	-	-	-0.14	0.255	0.282
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	23095	707.5	22.97	23.40	1.104	-	-	-0.18	0.052	0.057
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	23095	707.5	22.97	23.40	1.104	-	-	0.03	0.452	0.499
	LTE Band 12B	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	23048+23120	702.8+710	22.71	22.90	1.045	-	-	-0.18	0.412	0.431
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	23095	707.5	22.97	23.40	1.104	-	-	0.03	0.069	0.076
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 5	23095	707.5	21.94	22.40	1.112	-	-	0.13	0.211	0.235
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 5	23095	707.5	21.94	22.40	1.112	-	-	0.07	0.043	0.048
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 5	23095	707.5	21.94	22.40	1.112	-	-	-0.07	0.380	0.423
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 5	23095	707.5	21.94	22.40	1.112	-	-	0.04	0.059	0.066
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 5	23230	782	23.70	24.80	1.288	-	-	-0.18	0.232	0.299
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 5	23230	782	23.70	24.80	1.288	-	-	-0.18	0.111	0.143
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 5	23230	782	23.70	24.80	1.288	-	-	0.13	0.105	0.135
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 5	23230	782	23.70	24.80	1.288	-	-	0.19	0.089	0.115
03	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 5	23230	782	22.68	23.80	1.294	-	-	0.01	0.184	0.238
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 5	23230	782	22.68	23.80	1.294	-	-	0.00	0.085	0.110
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 5	23230	782	22.68	23.80	1.294	-	-	0.19	0.085	0.110
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 5	23230	782	22.68	23.80	1.294	-	-	0.14	0.068	0.088
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	23230	782	22.95	23.90	1.245	-	-	0.16	0.233	0.290
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	23230	782	22.95	23.90	1.245	-	-	0.09	0.056	0.070
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	23230	782	22.95	23.90	1.245	-	-	-0.11	0.475	0.591
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	23230	782	22.95	23.90	1.245	-	-	-0.19	0.084	0.105
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 5	23230	782	21.90	22.90	1.259	-	-	-0.09	0.190	0.239
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 5	23230	782	21.90	22.90	1.259	-	-	0.08	0.045	0.057
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 5	23230	782	21.90	22.90	1.259	-	-	0.17	0.385	0.485



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 5	23230	782	21.90	22.90	1.259	-	-	-0.07	0.064	0.081
	FR1 n71	20M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	136100	680.5	23.88	24.70	1.208	-	-	-0.11	0.110	0.133
	FR1 n71	20M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	136100	680.5	23.88	24.70	1.208	-	-	0.08	0.063	0.076
	FR1 n71	20M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	136100	680.5	23.88	24.70	1.208	-	-	0.04	0.099	0.120
	FR1 n71	20M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	136100	680.5	23.88	24.70	1.208	-	-	-0.17	0.052	0.063
	FR1 n71	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	136100	680.5	23.86	24.70	1.213	-	-	-0.11	0.083	0.101
	FR1 n71	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	136100	680.5	23.86	24.70	1.213	-	-	-0.11	0.052	0.063
	FR1 n71	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	136100	680.5	23.86	24.70	1.213	-	-	0.00	0.076	0.092
	FR1 n71	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	136100	680.5	23.86	24.70	1.213	-	-	-	n/a	n/a
	FR1 n71	20M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	136100	680.5	23.09	23.80	1.178	-	-	0.16	0.275	0.324
	FR1 n71	20M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	136100	680.5	23.09	23.80	1.178	-	-	-0.18	0.055	0.065
04	FR1 n71	20M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	136100	680.5	23.09	23.80	1.178	-	-	-0.09	0.500	0.589
	FR1 n71	20M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	136100	680.5	23.09	23.80	1.178	-	-	-0.18	0.081	0.095
	FR1 n71	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	136100	680.5	23.07	23.80	1.183	-	-	0.10	0.234	0.277
	FR1 n71	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	136100	680.5	23.07	23.80	1.183	-	-	-	n/a	n/a
	FR1 n71	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	136100	680.5	23.07	23.80	1.183	-	-	-0.06	0.430	0.509
	FR1 n71	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	136100	680.5	23.07	23.80	1.183	-	-	-0.18	0.063	0.075
	FR1 n12	15M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	141500	707.5	24.12	24.70	1.143	-	-	0.07	0.072	0.082
	FR1 n12	15M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	141500	707.5	24.12	24.70	1.143	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	141500	707.5	24.12	24.70	1.143	-	-	-0.09	0.050	0.057
	FR1 n12	15M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	141500	707.5	24.12	24.70	1.143	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	36	22	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	141500	707.5	23.82	24.70	1.225	-	-	0.17	0.066	0.081
	FR1 n12	15M	QPSK	36	22	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	141500	707.5	23.82	24.70	1.225	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	36	22	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	141500	707.5	23.82	24.70	1.225	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	36	22	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	141500	707.5	23.82	24.70	1.225	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	141500	707.5	23.09	23.80	1.178	-	-	0.06	0.268	0.316
	FR1 n12	15M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	141500	707.5	23.09	23.80	1.178	-	-	0.11	0.057	0.067
05	FR1 n12	15M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	141500	707.5	23.09	23.80	1.178	-	-	-0.01	0.478	0.563
	FR1 n12	15M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	141500	707.5	23.09	23.80	1.178	-	-	-0.11	0.076	0.090
	FR1 n12	15M	QPSK	36	22	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	141500	707.5	22.89	23.80	1.233	-	-	-0.15	0.232	0.286
	FR1 n12	15M	QPSK	36	22	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	141500	707.5	22.89	23.80	1.233	-	-	-0.10	0.047	0.058
	FR1 n12	15M	QPSK	36	22	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	141500	707.5	22.89	23.80	1.233	-	-	-0.09	0.399	0.492
	FR1 n12	15M	QPSK	36	22	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	141500	707.5	22.89	23.80	1.233	-	-	0.02	0.065	0.080
	FR1 n13	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	156400	782	23.98	25.20	1.324	-	-	-0.07	0.255	0.338
	FR1 n13	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	156400	782	23.98	25.20	1.324	-	-	-0.07	0.122	0.162
	FR1 n13	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	156400	782	23.98	25.20	1.324	-	-	0.15	0.116	0.154
	FR1 n13	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	156400	782	23.98	25.20	1.324	-	-	-0.19	0.098	0.130
	FR1 n13	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	156400	782	23.52	25.20	1.472	-	-	-0.07	0.202	0.297
	FR1 n13	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	156400	782	23.52	25.20	1.472	-	-	0.05	0.094	0.138
	FR1 n13	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	156400	782	23.52	25.20	1.472	-	-	-0.11	0.094	0.138
	FR1 n13	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	156400	782	23.52	25.20	1.472	-	-	0.10	0.075	0.110
	FR1 n13	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	156400	782	22.82	24.30	1.406	-	-	-0.09	0.245	0.344
	FR1 n13	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	156400	782	22.82	24.30	1.406	-	-	-0.18	0.062	0.087
06	FR1 n13	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	156400	782	22.82	24.30	1.406	-	-	-0.08	0.521	0.733
	FR1 n13	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	156400	782	22.82	24.30	1.406	-	-	0.14	0.092	0.129
	FR1 n13	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	156400	782	22.63	24.30	1.469	-	-	-0.07	0.209	0.307
	FR1 n13	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	156400	782	22.63	24.30	1.469	-	-	0.18	0.050	0.073
	FR1 n13	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	156400	782	22.63	24.30	1.469	-	-	-0.03	0.404	0.593
	FR1 n13	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	156400	782	22.63	24.30	1.469	-	-	-0.10	0.070	0.103
835MHz																				
07	GSM850	-	-	-	-	GPRS (4Tx slots)	Right Cheek	0mm	Ant 1	DSI 5	189	836.4	26.82	28.50	1.472	-	-	-0.04	0.242	0.356
	GSM850	-	-	-	-	GPRS (4Tx slots)	Right Tilted	0mm	Ant 1	DSI 5	189	836.4	26.82	28.50	1.472	-	-	0.17	0.148	0.218
	GSM850	-	-	-	-	GPRS (4Tx slots)	Left Cheek	0mm	Ant 1	DSI 5	189	836.4	26.82	28.50	1.472	-	-	-0.11	0.144	0.212
	GSM850	-	-	-	-	GPRS (4Tx slots)	Left Tilted	0mm	Ant 1	DSI 5	189	836.4	26.82	28.50	1.472	-	-	0.05	0.084	0.124
	GSM850	-	-	-	-	DTM Multi-slot class 9	Right Cheek	0mm	Ant 1	DSI 5	189	836.4	23.70	24.98	1.341	-	-	-0.18	0.215	0.288
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 5	4182	836.4	24.36	25.00	1.159	-	-	-0.10	0.368	0.427



FCC SAR Test Report

Report No. : FA5O1021

	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 5	4182	836.4	24.36	25.00	1.159	-	-	0.08	0.138	0.160
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 5	4182	836.4	24.36	25.00	1.159	-	-	0.07	0.142	0.165
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 5	4182	836.4	24.36	25.00	1.159	-	-	-0.11	0.092	0.107
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 5	4182	836.4	23.52	24.10	1.143	-	-	0.05	0.254	0.290
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 5	4182	836.4	23.52	24.10	1.143	-	-	-0.03	0.051	0.058
08	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 5	4182	836.4	23.52	24.10	1.143	-	-	0.05	0.494	0.565
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 5	4182	836.4	23.52	24.10	1.143	-	-	0.13	0.059	0.067
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 5	26865	831.5	24.39	25.00	1.151	-	-	-0.14	0.300	0.345
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 5	26865	831.5	24.39	25.00	1.151	-	-	0.12	0.116	0.134
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 5	26865	831.5	24.39	25.00	1.151	-	-	-0.06	0.108	0.124
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 5	26865	831.5	24.39	25.00	1.151	-	-	-0.15	0.074	0.085
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 5	26865	831.5	23.30	24.00	1.175	-	-	0.15	0.270	0.317
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 5	26865	831.5	23.30	24.00	1.175	-	-	0.00	0.101	0.119
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 5	26865	831.5	23.30	24.00	1.175	-	-	0.16	0.095	0.112
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 5	26865	831.5	23.30	24.00	1.175	-	-	-0.02	0.066	0.078
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	26865	831.5	23.50	24.10	1.148	-	-	0.05	0.210	0.241
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	26865	831.5	23.50	24.10	1.148	-	-	-	n/a	n/a
09	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	26865	831.5	23.50	24.10	1.148	-	-	-0.16	0.374	0.429
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	26865	831.5	23.50	24.10	1.148	-	-	0.06	0.051	0.059
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 5	26865	831.5	22.48	23.10	1.153	-	-	-0.04	0.177	0.204
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 5	26865	831.5	22.48	23.10	1.153	-	-	-	n/a	n/a
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 5	26865	831.5	22.48	23.10	1.153	-	-	-0.09	0.329	0.379
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 5	26865	831.5	22.48	23.10	1.153	-	-	0.07	0.046	0.053
	FR1 n26	20M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	166300	831.5	24.51	25.20	1.172	-	-	-0.14	0.264	0.309
	FR1 n26	20M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	166300	831.5	24.51	25.20	1.172	-	-	-0.03	0.096	0.113
	FR1 n26	20M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	166300	831.5	24.51	25.20	1.172	-	-	-0.13	0.100	0.117
	FR1 n26	20M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	166300	831.5	24.51	25.20	1.172	-	-	-0.18	0.065	0.076
	FR1 n26	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 1	DSI 5	166300	831.5	24.32	25.20	1.225	-	-	-0.16	0.352	0.431
	FR1 n26	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 1	DSI 5	166300	831.5	24.32	25.20	1.225	-	-	-0.12	0.118	0.145
	FR1 n26	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 1	DSI 5	166300	831.5	24.32	25.20	1.225	-	-	-0.19	0.135	0.165
	FR1 n26	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 1	DSI 5	166300	831.5	24.32	25.20	1.225	-	-	-0.03	0.082	0.100
	FR1 n26	20M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	166300	831.5	23.45	24.30	1.216	-	-	0.18	0.187	0.227
	FR1 n26	20M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	166300	831.5	23.45	24.30	1.216	-	-	-	n/a	n/a
	FR1 n26	20M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	166300	831.5	23.45	24.30	1.216	-	-	0.05	0.346	0.421
	FR1 n26	20M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	166300	831.5	23.45	24.30	1.216	-	-	-0.18	0.042	0.051
	FR1 n26	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	166300	831.5	23.36	24.30	1.242	-	-	-0.02	0.218	0.271
	FR1 n26	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	166300	831.5	23.36	24.30	1.242	-	-	-0.05	0.043	0.053
10	FR1 n26	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	166300	831.5	23.36	24.30	1.242	-	-	-0.17	0.433	0.538
	FR1 n26	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	166300	831.5	23.36	24.30	1.242	-	-	-0.13	0.052	0.065
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	1413	1732.6	18.00	18.50	1.122	-	-	-0.02	0.819	0.919
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 4	DSI 5	1413	1732.6	18.00	18.50	1.122	-	-	0.14	0.760	0.853
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 4	DSI 5	1413	1732.6	18.00	18.50	1.122	-	-	0.09	0.454	0.509
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 4	DSI 5	1413	1732.6	18.00	18.50	1.122	-	-	0.19	0.541	0.607
11	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	1312	1712.4	17.88	18.50	1.153	-	-	-0.02	0.822	0.948
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	1513	1752.6	17.95	18.50	1.135	-	-	-0.13	0.806	0.915
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 4	DSI 5	1312	1712.4	17.88	18.50	1.153	-	-	-0.01	0.780	0.899
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 4	DSI 5	1513	1752.6	17.95	18.50	1.135	-	-	-0.18	0.778	0.883
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 6	DSI 5	1413	1732.6	15.68	16.50	1.208	-	-	0.04	0.340	0.411
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 6	DSI 5	1413	1732.6	15.68	16.50	1.208	-	-	-0.16	0.062	0.075
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 6	DSI 5	1413	1732.6	15.68	16.50	1.208	-	-	-0.18	0.637	0.769
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 6	DSI 5	1413	1732.6	15.68	16.50	1.208	-	-	-0.01	0.117	0.141
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	132322	1745	17.82	18.50	1.169	-	-	-0.08	0.765	0.894
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	132322	1745	17.82	18.50	1.169	-	-	0.19	0.689	0.805
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	132322	1745	17.82	18.50	1.169	-	-	-0.17	0.390	0.456
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	132322	1745	17.82	18.50	1.169	-	-	-0.16	0.458	0.535



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	132072	1720	17.80	18.50	1.175	-	-	0.16	0.720	0.846
12	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	132572	1770	17.77	18.50	1.183	-	-	0.05	0.782	0.925
	LTE Band 66C	20M	QPSK	1	0		Right Cheek	0mm	Ant 4	DSI 5	132322+ 132520	1745+ 1764.8	17.66	18.50	1.213	-	-	-0.01	0.654	0.793
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	132072	1720	17.80	18.50	1.175	-	-	-0.05	0.681	0.800
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	132572	1770	17.77	18.50	1.183	-	-	0.11	0.690	0.816
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	132322	1745	17.74	18.50	1.191	-	-	-0.03	0.765	0.911
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	132322	1745	17.74	18.50	1.191	-	-	0.16	0.695	0.828
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	132322	1745	17.74	18.50	1.191	-	-	-0.14	0.396	0.472
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	132322	1745	17.74	18.50	1.191	-	-	0.05	0.483	0.575
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	132072	1720	17.73	18.50	1.194	-	-	0.18	0.762	0.910
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	132572	1770	17.73	18.50	1.194	-	-	-0.08	0.769	0.918
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	132072	1720	17.73	18.50	1.194	-	-	0.06	0.710	0.848
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	132572	1770	17.73	18.50	1.194	-	-	-0.06	0.698	0.833
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	DSI 5	132322	1745	17.71	18.50	1.199	-	-	-0.14	0.756	0.906
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	DSI 5	132322	1745	17.71	18.50	1.199	-	-	-0.07	0.710	0.851
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	132322	1745	15.71	16.50	1.199	-	-	0.03	0.324	0.388
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	132322	1745	15.71	16.50	1.199	-	-	-0.17	0.061	0.073
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	132322	1745	15.71	16.50	1.199	-	-	0.18	0.593	0.711
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	132322	1745	15.71	16.50	1.199	-	-	-0.09	0.109	0.131
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	132322	1745	15.70	16.50	1.202	-	-	-0.12	0.321	0.386
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 5	132322	1745	15.70	16.50	1.202	-	-	0.13	0.061	0.073
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	132322	1745	15.70	16.50	1.202	-	-	0.04	0.634	0.762
	LTE Band 66C	20M	QPSK	1	0		Left Cheek	0mm	Ant 6	DSI 5	132322+ 132520	1745+ 1764.8	15.69	16.50	1.205	-	-	-0.12	0.548	0.660
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 5	132322	1745	15.70	16.50	1.202	-	-	0.17	0.111	0.133
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 5	132322	1745	20.74	21.50	1.191	-	-	0.11	0.053	0.063
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 5	132322	1745	20.74	21.50	1.191	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 5	132322	1745	20.74	21.50	1.191	-	-	-0.05	0.068	0.081
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 5	132322	1745	20.74	21.50	1.191	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 5	132322	1745	20.70	21.50	1.202	-	-	-0.16	0.053	0.064
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 5	132322	1745	20.70	21.50	1.202	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	132322	1745	20.70	21.50	1.202	-	-	-0.10	0.074	0.089
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 5	132322	1745	20.70	21.50	1.202	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	132322	1745	16.78	17.30	1.127	-	-	-0.19	0.733	0.826
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	132322	1745	16.78	17.30	1.127	-	-	0.04	0.140	0.158
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	132322	1745	16.78	17.30	1.127	-	-	-0.16	0.491	0.553
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	132322	1745	16.78	17.30	1.127	-	-	-0.03	0.096	0.108
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	132072	1720	16.72	17.30	1.143	-	-	0.16	0.723	0.826
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	132572	1770	16.70	17.30	1.148	-	-	-0.19	0.723	0.830
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	132322	1745	16.74	17.30	1.138	-	-	-0.09	0.702	0.799
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	132322	1745	16.74	17.30	1.138	-	-	-0.19	0.141	0.160
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	132322	1745	16.74	17.30	1.138	-	-	0.13	0.489	0.556
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	132322	1745	16.74	17.30	1.138	-	-	-0.16	0.088	0.100
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	132072	1720	16.70	17.30	1.148	-	-	-0.13	0.711	0.816
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	132572	1770	16.64	17.30	1.164	-	-	-0.16	0.710	0.826
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 0	DSI 5	132322	1745	16.72	17.30	1.143	-	-	0.06	0.712	0.814
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	349000	1745	17.62	18.70	1.282	-	-	-0.19	0.823	1.055
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	349000	1745	17.62	18.70	1.282	-	-	-0.09	0.744	0.954
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	349000	1745	17.62	18.70	1.282	-	-	-0.07	0.421	0.540
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	349000	1745	17.62	18.70	1.282	-	-	0.02	0.495	0.635
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	-0.19	0.826	1.074
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	0.10	0.748	0.972
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	-0.11	0.447	0.581
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	-0.06	0.531	0.690
	FR1 n66	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	349000	1745	17.50	18.70	1.318	-	-	-0.13	0.808	1.065
	FR1 n66	40M	QPSK	216	0	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	349000	1745	17.50	18.70	1.318	-	-	0.14	0.737	0.971
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	349000	1745	15.54	16.70	1.306	-	-	-0.19	0.350	0.457



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	349000	1745	15.54	16.70	1.306	-	-	-0.06	0.066	0.086
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	349000	1745	15.54	16.70	1.306	-	-	-0.05	0.621	0.811
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	349000	1745	15.54	16.70	1.306	-	-	-0.08	0.118	0.154
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	349000	1745	15.46	16.70	1.330	-	-	0.05	0.347	0.462
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	349000	1745	15.46	16.70	1.330	-	-	-0.09	0.066	0.088
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	349000	1745	15.46	16.70	1.330	-	-	-0.08	0.712	0.947
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	349000	1745	15.46	16.70	1.330	-	-	0.15	0.120	0.160
	FR1 n66	40M	QPSK	216	0	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	349000	1745	15.45	16.70	1.334	-	-	-0.08	0.683	0.911
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	349000	1745	20.79	21.70	1.233	-	-	-0.13	0.057	0.070
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	349000	1745	20.79	21.70	1.233	-	-	-	n/a	n/a
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	349000	1745	20.79	21.70	1.233	-	-	-0.04	0.073	0.090
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	349000	1745	20.79	21.70	1.233	-	-	-	n/a	n/a
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	349000	1745	20.74	21.70	1.247	-	-	0.06	0.057	0.071
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	349000	1745	20.74	21.70	1.247	-	-	-	n/a	n/a
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	349000	1745	20.74	21.70	1.247	-	-	0.12	0.080	0.100
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	349000	1745	20.74	21.70	1.247	-	-	-	n/a	n/a
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	349000	1745	15.87	17.20	1.358	-	-	-0.11	0.792	1.076
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	349000	1745	15.87	17.20	1.358	-	-	0.12	0.151	0.205
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	349000	1745	15.87	17.20	1.358	-	-	-0.10	0.530	0.720
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	349000	1745	15.87	17.20	1.358	-	-	0.10	0.104	0.141
13	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	349000	1745	15.81	17.20	1.377	-	-	0.06	0.808	1.113
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	349000	1745	15.81	17.20	1.377	-	-	-0.10	0.152	0.209
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	349000	1745	15.81	17.20	1.377	-	-	-0.16	0.528	0.727
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	349000	1745	15.81	17.20	1.377	-	-	-0.18	0.095	0.131
	FR1 n66	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	349000	1745	15.77	17.20	1.390	-	-	-0.09	0.789	1.097
1900MHz																				
14	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Cheek	0mm	Ant 4	DSI 5	810	1909.8	20.49	21.70	1.321	-	-	-0.05	0.658	0.869
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Tilted	0mm	Ant 4	DSI 5	810	1909.8	20.49	21.70	1.321	-	-	0.05	0.543	0.717
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Left Cheek	0mm	Ant 4	DSI 5	810	1909.8	20.49	21.70	1.321	-	-	0.03	0.267	0.353
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Left Tilted	0mm	Ant 4	DSI 5	810	1909.8	20.49	21.70	1.321	-	-	-0.08	0.362	0.478
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Cheek	0mm	Ant 4	DSI 5	512	1850.2	20.48	21.70	1.324	-	-	0.01	0.617	0.817
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Cheek	0mm	Ant 4	DSI 5	661	1880	20.49	21.70	1.321	-	-	0.18	0.592	0.782
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Right Cheek	0mm	Ant 4	DSI 5	810	1909.8	18.04	18.68	1.159	-	-	0.19	0.622	0.721
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Cheek	0mm	Ant 6	DSI 5	810	1909.8	18.25	19.20	1.245	-	-	-0.14	0.225	0.280
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Tilted	0mm	Ant 6	DSI 5	810	1909.8	18.25	19.20	1.245	-	-	-0.18	0.042	0.052
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Left Cheek	0mm	Ant 6	DSI 5	810	1909.8	18.25	19.20	1.245	-	-	0.19	0.394	0.491
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Left Tilted	0mm	Ant 6	DSI 5	810	1909.8	18.25	19.20	1.245	-	-	-0.12	0.072	0.090
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Left Cheek	0mm	Ant 6	DSI 5	810	1909.8	18.25	19.20	1.245	-	-	0.02	0.363	0.452
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	9400	1880	17.78	17.80	1.005	-	-	-0.16	0.803	0.807
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 4	DSI 5	9400	1880	17.78	17.80	1.005	-	-	-0.14	0.715	0.719
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 4	DSI 5	9400	1880	17.78	17.80	1.005	-	-	0.19	0.347	0.349
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 4	DSI 5	9400	1880	17.78	17.80	1.005	-	-	-0.03	0.468	0.470
15	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	9262	1852.4	17.77	17.80	1.007	-	-	-0.09	0.967	0.974
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	9538	1907.6	17.74	17.80	1.014	-	-	-0.15	0.679	0.689
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 6	DSI 5	9400	1880	18.18	18.30	1.028	-	-	-0.10	0.525	0.540
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 6	DSI 5	9400	1880	18.18	18.30	1.028	-	-	0.18	0.101	0.104
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 6	DSI 5	9400	1880	18.18	18.30	1.028	-	-	-0.18	0.891	0.916
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 6	DSI 5	9400	1880	18.18	18.30	1.028	-	-	0.10	0.171	0.176
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 6	DSI 5	9262	1852.4	18.16	18.30	1.033	-	-	0.06	0.934	0.965
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 6	DSI 5	9538	1907.6	18.05	18.30	1.059	-	-	-0.12	0.775	0.821
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	26340	1880	17.61	17.80	1.045	-	-	0.11	0.750	0.784
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	26340	1880	17.61	17.80	1.045	-	-	-0.13	0.672	0.702
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	26340	1880	17.61	17.80	1.045	-	-	-0.08	0.366	0.382
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	26340	1880	17.61	17.80	1.045	-	-	0.19	0.457	0.478
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	26340	1880	17.56	17.80	1.057	-	-	-0.17	0.696	0.736



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	26340	1880	17.56	17.80	1.057	-	-	-0.09	0.651	0.688
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	26340	1880	17.56	17.80	1.057	-	-	0.01	0.379	0.401
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	26340	1880	17.56	17.80	1.057	-	-	-0.05	0.468	0.495
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	26340	1880	16.71	17.30	1.146	-	-	0.15	0.493	0.565
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	26340	1880	16.71	17.30	1.146	-	-	-0.03	0.090	0.103
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	26340	1880	16.71	17.30	1.146	-	-	0.02	0.846	0.970
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	26340	1880	16.71	17.30	1.146	-	-	0.19	0.162	0.186
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	26140	1860	16.65	17.30	1.161	-	-	0.11	0.886	1.029
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	26590	1905	16.54	17.30	1.191	-	-	-0.03	0.751	0.894
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	26340	1880	16.68	17.30	1.153	-	-	0.06	0.491	0.566
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 5	26340	1880	16.68	17.30	1.153	-	-	0.11	0.091	0.105
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	26340	1880	16.68	17.30	1.153	-	-	0.12	0.841	0.970
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 5	26340	1880	16.68	17.30	1.153	-	-	0.12	0.161	0.186
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	26140	1860	16.60	17.30	1.175	-	-	0.02	0.867	1.019
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	26590	1905	16.53	17.30	1.194	-	-	-0.19	0.757	0.904
	LTE Band 25	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 6	DSI 5	26340	1880	16.60	17.30	1.175	-	-	-0.04	0.842	0.989
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 5	26340	1880	22.38	23.00	1.153	-	-	-0.07	0.064	0.074
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 5	26340	1880	22.38	23.00	1.153	-	-	-	n/a	n/a
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 5	26340	1880	22.38	23.00	1.153	-	-	0.14	0.050	0.058
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 5	26340	1880	22.38	23.00	1.153	-	-	-	n/a	n/a
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 5	26340	1880	22.33	23.00	1.167	-	-	-0.15	0.057	0.067
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 5	26340	1880	22.33	23.00	1.167	-	-	-0.15	0.042	0.049
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	26340	1880	22.33	23.00	1.167	-	-	-0.06	0.056	0.065
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 5	26340	1880	22.33	23.00	1.167	-	-	-	n/a	n/a
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	26340	1880	18.17	18.50	1.079	-	-	-0.14	0.888	0.958
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	26340	1880	18.17	18.50	1.079	-	-	0.14	0.135	0.146
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	26340	1880	18.17	18.50	1.079	-	-	-0.15	0.473	0.510
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	26340	1880	18.17	18.50	1.079	-	-	0.04	0.083	0.090
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	26140	1860	18.10	18.50	1.096	-	-	0.18	0.909	0.996
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	26590	1905	18.11	18.50	1.094	-	-	0.11	0.866	0.947
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	26340	1880	18.16	18.50	1.081	-	-	0.03	0.888	0.960
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	26340	1880	18.16	18.50	1.081	-	-	-0.11	0.138	0.149
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	26340	1880	18.16	18.50	1.081	-	-	-0.05	0.490	0.530
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	26340	1880	18.16	18.50	1.081	-	-	0.14	0.082	0.089
16	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	26140	1860	18.08	18.50	1.102	-	-	0.11	0.966	1.065
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	26590	1905	18.05	18.50	1.109	-	-	-0.14	0.868	0.963
	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 0	DSI 5	26340	1880	18.14	18.50	1.086	-	-	-0.10	0.894	0.971
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	376500	1882.5	17.00	18.20	1.318	-	-	-0.08	0.651	0.858
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	376500	1882.5	17.00	18.20	1.318	-	-	0.18	0.586	0.772
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	376500	1882.5	17.00	18.20	1.318	-	-	0.09	0.315	0.415
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	376500	1882.5	17.00	18.20	1.318	-	-	0.05	0.421	0.555
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	376500	1882.5	16.96	18.20	1.330	-	-	0.16	0.783	1.041
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	376500	1882.5	16.96	18.20	1.330	-	-	0.05	0.627	0.834
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	376500	1882.5	16.96	18.20	1.330	-	-	-0.05	0.308	0.410
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	376500	1882.5	16.96	18.20	1.330	-	-	-0.02	0.407	0.541
	FR1 n25	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	376500	1882.5	16.93	18.20	1.340	-	-	-0.13	0.650	0.871
	FR1 n25	40M	QPSK	216	0	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	376500	1882.5	16.93	18.20	1.340	-	-	-0.13	0.532	0.713
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	376500	1882.5	17.68	18.70	1.265	-	-	0.12	0.444	0.562
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	376500	1882.5	17.68	18.70	1.265	-	-	0.10	0.081	0.102
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	376500	1882.5	17.68	18.70	1.265	-	-	0.07	0.761	0.963
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	376500	1882.5	17.68	18.70	1.265	-	-	-0.07	0.146	0.185
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	376500	1882.5	17.63	18.70	1.279	-	-	-0.07	0.442	0.565
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	376500	1882.5	17.63	18.70	1.279	-	-	-0.06	0.082	0.105
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	376500	1882.5	17.63	18.70	1.279	-	-	-0.02	0.757	0.968
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	376500	1882.5	17.63	18.70	1.279	-	-	-0.04	0.145	0.185
17	FR1 n25	40M	QPSK	216	0	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	376500	1882.5	17.55	18.70	1.303	-	-	0.09	0.910	1.186



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	376500	1882.5	21.23	22.20	1.250	-	-	-0.04	0.058	0.073
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	376500	1882.5	21.23	22.20	1.250	-	-	-	n/a	n/a
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	376500	1882.5	21.23	22.20	1.250	-	-	0.01	0.045	0.056
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	376500	1882.5	21.23	22.20	1.250	-	-	-	n/a	n/a
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	376500	1882.5	21.19	22.20	1.262	-	-	-0.16	0.060	0.076
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	376500	1882.5	21.19	22.20	1.262	-	-	-0.06	0.042	0.053
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	376500	1882.5	21.19	22.20	1.262	-	-	0.08	0.050	0.063
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	376500	1882.5	21.19	22.20	1.262	-	-	-	n/a	n/a
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	376500	1882.5	16.84	17.70	1.219	-	-	-0.15	0.804	0.980
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	376500	1882.5	16.84	17.70	1.219	-	-	0.02	0.132	0.161
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	376500	1882.5	16.84	17.70	1.219	-	-	-0.16	0.460	0.561
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	376500	1882.5	16.84	17.70	1.219	-	-	0.19	0.081	0.099
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	376500	1882.5	16.81	17.70	1.227	-	-	-0.06	0.824	1.011
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	376500	1882.5	16.81	17.70	1.227	-	-	0.10	0.134	0.164
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	376500	1882.5	16.81	17.70	1.227	-	-	0.02	0.476	0.584
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	376500	1882.5	16.81	17.70	1.227	-	-	-0.02	0.080	0.098
	FR1 n25	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	376500	1882.5	16.80	17.70	1.230	-	-	0.13	0.802	0.986
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	27710	2310	17.57	18.30	1.183	-	-	0.05	0.720	0.852
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	27710	2310	17.57	18.30	1.183	-	-	-0.12	0.713	0.843
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	27710	2310	17.57	18.30	1.183	-	-	-0.17	0.391	0.463
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	27710	2310	17.57	18.30	1.183	-	-	-0.05	0.390	0.461
18	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	-0.04	0.807	0.961
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	0.13	0.795	0.947
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	0.03	0.386	0.460
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	-0.13	0.391	0.466
	LTE Band 30	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	27710	2310	17.52	18.30	1.197	-	-	-0.13	0.741	0.887
	LTE Band 30	10M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	27710	2310	17.52	18.30	1.197	-	-	-0.17	0.734	0.879
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	27710	2310	18.84	19.60	1.191	-	-	0.07	0.587	0.699
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	27710	2310	18.84	19.60	1.191	-	-	0.16	0.094	0.112
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	27710	2310	18.84	19.60	1.191	-	-	0.18	0.683	0.813
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	27710	2310	18.84	19.60	1.191	-	-	0.06	0.164	0.195
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 6	DSI 5	27710	2310	18.80	19.60	1.202	-	-	-0.09	0.591	0.710
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 6	DSI 5	27710	2310	18.80	19.60	1.202	-	-	-0.10	0.094	0.113
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 6	DSI 5	27710	2310	18.80	19.60	1.202	-	-	0.06	0.695	0.835
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 6	DSI 5	27710	2310	18.80	19.60	1.202	-	-	-0.05	0.161	0.194
	LTE Band 30	10M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	27710	2310	18.82	19.60	1.197	-	-	-0.07	0.733	0.877
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	462000	2310	17.07	18.40	1.358	-	-	0.11	0.710	0.964
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	462000	2310	17.07	18.40	1.358	-	-	-0.09	0.700	0.951
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	462000	2310	17.07	18.40	1.358	-	-	0.12	0.373	0.507
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	462000	2310	17.07	18.40	1.358	-	-	0.00	0.367	0.498
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	462000	2310	17.04	18.40	1.368	-	-	0.15	0.703	0.962
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	462000	2310	17.04	18.40	1.368	-	-	0.08	0.698	0.955
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	462000	2310	17.04	18.40	1.368	-	-	0.19	0.382	0.523
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	462000	2310	17.04	18.40	1.368	-	-	-0.15	0.373	0.510
19	FR1 n30	10M	QPSK	50	0	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	462000	2310	16.99	18.40	1.384	-	-	-0.18	0.701	0.970
	FR1 n30	10M	QPSK	50	0	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	462000	2310	16.99	18.40	1.384	-	-	0.16	0.689	0.954
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	462000	2310	18.33	19.40	1.279	-	-	-0.10	0.581	0.743
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	462000	2310	18.33	19.40	1.279	-	-	0.11	0.093	0.119
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	462000	2310	18.33	19.40	1.279	-	-	-0.05	0.676	0.865
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	462000	2310	18.33	19.40	1.279	-	-	0.17	0.162	0.207
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	462000	2310	18.28	19.40	1.294	-	-	-0.16	0.585	0.757
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	462000	2310	18.28	19.40	1.294	-	-	0.19	0.093	0.120
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	462000	2310	18.28	19.40	1.294	-	-	0.14	0.741	0.959
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	462000	2310	18.28	19.40	1.294	-	-	-0.15	0.159	0.206
	FR1 n30	10M	QPSK	50	0	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	462000	2310	18.26	19.40	1.300	-	-	-0.16	0.585	0.761



2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	21100	2535	16.98	17.50	1.127	-	-	-0.06	0.734	0.827
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	21100	2535	16.98	17.50	1.127	-	-	-0.13	0.745	0.840
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	21100	2535	16.98	17.50	1.127	-	-	0.07	0.382	0.431
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	21100	2535	16.98	17.50	1.127	-	-	-0.04	0.483	0.544
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	20850	2510	16.89	17.50	1.151	-	-	0.13	0.842	0.969
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	21350	2560	16.97	17.50	1.130	-	-	-0.15	0.663	0.749
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	20850	2510	16.89	17.50	1.151	-	-	0.17	0.876	1.008
	LTE Band 7C	20M	QPSK	1	0		Right Tilted	0mm	Ant 4	DSI 5	21100+ 21298	2535+ 2554.8	16.62	17.50	1.225	-	-	0.09	0.766	0.938
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	21350	2560	16.97	17.50	1.130	-	-	-0.15	0.693	0.783
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	21100	2535	16.96	17.50	1.132	-	-	0.12	0.625	0.708
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	21100	2535	16.96	17.50	1.132	-	-	-0.06	0.770	0.872
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	21100	2535	16.96	17.50	1.132	-	-	0.09	0.376	0.426
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	21100	2535	16.96	17.50	1.132	-	-	-0.18	0.492	0.557
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	20850	2510	16.83	17.50	1.167	-	-	0.18	0.803	0.937
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	21350	2560	16.91	17.50	1.146	-	-	-0.01	0.730	0.837
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	DSI 5	21100	2535	16.88	17.50	1.153	-	-	-0.12	0.758	0.874
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	21100	2535	17.31	17.50	1.045	-	-	-0.15	0.919	0.960
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	21100	2535	17.31	17.50	1.045	-	-	-0.08	0.080	0.084
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	21100	2535	17.31	17.50	1.045	-	-	0.00	0.538	0.562
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	21100	2535	17.31	17.50	1.045	-	-	-0.07	0.150	0.157
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	20850	2510	16.98	17.50	1.127	-	-	-0.03	0.890	1.003
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	21350	2560	17.30	17.50	1.047	-	-	-0.04	0.948	0.993
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	21100	2535	17.28	17.50	1.052	-	-	-0.17	0.955	1.005
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 5	21100	2535	17.28	17.50	1.052	-	-	-0.01	0.080	0.084
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	21100	2535	17.28	17.50	1.052	-	-	-0.05	0.547	0.575
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 5	21100	2535	17.28	17.50	1.052	-	-	0.02	0.153	0.161
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	20850	2510	16.96	17.50	1.132	-	-	0.08	0.923	1.045
20	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	21350	2560	17.21	17.50	1.069	-	-	0.10	1.010	1.080
	LTE Band 7C	20M	QPSK	1	0		Right Cheek	0mm	Ant 6	DSI 5	21100+ 21298	2535+ 2554.8	17.23	17.50	1.064	-	-	0.13	0.825	0.878
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 6	DSI 5	21100	2535	17.24	17.50	1.062	-	-	-0.12	0.943	1.001
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 5	21100	2535	19.57	20.00	1.104	-	-	0.15	0.131	0.145
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 5	21100	2535	19.57	20.00	1.104	-	-	-0.14	0.081	0.089
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 5	21100	2535	19.57	20.00	1.104	-	-	-0.13	0.130	0.144
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 5	21100	2535	19.57	20.00	1.104	-	-	-0.03	0.054	0.060
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 5	21100	2535	19.54	20.00	1.112	-	-	0.13	0.129	0.143
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 5	21100	2535	19.54	20.00	1.112	-	-	0.08	0.083	0.092
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	21100	2535	19.54	20.00	1.112	-	-	0.16	0.105	0.117
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 5	21100	2535	19.54	20.00	1.112	-	-	-0.10	0.061	0.068
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	21100	2535	16.05	16.30	1.059	-	-	-0.12	0.691	0.732
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	21100	2535	16.05	16.30	1.059	-	-	-0.13	0.163	0.173
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	21100	2535	16.05	16.30	1.059	-	-	-0.08	0.362	0.383
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	21100	2535	16.05	16.30	1.059	-	-	0.00	0.066	0.070
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	21100	2535	16.03	16.30	1.064	-	-	-0.18	0.666	0.709
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	21100	2535	16.03	16.30	1.064	-	-	-0.03	0.172	0.183
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	21100	2535	16.03	16.30	1.064	-	-	-0.03	0.368	0.392
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	21100	2535	16.03	16.30	1.064	-	-	-0.16	0.075	0.080
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	38000	2595	18.97	19.50	1.130	62.9	1.006	-0.12	0.705	0.801
	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	38000	2595	18.97	19.50	1.130	62.9	1.006	0.10	0.815	0.926
	LTE Band 38C	20M	QPSK	1	0		Right Tilted	0mm	Ant 4	DSI 5	37901+ 38099	2585.1+ 2604.9	18.86	19.50	1.159	62.9	1.006	-0.18	0.762	0.888
	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	38000	2595	18.97	19.50	1.130	62.9	1.006	-0.08	0.406	0.462
	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	38000	2595	18.97	19.50	1.130	62.9	1.006	-0.18	0.521	0.592
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	38000	2595	18.95	19.50	1.135	62.9	1.006	0.01	0.709	0.810
	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	38000	2595	18.95	19.50	1.135	62.9	1.006	0.01	0.767	0.876
	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	38000	2595	18.95	19.50	1.135	62.9	1.006	0.01	0.409	0.467



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	38000	2595	18.95	19.50	1.135	62.9	1.006	-0.05	0.523	0.597
	LTE Band 38	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	DSI 5	38000	2595	18.92	19.50	1.143	62.9	1.006	0.06	0.716	0.823
	LTE Band 38	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	DSI 5	38000	2595	18.92	19.50	1.143	62.9	1.006	0.01	0.762	0.876
21	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	38000	2595	19.40	19.50	1.023	62.9	1.006	0.13	0.997	1.026
	LTE Band 38C	20M	QPSK	1	0		Right Cheek	0mm	Ant 6	DSI 5	37901+38099	2585.1+2604.9	19.23	19.50	1.064	62.9	1.006	-0.03	0.844	0.903
	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	38000	2595	19.40	19.50	1.023	62.9	1.006	0.00	0.071	0.073
	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	38000	2595	19.40	19.50	1.023	62.9	1.006	0.18	0.473	0.487
	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	38000	2595	19.40	19.50	1.023	62.9	1.006	-0.17	0.108	0.111
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	38000	2595	19.36	19.50	1.033	62.9	1.006	0.01	0.772	0.802
	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 5	38000	2595	19.36	19.50	1.033	62.9	1.006	-0.15	0.069	0.072
	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	38000	2595	19.36	19.50	1.033	62.9	1.006	0.11	0.474	0.493
	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 5	38000	2595	19.36	19.50	1.033	62.9	1.006	0.07	0.097	0.101
	LTE Band 38	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 6	DSI 5	38000	2595	19.31	19.50	1.045	62.9	1.006	0.13	0.748	0.786
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 5	38000	2595	22.16	22.50	1.081	62.9	1.006	0.02	0.120	0.130
	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 5	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.03	0.069	0.075
	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 5	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.07	0.128	0.139
	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 5	38000	2595	22.16	22.50	1.081	62.9	1.006	-	n/a	n/a
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 5	38000	2595	22.10	22.50	1.096	62.9	1.006	-0.11	0.106	0.117
	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 5	38000	2595	22.10	22.50	1.096	62.9	1.006	-0.04	0.061	0.067
	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	38000	2595	22.10	22.50	1.096	62.9	1.006	0.16	0.107	0.118
	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 5	38000	2595	22.10	22.50	1.096	62.9	1.006	-	n/a	n/a
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	38000	2595	18.50	18.50	1.000	62.9	1.006	0.12	0.800	0.805
	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	38000	2595	18.50	18.50	1.000	62.9	1.006	-0.07	0.237	0.238
	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	38000	2595	18.50	18.50	1.000	62.9	1.006	0.01	0.448	0.451
	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	38000	2595	18.50	18.50	1.000	62.9	1.006	-0.16	0.104	0.105
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	38000	2595	18.49	18.50	1.002	62.9	1.006	0.07	0.786	0.792
	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	38000	2595	18.49	18.50	1.002	62.9	1.006	-0.12	0.246	0.248
	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	38000	2595	18.49	18.50	1.002	62.9	1.006	-0.12	0.445	0.449
	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	38000	2595	18.49	18.50	1.002	62.9	1.006	0.11	0.089	0.090
	LTE Band 38	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 0	DSI 5	38000	2595	18.42	18.50	1.019	62.9	1.006	-0.17	0.781	0.801
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	40620	2593	17.43	17.70	1.064	62.9	1.006	0.18	0.470	0.503
22	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	40620	2593	17.43	17.70	1.064	62.9	1.006	0.07	0.547	0.586
	LTE Band 41C	20M	QPSK	1	0		Right Tilted	0mm	Ant 4	DSI 5	40620+40818	2593+2612.8	17.22	17.70	1.117	62.9	1.006	0.10	0.412	0.463
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	40620	2593	17.43	17.70	1.064	62.9	1.006	0.08	0.293	0.314
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	40620	2593	17.43	17.70	1.064	62.9	1.006	0.12	0.343	0.367
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	40620	2593	19.24	19.30	1.014	42.9	1.009	-0.05	0.527	0.539
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	40620	2593	17.41	17.70	1.069	62.9	1.006	0.09	0.476	0.512
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	40620	2593	17.41	17.70	1.069	62.9	1.006	0.12	0.513	0.552
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	40620	2593	17.41	17.70	1.069	62.9	1.006	0.18	0.286	0.308
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	40620	2593	17.41	17.70	1.069	62.9	1.006	0.17	0.350	0.376
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	40620	2593	17.16	17.20	1.009	62.9	1.006	-0.09	0.464	0.471
	LTE Band 41C	20M	QPSK	1	0		Right Cheek	0mm	Ant 6	DSI 5	40620+40818	2593+2612.8	17.11	17.20	1.021	62.9	1.006	0.02	0.411	0.422
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 5	40620	2593	17.16	17.20	1.009	62.9	1.006	0.03	0.038	0.039
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 5	40620	2593	17.16	17.20	1.009	62.9	1.006	0.10	0.281	0.285
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 5	40620	2593	17.16	17.20	1.009	62.9	1.006	0.18	0.064	0.065
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 5	40620	2593	18.64	18.80	1.038	42.9	1.009	0.17	0.439	0.460
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	40620	2593	17.11	17.20	1.021	62.9	1.006	-0.15	0.453	0.465
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 5	40620	2593	17.11	17.20	1.021	62.9	1.006	-0.19	0.041	0.042
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 5	40620	2593	17.11	17.20	1.021	62.9	1.006	0.02	0.285	0.293
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 5	40620	2593	17.11	17.20	1.021	62.9	1.006	-0.05	0.060	0.062
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 5	40620	2593	18.21	18.70	1.119	62.9	1.006	0.11	0.062	0.070
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 5	40620	2593	18.21	18.70	1.119	62.9	1.006	-0.16	0.039	0.044
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 5	40620	2593	18.21	18.70	1.119	62.9	1.006	-0.03	0.060	0.068
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 5	40620	2593	18.21	18.70	1.119	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 5	40620	2593	18.15	18.70	1.135	62.9	1.006	-0.09	0.066	0.075



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 5	40620	2593	18.15	18.70	1.135	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	40620	2593	18.15	18.70	1.135	62.9	1.006	0.14	0.070	0.080
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 5	40620	2593	18.15	18.70	1.135	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 5	40620	2593	20.01	20.30	1.069	42.9	1.009	0.18	0.069	0.074
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	40620	2593	16.04	16.20	1.038	62.9	1.006	-0.15	0.489	0.511
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 5	40620	2593	16.04	16.20	1.038	62.9	1.006	0.08	0.143	0.149
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 5	40620	2593	16.04	16.20	1.038	62.9	1.006	0.13	0.275	0.287
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 5	40620	2593	16.04	16.20	1.038	62.9	1.006	0.15	0.066	0.069
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 5	40620	2593	17.70	17.80	1.023	42.9	1.009	0.17	0.454	0.469
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 5	40620	2593	15.99	16.20	1.050	62.9	1.006	0.03	0.477	0.504
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 5	40620	2593	15.99	16.20	1.050	62.9	1.006	0.01	0.147	0.155
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 5	40620	2593	15.99	16.20	1.050	62.9	1.006	0.11	0.275	0.290
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 5	40620	2593	15.99	16.20	1.050	62.9	1.006	-0.07	0.069	0.073
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	507000	2535	16.67	17.70	1.268	-	-	-0.13	0.698	0.885
23	FR1 n7	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	507000	2535	16.67	17.70	1.268	-	-	-0.10	0.825	1.046
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	507000	2535	16.67	17.70	1.268	-	-	0.06	0.390	0.495
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	507000	2535	16.67	17.70	1.268	-	-	0.18	0.482	0.611
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	507000	2535	16.62	17.70	1.282	-	-	-0.12	0.684	0.877
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	507000	2535	16.62	17.70	1.282	-	-	0.02	0.766	0.982
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 4	DSI 5	507000	2535	16.62	17.70	1.282	-	-	-0.10	0.404	0.518
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 4	DSI 5	507000	2535	16.62	17.70	1.282	-	-	-0.12	0.493	0.632
	FR1 n7	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	507000	2535	16.55	17.70	1.303	-	-	-0.01	0.681	0.887
	FR1 n7	40M	QPSK	216	0	DFT-15	Right Tilted	0mm	Ant 4	DSI 5	507000	2535	16.55	17.70	1.303	-	-	-0.15	0.753	0.981
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	507000	2535	17.06	17.70	1.159	-	-	0.01	0.694	0.804
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	507000	2535	17.06	17.70	1.159	-	-	0.15	0.084	0.097
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	507000	2535	17.06	17.70	1.159	-	-	0.03	0.565	0.655
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	507000	2535	17.06	17.70	1.159	-	-	-0.06	0.158	0.183
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	507000	2535	17.04	17.70	1.164	-	-	-0.15	0.753	0.876
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 6	DSI 5	507000	2535	17.04	17.70	1.164	-	-	0.01	0.084	0.098
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 6	DSI 5	507000	2535	17.04	17.70	1.164	-	-	0.10	0.574	0.668
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 6	DSI 5	507000	2535	17.04	17.70	1.164	-	-	0.07	0.161	0.187
	FR1 n7	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 6	DSI 5	507000	2535	16.99	17.70	1.178	-	-	-0.09	0.826	0.973
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	507000	2535	18.99	19.70	1.178	-	-	0.18	0.069	0.081
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	507000	2535	18.99	19.70	1.178	-	-	-0.03	0.043	0.051
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	507000	2535	18.99	19.70	1.178	-	-	-0.17	0.069	0.081
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	507000	2535	18.99	19.70	1.178	-	-	0.15	0.029	0.034
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 5	DSI 5	507000	2535	18.95	19.70	1.189	-	-	0.15	0.068	0.081
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 5	DSI 5	507000	2535	18.95	19.70	1.189	-	-	-0.19	0.044	0.052
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 5	DSI 5	507000	2535	18.95	19.70	1.189	-	-	0.06	0.071	0.084
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 5	DSI 5	507000	2535	18.95	19.70	1.189	-	-	0.04	0.032	0.038
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	507000	2535	15.84	16.50	1.164	-	-	-0.01	0.572	0.666
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	507000	2535	15.84	16.50	1.164	-	-	0.10	0.171	0.199
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	507000	2535	15.84	16.50	1.164	-	-	0.11	0.271	0.315
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	507000	2535	15.84	16.50	1.164	-	-	-0.04	0.069	0.080
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 0	DSI 5	507000	2535	15.83	16.50	1.167	-	-	0.11	0.628	0.733
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 0	DSI 5	507000	2535	15.83	16.50	1.167	-	-	-0.17	0.181	0.211
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 0	DSI 5	507000	2535	15.83	16.50	1.167	-	-	0.00	0.310	0.362
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 0	DSI 5	507000	2535	15.83	16.50	1.167	-	-	0.17	0.079	0.092
24	FR1 n38	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	519000	2595	16.09	16.70	1.151	-	-	0.18	0.619	0.712
	FR1 n38	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 6	DSI 5	519000	2595	16.09	16.70	1.151	-	-	-0.06	0.056	0.064
	FR1 n38	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 6	DSI 5	519000	2595	16.09	16.70	1.151	-	-	-0.18	0.413	0.475
	FR1 n38	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 6	DSI 5	519000	2595	16.09	16.70	1.151	-	-	-0.05	0.105	0.121
	FR1 n38	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	519000	2595	16.07	16.70	1.156	-	-	-0.17	0.601	0.695
	FR1 n38	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 6	DSI 5	519000	2595	16.07	16.70	1.156	-	-	0.16	0.062	0.072
	FR1 n38	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 6	DSI 5	519000	2595	16.07	16.70	1.156	-	-	0.07	0.381	0.440
	FR1 n38	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 6	DSI 5	519000	2595	16.07	16.70	1.156	-	-	0.03	0.078	0.090



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	518598	2592.99	15.96	17.20	1.330	-	-	0.16	0.527	0.701
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	518598	2592.99	15.96	17.20	1.330	-	-	0.05	0.623	0.829
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	518598	2592.99	15.96	17.20	1.330	-	-	0.07	0.330	0.439
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	518598	2592.99	15.96	17.20	1.330	-	-	0.02	0.412	0.548
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	518598	2592.99	15.88	17.20	1.355	-	-	0.18	0.532	0.721
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	518598	2592.99	15.88	17.20	1.355	-	-	-0.07	0.639	0.866
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	518598	2592.99	15.88	17.20	1.355	-	-	0.10	0.341	0.462
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	518598	2592.99	15.88	17.20	1.355	-	-	0.16	0.436	0.591
	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	518598	2592.99	15.83	17.20	1.371	-	-	0.11	0.546	0.749
25	FR1 n41	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	518598	2592.99	15.83	17.20	1.371	-	-	-0.09	0.685	0.939
	FR1 n41C	100M	QPSK	144	129	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	509598+2547.99+528582	2642.91	15.90	17.20	1.349	-	-	0.03	0.622	0.839
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	518598	2592.99	15.55	16.20	1.161	-	-	0.09	0.527	0.612
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 6	DSI 5	518598	2592.99	15.55	16.20	1.161	-	-	0.16	0.050	0.058
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 6	DSI 5	518598	2592.99	15.55	16.20	1.161	-	-	-0.04	0.374	0.434
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 6	DSI 5	518598	2592.99	15.55	16.20	1.161	-	-	-0.11	0.089	0.103
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	518598	2592.99	15.48	16.20	1.180	-	-	-0.09	0.554	0.654
	FR1 n41C	100M	QPSK	144	129	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	509598+2547.99+528582	2642.91	15.19	16.20	1.262	-	-	0.02	0.518	0.654
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 6	DSI 5	518598	2592.99	15.48	16.20	1.180	-	-	0.09	0.050	0.059
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 6	DSI 5	518598	2592.99	15.48	16.20	1.180	-	-	0.09	0.330	0.389
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 6	DSI 5	518598	2592.99	15.48	16.20	1.180	-	-	0.01	0.067	0.079
	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 6	DSI 5	518598	2592.99	15.46	16.20	1.186	-	-	-0.06	0.491	0.582
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 5	DSI 5	518598	2592.99	17.79	18.70	1.233	-	-	0.10	0.119	0.147
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 5	DSI 5	518598	2592.99	17.79	18.70	1.233	-	-	0.17	0.060	0.074
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 5	DSI 5	518598	2592.99	17.79	18.70	1.233	-	-	0.18	0.113	0.139
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 5	DSI 5	518598	2592.99	17.79	18.70	1.233	-	-	-	n/a	n/a
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 5	DSI 5	518598	2592.99	17.74	18.70	1.247	-	-	-0.12	0.112	0.140
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 5	DSI 5	518598	2592.99	17.74	18.70	1.247	-	-	0.05	0.059	0.074
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 5	DSI 5	518598	2592.99	17.74	18.70	1.247	-	-	0.10	0.122	0.152
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 5	DSI 5	518598	2592.99	17.74	18.70	1.247	-	-	0.12	0.059	0.074
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 0	DSI 5	518598	2592.99	15.98	16.70	1.180	-	-	-0.12	0.645	0.761
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 0	DSI 5	518598	2592.99	15.98	16.70	1.180	-	-	-0.01	0.216	0.255
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 0	DSI 5	518598	2592.99	15.98	16.70	1.180	-	-	-0.18	0.324	0.382
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 0	DSI 5	518598	2592.99	15.98	16.70	1.180	-	-	-0.07	0.081	0.096
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 0	DSI 5	518598	2592.99	15.97	16.70	1.183	-	-	-0.01	0.687	0.813
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 0	DSI 5	518598	2592.99	15.97	16.70	1.183	-	-	-0.03	0.248	0.293
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 0	DSI 5	518598	2592.99	15.97	16.70	1.183	-	-	-0.15	0.366	0.433
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 0	DSI 5	518598	2592.99	15.97	16.70	1.183	-	-	0.04	0.085	0.101
	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 0	DSI 5	518598	2592.99	15.92	16.70	1.197	-	-	0.12	0.683	0.818
3500-3900MHz																				
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	DSI 5	55830	3609	18.78	19.50	1.180	62.9	1.006	-0.13	0.181	0.215
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	DSI 5	55830	3609	18.78	19.50	1.180	62.9	1.006	-0.11	0.151	0.179
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	DSI 5	55830	3609	18.78	19.50	1.180	62.9	1.006	-0.04	0.690	0.819
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	DSI 5	55830	3609	18.78	19.50	1.180	62.9	1.006	-0.09	0.422	0.501
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	DSI 5	55340	3560	18.72	19.50	1.197	62.9	1.006	-0.18	0.646	0.778
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	DSI 5	56150	3641	18.76	19.50	1.186	62.9	1.006	-0.17	0.652	0.778
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	DSI 5	56640	3690	18.60	19.50	1.230	62.9	1.006	0.15	0.618	0.765
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	DSI 5	55830	3609	18.72	19.50	1.197	62.9	1.006	0.18	0.181	0.218
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	DSI 5	55830	3609	18.72	19.50	1.197	62.9	1.006	-0.09	0.154	0.185
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	DSI 5	55830	3609	18.72	19.50	1.197	62.9	1.006	-0.14	0.717	0.863
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	DSI 5	55830	3609	18.72	19.50	1.197	62.9	1.006	0.07	0.419	0.505
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	DSI 5	55340	3560	18.67	19.50	1.211	62.9	1.006	-0.06	0.709	0.864
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	DSI 5	56150	3641	18.66	19.50	1.213	62.9	1.006	-0.05	0.654	0.798
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	DSI 5	56640	3690	18.54	19.50	1.247	62.9	1.006	0.18	0.629	0.789
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 9	DSI 5	55830	3609	18.64	19.50	1.219	62.9	1.006	-0.17	0.701	0.860
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 5	55830	3609	18.97	19.80	1.211	62.9	1.006	-0.06	0.424	0.517
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 5	55830	3609	18.97	19.80	1.211	62.9	1.006	-0.15	0.448	0.546



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 5	55830	3609	18.97	19.80	1.211	62.9	1.006	0.08	0.693	0.844
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 5	55830	3609	18.97	19.80	1.211	62.9	1.006	0.17	0.740	0.902
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 5	55340	3560	18.94	19.80	1.219	62.9	1.006	-0.14	0.774	0.949
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 5	56150	3641	18.79	19.80	1.262	62.9	1.006	0.15	0.679	0.862
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 5	56640	3690	18.89	19.80	1.233	62.9	1.006	0.18	0.674	0.836
26	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 5	55340	3560	18.94	19.80	1.219	62.9	1.006	0.15	0.927	1.137
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 5	56150	3641	18.79	19.80	1.262	62.9	1.006	-0.13	0.723	0.918
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 5	56640	3690	18.89	19.80	1.233	62.9	1.006	-0.09	0.705	0.874
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 5	55830	3609	18.95	19.80	1.216	62.9	1.006	-0.03	0.440	0.538
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 5	55830	3609	18.95	19.80	1.216	62.9	1.006	-0.16	0.451	0.552
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 5	55830	3609	18.95	19.80	1.216	62.9	1.006	-0.02	0.731	0.894
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 5	55830	3609	18.95	19.80	1.216	62.9	1.006	0.19	0.767	0.938
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 5	55340	3560	18.92	19.80	1.225	62.9	1.006	0.12	0.776	0.956
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 5	56150	3641	18.74	19.80	1.276	62.9	1.006	0.10	0.694	0.891
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 5	56640	3690	18.87	19.80	1.239	62.9	1.006	-0.09	0.679	0.846
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 5	55340	3560	18.92	19.80	1.225	62.9	1.006	-0.09	0.801	0.987
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 5	56150	3641	18.74	19.80	1.276	62.9	1.006	-0.19	0.726	0.932
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 5	56640	3690	18.87	19.80	1.239	62.9	1.006	0.07	0.694	0.865
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 8	DSI 5	55830	3609	18.93	19.80	1.222	62.9	1.006	-0.16	0.723	0.889
	LTE Band 48	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 8	DSI 5	55830	3609	18.93	19.80	1.222	62.9	1.006	-0.06	0.767	0.943
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 10	DSI 5	55830	3609	17.43	17.50	1.016	62.9	1.006	0.04	0.814	0.832
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 10	DSI 5	55830	3609	17.43	17.50	1.016	62.9	1.006	-0.10	0.167	0.171
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 10	DSI 5	55830	3609	17.43	17.50	1.016	62.9	1.006	0.15	0.198	0.202
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 10	DSI 5	55830	3609	17.43	17.50	1.016	62.9	1.006	-	n/a	n/a
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 10	DSI 5	55340	3560	17.35	17.50	1.035	62.9	1.006	0.09	0.924	0.962
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 10	DSI 5	56150	3641	17.32	17.50	1.042	62.9	1.006	0.02	0.783	0.821
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 10	DSI 5	56640	3690	17.17	17.50	1.079	62.9	1.006	-0.08	0.714	0.775
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 10	DSI 5	55830	3609	17.41	17.50	1.021	62.9	1.006	-0.03	0.831	0.854
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 10	DSI 5	55830	3609	17.41	17.50	1.021	62.9	1.006	-0.14	0.156	0.160
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 10	DSI 5	55830	3609	17.41	17.50	1.021	62.9	1.006	0.04	0.177	0.182
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 10	DSI 5	55830	3609	17.41	17.50	1.021	62.9	1.006	-	n/a	n/a
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 10	DSI 5	55340	3560	17.30	17.50	1.047	62.9	1.006	0.11	0.786	0.828
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 10	DSI 5	56150	3641	17.23	17.50	1.064	62.9	1.006	-0.19	0.771	0.825
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 10	DSI 5	56640	3690	17.11	17.50	1.094	62.9	1.006	0.02	0.696	0.766
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 10	DSI 5	55830	3609	17.38	17.50	1.028	62.9	1.006	0.09	0.833	0.861
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 5	55830	3609	16.73	16.80	1.016	62.9	1.006	0.18	0.263	0.269
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 5	55830	3609	16.73	16.80	1.016	62.9	1.006	-0.11	0.326	0.333
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 5	55830	3609	16.73	16.80	1.016	62.9	1.006	-0.07	0.203	0.207
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 5	55830	3609	16.73	16.80	1.016	62.9	1.006	-0.12	0.202	0.206
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 5	55830	3609	16.69	16.80	1.026	62.9	1.006	-0.07	0.265	0.274
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 5	55830	3609	16.69	16.80	1.026	62.9	1.006	-0.07	0.311	0.321
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 5	55830	3609	16.69	16.80	1.026	62.9	1.006	0.08	0.196	0.202
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 5	55830	3609	16.69	16.80	1.026	62.9	1.006	0.06	0.202	0.208
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	641666	3624.99	16.12	17.20	1.282	-	-	-0.04	0.178	0.228
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	641666	3624.99	16.12	17.20	1.282	-	-	-0.17	0.154	0.197
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	641666	3624.99	16.12	17.20	1.282	-	-	-0.13	0.681	0.873
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	641666	3624.99	16.12	17.20	1.282	-	-	0.12	0.417	0.535
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	638000	3570	16.02	17.20	1.312	-	-	0.02	0.681	0.893
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	645332	3679.98	16.06	17.20	1.300	-	-	0.11	0.624	0.811
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	641666	3624.99	16.07	17.20	1.297	-	-	0.14	0.174	0.226
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	641666	3624.99	16.07	17.20	1.297	-	-	-0.12	0.152	0.197
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	641666	3624.99	16.07	17.20	1.297	-	-	0.06	0.638	0.827
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	641666	3624.99	16.07	17.20	1.297	-	-	0.15	0.408	0.529
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	638000	3570	15.95	17.20	1.334	-	-	0.16	0.765	1.021
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	645332	3679.98	15.99	17.20	1.321	-	-	0.15	0.597	0.789
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	641666	3624.99	16.03	17.20	1.309	-	-	0.05	0.671	0.878



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	0.07	0.478	0.583
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	0.07	0.528	0.644
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	0.11	0.781	0.952
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	-0.18	0.845	1.030
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	638000	3570	16.89	17.80	1.233	-	-	-0.01	0.553	0.682
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	645332	3679.98	16.79	17.80	1.262	-	-	0.06	0.469	0.592
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	638000	3570	16.89	17.80	1.233	-	-	0.05	0.815	1.005
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	645332	3679.98	16.79	17.80	1.262	-	-	0.19	0.718	0.906
27	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	638000	3570	16.89	17.80	1.233	-	-	0.09	0.965	1.190
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	645332	3679.98	16.79	17.80	1.262	-	-	-0.03	0.770	0.972
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	641666	3624.99	16.86	17.80	1.242	-	-	-0.07	0.469	0.582
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.86	17.80	1.242	-	-	0.16	0.511	0.635
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	641666	3624.99	16.86	17.80	1.242	-	-	0.05	0.762	0.946
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.86	17.80	1.242	-	-	-0.11	0.826	1.026
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	638000	3570	16.82	17.80	1.253	-	-	-0.07	0.536	0.672
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	645332	3679.98	16.78	17.80	1.265	-	-	-0.11	0.452	0.572
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	638000	3570	16.82	17.80	1.253	-	-	0.05	0.776	0.972
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	645332	3679.98	16.78	17.80	1.265	-	-	-0.15	0.709	0.897
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	638000	3570	16.82	17.80	1.253	-	-	0.16	0.866	1.085
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	645332	3679.98	16.78	17.80	1.265	-	-	-0.06	0.765	0.968
	FR1 n48	40M	QPSK	100	0	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.85	17.80	1.245	-	-	0.15	0.513	0.639
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	641666	3624.99	16.85	17.80	1.245	-	-	0.03	0.767	0.955
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.85	17.80	1.245	-	-	-0.16	0.839	1.045
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	641666	3624.99	14.10	14.70	1.148	-	-	0.14	0.656	0.753
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	641666	3624.99	14.10	14.70	1.148	-	-	-0.14	0.284	0.326
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	641666	3624.99	14.10	14.70	1.148	-	-	0.16	0.152	0.174
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	641666	3624.99	14.10	14.70	1.148	-	-	0.13	0.085	0.098
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	638000	3570	14.03	14.70	1.167	-	-	-0.03	0.640	0.747
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	645332	3679.98	13.97	14.70	1.183	-	-	0.18	0.578	0.684
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	641666	3624.99	14.08	14.70	1.153	-	-	-0.04	0.640	0.738
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	641666	3624.99	14.08	14.70	1.153	-	-	0.07	0.273	0.315
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	641666	3624.99	14.08	14.70	1.153	-	-	-0.02	0.196	0.226
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	641666	3624.99	14.08	14.70	1.153	-	-	0.10	0.083	0.096
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	638000	3570	13.97	14.70	1.183	-	-	0.00	0.683	0.808
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	645332	3679.98	13.94	14.70	1.191	-	-	0.13	0.573	0.682
	FR1 n48	40M	QPSK	100	0	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	641666	3624.99	14.01	14.70	1.172	-	-	0.00	0.642	0.752
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	641666	3624.99	17.35	18.70	1.365	-	-	-0.07	0.815	1.112
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	641666	3624.99	17.35	18.70	1.365	-	-	0.11	0.762	1.040
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	641666	3624.99	17.35	18.70	1.365	-	-	-0.08	0.477	0.651
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	641666	3624.99	17.35	18.70	1.365	-	-	0.17	0.484	0.661
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	638000	3570	17.24	18.70	1.400	-	-	0.01	0.815	1.141
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	645332	3679.98	17.13	18.70	1.435	-	-	0.08	0.785	1.126
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	638000	3570	17.24	18.70	1.400	-	-	-0.05	0.803	1.124
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	645332	3679.98	17.13	18.70	1.435	-	-	0.17	0.793	1.138
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	638000	3570	17.24	18.70	1.400	-	-	-0.09	0.511	0.715
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	645332	3679.98	17.13	18.70	1.435	-	-	-0.17	0.432	0.620
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	638000	3570	17.24	18.70	1.400	-	-	-0.14	0.518	0.725
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	645332	3679.98	17.13	18.70	1.435	-	-	-0.12	0.465	0.667
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	641666	3624.99	17.33	18.70	1.371	-	-	-0.11	0.775	1.063
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	641666	3624.99	17.33	18.70	1.371	-	-	0.00	0.715	0.980
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	641666	3624.99	17.33	18.70	1.371	-	-	-0.12	0.455	0.624
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	641666	3624.99	17.33	18.70	1.371	-	-	-0.11	0.464	0.636
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	638000	3570	17.17	18.70	1.422	-	-	-0.15	0.802	1.140
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	645332	3679.98	17.07	18.70	1.455	-	-	-0.04	0.763	1.110
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	638000	3570	17.17	18.70	1.422	-	-	0.17	0.738	1.049
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	645332	3679.98	17.07	18.70	1.455	-	-	-0.03	0.658	0.957



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	638000	3570	17.17	18.70	1.422	-	-	-0.08	0.402	0.572
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	645332	3679.98	17.07	18.70	1.455	-	-	0.17	0.363	0.528
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	638000	3570	17.17	18.70	1.422	-	-	0.01	0.338	0.481
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	645332	3679.98	17.07	18.70	1.455	-	-	0.08	0.358	0.521
	FR1 n48	40M	QPSK	100	0	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	641666	3624.99	16.28	17.70	1.387	-	-	-0.15	0.623	0.864
	FR1 n48	40M	QPSK	100	0	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	641666	3624.99	16.28	17.70	1.387	-	-	0.14	0.582	0.807
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	641666	3624.99	16.28	17.70	1.387	-	-	0.08	0.329	0.456
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	641666	3624.99	16.28	17.70	1.387	-	-	0.18	0.334	0.463
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	633332	3499.98	15.85	16.70	1.216	-	-	0.04	0.187	0.227
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	633332	3499.98	15.85	16.70	1.216	-	-	-0.10	0.164	0.199
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	633332	3499.98	15.85	16.70	1.216	-	-	0.07	0.748	0.910
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	633332	3499.98	15.85	16.70	1.216	-	-	0.11	0.448	0.545
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	633332	3499.98	15.84	16.70	1.219	-	-	0.00	0.177	0.216
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	633332	3499.98	15.84	16.70	1.219	-	-	0.17	0.156	0.190
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	633332	3499.98	15.84	16.70	1.219	-	-	0.19	0.712	0.868
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	633332	3499.98	15.84	16.70	1.219	-	-	-0.17	0.421	0.513
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	633332	3499.98	15.80	16.70	1.230	-	-	-0.14	0.752	0.925
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	656000	3840	15.84	16.70	1.219	-	-	0.06	0.134	0.163
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	656000	3840	15.84	16.70	1.219	-	-	-0.15	0.095	0.116
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	656000	3840	15.84	16.70	1.219	-	-	0.06	0.565	0.689
	FR1 n77C	100M	QPSK	135	138	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	650000+ 656664	3750+ 3849.96	15.38	16.70	1.355	-	-	0.19	0.493	0.668
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	656000	3840	15.84	16.70	1.219	-	-	0.18	0.284	0.346
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 9	DSI 5	656000	3840	15.81	16.70	1.227	-	-	0.05	0.111	0.136
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 9	DSI 5	656000	3840	15.81	16.70	1.227	-	-	0.06	0.083	0.102
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	656000	3840	15.81	16.70	1.227	-	-	0.13	0.444	0.545
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 9	DSI 5	656000	3840	15.81	16.70	1.227	-	-	0.11	0.222	0.272
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 9	DSI 5	656000	3840	15.76	16.70	1.242	-	-	0.00	0.491	0.610
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	0.09	0.508	0.598
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	0.18	0.549	0.647
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	-0.18	0.836	0.985
28	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	-0.02	0.995	1.172
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	633332	3499.98	16.53	17.30	1.194	-	-	-0.17	0.485	0.579
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.53	17.30	1.194	-	-	-0.14	0.528	0.630
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	633332	3499.98	16.53	17.30	1.194	-	-	0.08	0.821	0.980
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.53	17.30	1.194	-	-	0.18	0.877	1.047
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	633332	3499.98	16.48	17.30	1.208	-	-	0.11	0.796	0.962
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.48	17.30	1.208	-	-	0.08	0.835	1.009
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	656000	3840	16.52	17.30	1.197	-	-	0.19	0.331	0.396
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	656000	3840	16.52	17.30	1.197	-	-	-0.01	0.384	0.460
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	656000	3840	16.52	17.30	1.197	-	-	-0.10	0.677	0.810
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	656000	3840	16.52	17.30	1.197	-	-	0.13	0.672	0.804
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 8	DSI 5	656000	3840	16.47	17.30	1.211	-	-	0.19	0.283	0.343
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	656000	3840	16.47	17.30	1.211	-	-	0.01	0.335	0.406
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	656000	3840	16.47	17.30	1.211	-	-	-0.16	0.711	0.861
	FR1 n77C	100M	QPSK	135	138	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	652668+ 659332	3790.02+ 3889.98	15.60	17.30	1.479	-	-	0.07	0.576	0.852
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	656000	3840	16.47	17.30	1.211	-	-	-0.01	0.602	0.729
	FR1 n77	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 8	DSI 5	656000	3840	16.39	17.30	1.233	-	-	0.08	0.314	0.387
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 8	DSI 5	656000	3840	16.39	17.30	1.233	-	-	-0.01	0.684	0.843
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	656000	3840	16.39	17.30	1.233	-	-	-0.11	0.653	0.805
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	633332	3499.98	13.96	14.50	1.132	-	-	0.06	0.801	0.907
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	633332	3499.98	13.96	14.50	1.132	-	-	0.15	0.304	0.344
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	633332	3499.98	13.96	14.50	1.132	-	-	0.06	0.129	0.146
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	633332	3499.98	13.96	14.50	1.132	-	-	-0.18	0.088	0.100
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	633332	3499.98	13.93	14.50	1.140	-	-	0.04	0.737	0.840
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	633332	3499.98	13.93	14.50	1.140	-	-	0.07	0.307	0.350
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	633332	3499.98	13.93	14.50	1.140	-	-	-0.14	0.120	0.137



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	633332	3499.98	13.93	14.50	1.140	-	-	0.05	0.085	0.097
	FR1 n77	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	633332	3499.98	13.88	14.50	1.153	-	-	0.01	0.711	0.820
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	656000	3840	14.00	14.50	1.122	-	-	0.19	0.355	0.398
	FR1 n77C	100M	QPSK	135	138	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	652668+ 659332	3790.02+ 3889.98	13.22	14.50	1.343	-	-	0.15	0.312	0.419
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	656000	3840	14.00	14.50	1.122	-	-	-0.16	0.115	0.129
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	656000	3840	14.00	14.50	1.122	-	-	-0.17	0.095	0.107
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	656000	3840	14.00	14.50	1.122	-	-	0.11	0.076	0.085
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 10	DSI 5	656000	3840	13.98	14.50	1.127	-	-	-0.05	0.269	0.303
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 10	DSI 5	656000	3840	13.98	14.50	1.127	-	-	0.01	0.081	0.091
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 10	DSI 5	656000	3840	13.98	14.50	1.127	-	-	0.15	0.101	0.114
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 10	DSI 5	656000	3840	13.98	14.50	1.127	-	-	-0.04	0.042	0.047
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.62	15.20	1.143	-	-	0.12	0.608	0.695
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.62	15.20	1.143	-	-	-0.15	0.492	0.562
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.62	15.20	1.143	-	-	-0.09	0.242	0.277
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.62	15.20	1.143	-	-	-0.04	0.252	0.288
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.59	15.20	1.151	-	-	0.10	0.481	0.554
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.59	15.20	1.151	-	-	-0.09	0.440	0.506
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.59	15.20	1.151	-	-	0.14	0.202	0.233
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.59	15.20	1.151	-	-	-0.03	0.209	0.241
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	656000	3840	14.79	15.20	1.099	-	-	-0.05	0.255	0.280
	FR1 n77C	100M	QPSK	135	138	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	652668+ 659332	3790.02+ 3889.98	13.74	15.20	1.400	-	-	-0.09	0.196	0.274
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	656000	3840	14.79	15.20	1.099	-	-	-0.13	0.251	0.276
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	656000	3840	14.79	15.20	1.099	-	-	-0.05	0.139	0.153
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	656000	3840	14.79	15.20	1.099	-	-	-0.01	0.149	0.164
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	656000	3840	14.74	15.20	1.112	-	-	-0.11	0.195	0.217
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	656000	3840	14.74	15.20	1.112	-	-	-0.16	0.196	0.218
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	656000	3840	14.74	15.20	1.112	-	-	-0.16	0.109	0.121
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	656000	3840	14.74	15.20	1.112	-	-	0.08	0.116	0.129
	FR1 n78	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.31	15.50	1.315	-	-	-0.06	0.375	0.493
	FR1 n78	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.31	15.50	1.315	-	-	0.16	0.332	0.437
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.31	15.50	1.315	-	-	-0.02	0.269	0.354
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.31	15.50	1.315	-	-	0.13	0.271	0.356
29	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.25	15.50	1.334	-	-	-0.08	0.420	0.560
	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.25	15.50	1.334	-	-	0.15	0.405	0.540
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	633332	3499.98	14.25	15.50	1.334	-	-	-0.10	0.310	0.414
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	633332	3499.98	14.25	15.50	1.334	-	-	-0.01	0.291	0.388
	FR1 n78	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	650000	3750	14.26	15.50	1.330	-	-	-0.03	0.335	0.446
	FR1 n78	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	650000	3750	14.26	15.50	1.330	-	-	0.19	0.310	0.412
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	650000	3750	14.26	15.50	1.330	-	-	0.18	0.188	0.250
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	650000	3750	14.26	15.50	1.330	-	-	-0.03	0.191	0.254
	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 5	650000	3750	14.19	15.50	1.352	-	-	-0.01	0.263	0.356
	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	DSI 5	650000	3750	14.19	15.50	1.352	-	-	-0.08	0.248	0.335
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	DSI 5	650000	3750	14.19	15.50	1.352	-	-	-0.02	0.141	0.191
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	DSI 5	650000	3750	14.19	15.50	1.352	-	-	0.06	0.182	0.246



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																
	Bluetooth	DH5 1Mbps	Right Cheek	0mm	Ant 13	Standalone	39	2441	15.25	16.00	1.189	77.07	1.007	-0.09	0.180	0.216
	Bluetooth	DH5 1Mbps	Right Tilted	0mm	Ant 13	Standalone	39	2441	15.25	16.00	1.189	77.07	1.007	-	n/a	n/a
	Bluetooth	DH5 1Mbps	Left Cheek	0mm	Ant 13	Standalone	39	2441	15.25	16.00	1.189	77.07	1.007	-0.11	0.281	0.336
	Bluetooth	DH5 1Mbps	Left Tilted	0mm	Ant 13	Standalone	39	2441	15.25	16.00	1.189	77.07	1.007	-0.17	0.272	0.326
30	Bluetooth	DH5 1Mbps	Right Cheek	0mm	Ant 6	Standalone	0	2402	16.85	17.00	1.035	77.07	1.007	-0.03	0.426	0.444
	Bluetooth	DH5 1Mbps	Right Tilted	0mm	Ant 6	Standalone	0	2402	16.85	17.00	1.035	77.07	1.007	0.13	0.052	0.054
	Bluetooth	DH5 1Mbps	Left Cheek	0mm	Ant 6	Standalone	0	2402	16.85	17.00	1.035	77.07	1.007	0.02	0.366	0.381
	Bluetooth	DH5 1Mbps	Left Tilted	0mm	Ant 6	Standalone	0	2402	16.85	17.00	1.035	77.07	1.007	0.01	0.080	0.083
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 13	Standalone	1	2412	15.47	17.00	1.422	100	1.000	0.18	0.384	0.546
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 13	Standalone	1	2412	15.47	17.00	1.422	100	1.000	0.18	0.467	0.664
31	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 13	Standalone	1	2412	15.47	17.00	1.422	100	1.000	-0.13	0.622	0.884
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 13	Standalone	1	2412	15.47	17.00	1.422	100	1.000	0.19	0.553	0.786
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 13	Standalone	6	2437	15.28	17.00	1.486	100	1.000	0.19	0.473	0.703
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 13	Standalone	11	2462	15.15	17.00	1.531	100	1.000	-0.18	0.477	0.730
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6	Standalone	6	2437	14.37	16.00	1.455	100	1.000	0.19	0.465	0.677
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6	Standalone	6	2437	14.37	16.00	1.455	100	1.000	0.13	0.040	0.058
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Standalone	6	2437	14.37	16.00	1.455	100	1.000	0.13	0.341	0.496
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	Standalone	6	2437	14.37	16.00	1.455	100	1.000	0.08	0.056	0.081
	WLAN2.4GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.17	0.290	0.423
	WLAN2.4GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.18	0.287	0.418
	WLAN2.4GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	-0.05	0.544	0.793
	WLAN2.4GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.08	0.473	0.690
5000MHz																
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 9	Standalone	50	5250	13.45	14.50	1.274	100	1.000	0.06	0.110	0.140
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 9	Standalone	50	5250	13.45	14.50	1.274	100	1.000	0.12	0.104	0.132
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 9	Standalone	50	5250	13.45	14.50	1.274	100	1.000	-0.11	0.592	0.754
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 9	Standalone	50	5250	13.45	14.50	1.274	100	1.000	-0.04	0.275	0.350
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	0.16	0.590	0.599
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	-0.06	0.762	0.774
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	-0.07	0.936	0.951
32	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	0.14	1.050	1.067
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 9+8	Standalone	50	5250	15.16	16.50	1.361	100	1.000	-0.14	0.293	0.399
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 9+8	Standalone	50	5250	15.16	16.50	1.361	100	1.000	0.03	0.375	0.510
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	50	5250	15.16	16.50	1.361	100	1.000	0.17	0.506	0.689
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 9+8	Standalone	50	5250	15.16	16.50	1.361	100	1.000	-0.19	0.564	0.768
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 9	Standalone	114	5570	13.50	14.00	1.122	100	1.000	0.17	0.108	0.121
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 9	Standalone	114	5570	13.50	14.00	1.122	100	1.000	-0.11	0.109	0.122
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 9	Standalone	114	5570	13.50	14.00	1.122	100	1.000	-0.04	0.462	0.518
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 9	Standalone	114	5570	13.50	14.00	1.122	100	1.000	-0.16	0.221	0.248
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	0.17	0.641	0.651
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	0.17	0.806	0.819
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	-0.07	0.917	0.932
33	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	0.13	1.060	1.077
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 9+8	Standalone	114	5570	15.88	17.00	1.294	100	1.000	-0.06	0.215	0.278
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 9+8	Standalone	114	5570	15.88	17.00	1.294	100	1.000	-0.05	0.252	0.326
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	114	5570	15.88	17.00	1.294	100	1.000	-0.13	0.437	0.565
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 9+8	Standalone	114	5570	15.88	17.00	1.294	100	1.000	0.03	0.364	0.471
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 9	Standalone	155	5775	17.70	18.50	1.202	99.45	1.006	-0.05	0.240	0.290
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 9	Standalone	155	5775	17.70	18.50	1.202	99.45	1.006	-0.10	0.224	0.271
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 9	Standalone	155	5775	17.70	18.50	1.202	99.45	1.006	-0.10	0.828	1.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 9	Standalone	155	5775	17.70	18.50	1.202	99.45	1.006	-0.11	0.547	0.661



FCC SAR Test Report

Report No. : FA5O1021

	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	0.16	0.689	0.794
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	-0.06	0.741	0.854
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	0.10	0.826	0.952
34	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	-0.09	0.915	1.055
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 9+8	Standalone	155	5775	19.27	21.00	1.489	99.45	1.006	-0.02	0.346	0.518
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 9+8	Standalone	155	5775	19.27	21.00	1.489	99.45	1.006	0.08	0.372	0.557
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	155	5775	19.27	21.00	1.489	99.45	1.006	-0.14	0.591	0.885
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 9+8	Standalone	155	5775	19.27	21.00	1.489	99.45	1.006	0.19	0.536	0.803

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)	Measured APD (W/m^2)
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.01	0.035	0.043	0.186
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.10	0.054	0.067	0.217
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.01	0.073	0.090	0.371
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.09	0.059	0.073	0.288
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	15	6025	11.43	12.50	1.280	99.82	1.002	-0.04	0.053	0.068	0.276
35	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	111	6505	11.30	12.50	1.319	99.82	1.002	0.03	0.088	0.116	0.451
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	143	6665	11.00	12.50	1.414	99.82	1.002	0.08	0.080	0.113	0.412
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 9+8	Standalone	207	6985	11.05	12.50	1.398	99.82	1.002	0.02	0.068	0.095	0.304



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)
750MHz																				
	LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	0.15	0.162	0.167
	LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	0.15	0.167	0.172
	LTE Band 71	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	0.06	0.321	0.330
	LTE Band 71	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	-0.14	0.084	0.086
	LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	0.18	0.122	0.135
	LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	0.05	0.134	0.148
	LTE Band 71	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	-0.04	0.252	0.278
	LTE Band 71	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	-0.06	0.067	0.074
	LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	0.12	0.253	0.257
	LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	0.18	0.312	0.317
36	LTE Band 71	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	-0.03	0.539	0.548
	LTE Band 71	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	-	n/a	n/a
	LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	-0.12	0.235	0.243
	LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	0.06	0.249	0.257
	LTE Band 71	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	0.13	0.393	0.406
	LTE Band 71	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	-0.02	0.089	0.100
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	0	0.100	0.113
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	-0.11	0.168	0.189
	LTE Band 12B	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 4	23048+23120	702.8+710	23.68	23.80	1.028	-	-	-0.07	0.148	0.152
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	-0.06	0.048	0.054
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-0.02	0.072	0.080
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-0.19	0.085	0.095
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-0.07	0.145	0.162
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	-0.06	0.263	0.290
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	0.07	0.307	0.339
37	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	-0.07	0.599	0.661
	LTE Band 12B	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	23048+23120	702.8+710	22.71	22.90	1.045	-	-	0.14	0.533	0.557
	LTE Band 12	10M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-0.04	0.218	0.242
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-0.13	0.240	0.267
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-0.04	0.428	0.476
	LTE Band 12	10M	QPSK	25	0	-	Top Side	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-	n/a	n/a
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	-0.06	0.172	0.222
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	-0.11	0.218	0.281
	LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	0	0.362	0.466
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	-0.15	0.144	0.185
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	0.18	0.138	0.179
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	-0.1	0.178	0.230
	LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	-0.07	0.290	0.375
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	0	0.112	0.145
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	0.12	0.265	0.330
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	0.09	0.294	0.366
38	LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	-0.11	0.489	0.609
	LTE Band 13	10M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	-	n/a	n/a
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-0.11	0.214	0.269
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-0.1	0.226	0.285
	LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-0.02	0.326	0.410
	LTE Band 13	10M	QPSK	25	0	-	Top Side	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-	n/a	n/a



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n71	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	0.05	0.162	0.196
	FR1 n71	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	0.16	0.180	0.217
	FR1 n71	20M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	0.19	0.378	0.457
	FR1 n71	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	-0.02	0.084	0.101
	FR1 n71	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	-0.06	0.159	0.193
	FR1 n71	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	0.03	0.175	0.212
	FR1 n71	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	0.19	0.355	0.431
	FR1 n71	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	-0.13	0.085	0.103
	FR1 n71	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	0	0.279	0.329
	FR1 n71	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	-0.12	0.299	0.352
	FR1 n71	20M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	-0.17	0.478	0.563
	FR1 n71	20M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	-	n/a	n/a
	FR1 n71	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	-0.04	0.306	0.362
	FR1 n71	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	0.09	0.340	0.402
39	FR1 n71	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	-0.08	0.621	0.735
	FR1 n71	20M	QPSK	50	28	DFT-15	Top Side	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	-0.03	0.086	0.098
	FR1 n12	15M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	-0.05	0.103	0.118
	FR1 n12	15M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	0	0.184	0.210
	FR1 n12	15M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	-0.03	0.047	0.054
	FR1 n12	15M	QPSK	36	22	DFT-15	Front	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	0.03	0.107	0.131
	FR1 n12	15M	QPSK	36	22	DFT-15	Back	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	-0.02	0.121	0.148
	FR1 n12	15M	QPSK	36	22	DFT-15	Right Side	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	0.19	0.190	0.233
	FR1 n12	15M	QPSK	36	22	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	-0.09	0.058	0.071
	FR1 n12	15M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	0.08	0.275	0.324
	FR1 n12	15M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	0.06	0.299	0.352
	FR1 n12	15M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	0.07	0.525	0.618
	FR1 n12	15M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	-	n/a	n/a
	FR1 n12	15M	QPSK	36	22	DFT-15	Front	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	-0.01	0.299	0.369
	FR1 n12	15M	QPSK	36	22	DFT-15	Back	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	-0.13	0.320	0.395
40	FR1 n12	15M	QPSK	36	22	DFT-15	Left Side	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	0.1	0.591	0.729
	FR1 n12	15M	QPSK	36	22	DFT-15	Top Side	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	-	n/a	n/a
	FR1 n13	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.08	0.164	0.217
	FR1 n13	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.01	0.198	0.262
	FR1 n13	10M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.03	0.374	0.495
	FR1 n13	10M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.04	0.133	0.176
	FR1 n13	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	-0.08	0.177	0.261
	FR1 n13	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	0.07	0.225	0.331
	FR1 n13	10M	QPSK	25	14	DFT-15	Right Side	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	-0.1	0.393	0.578
	FR1 n13	10M	QPSK	25	14	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	0.02	0.144	0.212
	FR1 n13	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	0.11	0.271	0.381
	FR1 n13	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	-0.14	0.300	0.422
	FR1 n13	10M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	-0.17	0.405	0.569
	FR1 n13	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	-	n/a	n/a
	FR1 n13	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	-0.18	0.261	0.383
	FR1 n13	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	-0.07	0.264	0.388
41	FR1 n13	10M	QPSK	25	14	DFT-15	Left Side	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	0.04	0.412	0.605
	FR1 n13	10M	QPSK	25	14	DFT-15	Top Side	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	-	n/a	n/a
835MHz																				
	GSM850	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	0.03	0.203	0.299
	GSM850	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	-0.04	0.269	0.396
42	GSM850	-	-	-	-	GPRS (4Tx slots)	Right Side	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	-0.18	0.450	0.662
	GSM850	-	-	-	-	GPRS (4Tx slots)	Bottom Side	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	-0.16	0.183	0.269
	GSM850	-	-	-	-	DTM Multi-slot class 9	Right Side	10mm	Ant 1	DSI 4	189	836.4	23.70	24.98	1.341	-	-	0.02	0.403	0.540
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	-0.09	0.221	0.256
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	-0.05	0.330	0.382



FCC SAR Test Report

Report No. : FA5O1021

	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	0.09	0.394	0.457
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	0.1	0.202	0.234
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	-0.13	0.230	0.263
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	-0.02	0.241	0.275
43	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	0.01	0.512	0.585
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	-	n/a	n/a
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	-0.09	0.164	0.189
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	-0.05	0.202	0.233
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	0.17	0.310	0.357
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	0.06	0.148	0.170
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	0.01	0.144	0.169
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	-0.15	0.184	0.216
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	0.12	0.278	0.327
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	0.18	0.130	0.153
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-0.09	0.191	0.219
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-0.14	0.197	0.226
44	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-0.06	0.411	0.472
	LTE Band 26	15M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-	n/a	n/a
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	0	0.170	0.196
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	-0.01	0.177	0.204
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	-0.01	0.289	0.333
	LTE Band 26	15M	QPSK	36	0	-	Top Side	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	-	n/a	n/a
	FR1 n26	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	0.12	0.156	0.183
	FR1 n26	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	-0.17	0.195	0.229
	FR1 n26	20M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	0.06	0.316	0.370
	FR1 n26	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	0.18	0.130	0.152
	FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	0.08	0.200	0.245
	FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	-0.12	0.237	0.290
	FR1 n26	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	0.04	0.374	0.458
	FR1 n26	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	0.07	0.169	0.207
	FR1 n26	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-0.14	0.193	0.235
	FR1 n26	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-0.07	0.200	0.243
	FR1 n26	20M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-0.16	0.348	0.423
	FR1 n26	20M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-	n/a	n/a
	FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	0.1	0.216	0.268
	FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	0.06	0.223	0.277
45	FR1 n26	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	-0.19	0.434	0.539
	FR1 n26	20M	QPSK	50	28	DFT-15	Top Side	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	-	n/a	n/a
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	0.09	0.209	0.235
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	-0.06	0.371	0.417
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	-0.07	0.053	0.060
46	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	-0.06	0.442	0.497
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	0.14	0.229	0.279
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	-0.11	0.239	0.291
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	-0.09	0.393	0.479
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	-	n/a	n/a
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	0.14	0.256	0.306
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	0.03	0.437	0.522
	LTE Band 4	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	-0.08	0.102	0.122
	LTE Band 4	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	-0.11	0.589	0.703
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	-0.18	0.253	0.306
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	0.08	0.458	0.553
	LTE Band 4	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	0.08	0.111	0.134
	LTE Band 4	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	-0.05	0.576	0.696
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	0.09	0.337	0.405



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	-0.02	0.345	0.415
	LTE Band 4	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	-0.17	0.606	0.728
	LTE Band 4	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	0.15	0.052	0.063
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	0.15	0.352	0.426
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	-0.13	0.361	0.437
	LTE Band 4	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	-0.15	0.639	0.774
	LTE Band 4	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	0.1	0.052	0.063
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	-0.06	0.371	0.423
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	-0.03	0.436	0.497
	LTE Band 4	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	-0.13	0.119	0.136
47	LTE Band 4	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	0.08	0.797	0.909
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	0.08	0.361	0.413
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	-0.12	0.507	0.580
	LTE Band 4	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	-0.19	0.119	0.136
	LTE Band 4	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	-0.03	0.778	0.889
	LTE Band 4	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 4	20175	1732.5	21.90	22.50	1.148	-	-	-0.13	0.756	0.868
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	0.13	0.314	0.349
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	-0.01	0.445	0.495
	LTE Band 4	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	-0.02	0.681	0.757
	LTE Band 4	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	-	n/a	n/a
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	0.07	0.328	0.366
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	0.11	0.507	0.566
	LTE Band 4	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	0.19	0.681	0.761
	LTE Band 4	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	-0.09	0.223	0.263
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	-0.01	0.382	0.450
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	0.12	0.096	0.113
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	0.18	0.491	0.578
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	0.09	0.229	0.272
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	-0.04	0.383	0.455
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	0	0.088	0.105
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	0.02	0.495	0.589
	LTE Band 66C	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	132322+ 132520	1745+ 1764.8	19.73	20.50	1.194	-	-	-0.15	0.478	0.571
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	-0.07	0.315	0.374
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	0.17	0.324	0.384
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	-0.17	0.583	0.691
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	-0.19	0.045	0.053
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	-0.18	0.328	0.391
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	0.19	0.340	0.405
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	-0.09	0.602	0.717
	LTE Band 66C	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	132322+ 132520	1745+ 1764.8	18.71	19.50	1.199	-	-	-0.19	0.567	0.680
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	0.01	0.049	0.058
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.17	0.277	0.330
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.15	0.326	0.388
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.06	0.093	0.111
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.18	0.582	0.693
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.02	0.280	0.337
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.09	0.346	0.416
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.08	0.096	0.115
48	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.14	0.603	0.725
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	-0.18	0.271	0.296
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	0.17	0.359	0.392
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	-0.09	0.587	0.640
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	-0.07	0.292	0.322
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	0.16	0.372	0.411



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	0.07	0.585	0.646
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	-	n/a	n/a
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	0.08	0.248	0.322
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	-0.11	0.402	0.523
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	-0.02	0.065	0.085
	FR1 n66	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	0	0.487	0.633
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.04	0.244	0.319
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.01	0.373	0.487
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.09	0.061	0.080
	FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.1	0.449	0.586
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	-0.03	0.312	0.408
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	-0.07	0.328	0.429
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	0.16	0.591	0.774
	FR1 n66	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	-0.09	0.056	0.073
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	-0.14	0.314	0.412
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	-0.18	0.330	0.433
49	FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	0.04	0.598	0.785
	FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	-0.08	0.051	0.067
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	0.12	0.314	0.387
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	0.12	0.370	0.456
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	-0.12	0.100	0.123
	FR1 n66	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	0.19	0.566	0.698
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	0.15	0.303	0.378
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	0.17	0.354	0.441
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	-0.09	0.100	0.125
	FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	-0.14	0.587	0.732
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	0.12	0.253	0.343
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	0.13	0.367	0.497
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	0.13	0.534	0.724
	FR1 n66	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	-0.01	0.049	0.066
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.05	0.260	0.356
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.13	0.359	0.492
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.07	0.570	0.781
	FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.08	0.046	0.063
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	-0.1	0.115	0.149
50	GSM1900	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	0.13	0.446	0.578
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Left Side	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	0.11	0.067	0.087
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Top Side	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	-0.11	0.359	0.466
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Back	10mm	Ant 4	DSI 4	810	1909.8	19.48	20.68	1.318	-	-	0.06	0.401	0.529
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	0.03	0.115	0.158
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	-0.14	0.122	0.168
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Right Side	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	0.01	0.300	0.412
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Top Side	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	-	n/a	n/a
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Right Side	10mm	Ant 6	DSI 4	810	1909.8	16.35	17.18	1.209	-	-	0.03	0.265	0.320
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	0.19	0.234	0.238
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	0.14	0.427	0.434
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	0.11	0.122	0.124
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	-0.08	0.612	0.622
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	0.03	0.283	0.289
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	0.01	0.330	0.337
51	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	-0.14	0.624	0.637
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	0.08	0.074	0.076
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	-0.18	0.245	0.254
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	-0.09	0.441	0.456



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	-0.18	0.082	0.085
	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	0.05	0.608	0.629
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	0	0.241	0.255
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	0.09	0.428	0.453
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	-0.1	0.096	0.102
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	-0.05	0.585	0.620
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.07	0.412	0.438
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.12	0.420	0.447
	LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.15	0.914	0.972
	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.03	0.056	0.060
	LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	26140	1860	19.43	19.80	1.089	-	-	-0.19	0.911	0.992
	LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	26590	1905	19.39	19.80	1.099	-	-	-0.14	0.863	0.948
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	-0.1	0.416	0.447
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	0.1	0.430	0.462
52	LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	-0.07	0.948	1.018
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	0.16	0.056	0.060
	LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	26140	1860	19.41	19.80	1.094	-	-	0.19	0.923	1.010
	LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	26590	1905	19.38	19.80	1.102	-	-	-0.06	0.896	0.987
	LTE Band 25	20M	QPSK	100	0	-	Right Side	10mm	Ant 6	DSI 4	26340	1880	19.42	19.80	1.091	-	-	0.18	0.920	1.004
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.07	0.330	0.380
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.04	0.495	0.571
	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.07	0.132	0.152
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.16	0.752	0.867
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	26140	1860	22.31	23.00	1.172	-	-	-0.19	0.733	0.859
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	26590	1905	22.32	23.00	1.169	-	-	-0.14	0.728	0.851
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	0.01	0.342	0.399
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	-0.12	0.531	0.620
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	-0.03	0.134	0.156
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	-0.06	0.799	0.932
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	26140	1860	22.27	23.00	1.183	-	-	-0.19	0.778	0.920
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	26590	1905	22.28	23.00	1.180	-	-	-0.14	0.763	0.900
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 4	26340	1880	22.32	23.00	1.169	-	-	-0.05	0.751	0.878
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	-0.02	0.216	0.221
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	0.05	0.311	0.318
	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	-0.15	0.477	0.487
	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	-0.05	0.032	0.033
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	-0.08	0.224	0.231
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	-0.09	0.307	0.316
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	-0.1	0.498	0.513
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	0.17	0.031	0.032
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.15	0.225	0.287
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.19	0.514	0.655
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.14	0.109	0.139
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.11	0.459	0.585
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	0.1	0.220	0.283
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	0.06	0.359	0.461
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	-0.08	0.100	0.129
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	-0.03	0.465	0.598
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	-0.05	0.302	0.394
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	-0.08	0.334	0.435
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	0.18	0.808	1.053
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	-0.08	0.044	0.057
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	-0.03	0.315	0.412
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	0.09	0.343	0.449
53	FR1 n25	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	-0.11	0.807	1.056
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	0.1	0.048	0.063



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n25	40M	QPSK	216	0	DFT-15	Right Side	10mm	Ant 6	DSI 4	376500	1882.5	18.92	20.20	1.343	-	-	-0.18	0.766	1.029
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	-0.16	0.268	0.335
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	0.17	0.320	0.400
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	0	0.107	0.134
	FR1 n25	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	0.08	0.609	0.761
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	0.03	0.277	0.350
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	0.11	0.332	0.419
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	-0.13	0.109	0.138
	FR1 n25	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	-0.07	0.627	0.791
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	-0.01	0.328	0.403
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	-0.18	0.348	0.428
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	0.04	0.693	0.852
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	0	0.042	0.052
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	-0.18	0.302	0.376
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	-0.09	0.359	0.447
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	-0.1	0.675	0.840
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	0.16	0.041	0.051
	FR1 n25	40M	QPSK	216	0	DFT-15	Left Side	10mm	Ant 0	DSI 4	376500	1882.5	18.20	19.20	1.259	-	-	-0.11	0.671	0.845
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	-0.11	0.225	0.265
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	0.05	0.381	0.449
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	0.19	0.120	0.141
	LTE Band 30	10M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	-0.05	0.376	0.443
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	0.05	0.222	0.262
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	0.11	0.384	0.453
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	-0.15	0.127	0.150
	LTE Band 30	10M	QPSK	25	0	-	Top Side	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	-0.17	0.377	0.445
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	0.08	0.256	0.302
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	-0.07	0.443	0.523
	LTE Band 30	10M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	0.16	0.539	0.636
	LTE Band 30	10M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	-	n/a	n/a
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	0.06	0.262	0.313
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	-0.11	0.456	0.544
54	LTE Band 30	10M	QPSK	25	0	-	Right Side	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	-0.02	0.582	0.695
	LTE Band 30	10M	QPSK	25	0	-	Top Side	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	-	n/a	n/a
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	-0.14	0.203	0.273
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	0.1	0.344	0.462
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	0.08	0.108	0.145
	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	0.12	0.288	0.387
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.13	0.201	0.272
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.14	0.359	0.486
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Side	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.08	0.114	0.154
	FR1 n30	10M	QPSK	25	14	DFT-15	Top Side	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.08	0.298	0.404
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	0.19	0.185	0.237
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	-0.03	0.321	0.411
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	0.09	0.390	0.499
	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	-	n/a	n/a
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	0.11	0.189	0.245
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	-0.05	0.318	0.411
55	FR1 n30	10M	QPSK	25	14	DFT-15	Right Side	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	0.02	0.400	0.518
	FR1 n30	10M	QPSK	25	14	DFT-15	Top Side	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	-	n/a	n/a
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	-0.1	0.235	0.261
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	0.19	0.396	0.440
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	0.13	0.068	0.076
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	0.03	0.693	0.771



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 7C	20M	QPSK	1	0		Top Side	10mm	Ant 4	DSI 4	21100+ 21298	2535+ 2554.8	18.64	19.50	1.219	-	-	-0.09	0.628	0.766
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.16	0.234	0.263
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.18	0.385	0.433
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.03	0.076	0.086
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.05	0.676	0.761
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	-0.19	0.310	0.323
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	0.15	0.488	0.508
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	0.17	0.603	0.628
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	0	0.064	0.067
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	-0.04	0.326	0.344
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	0.01	0.516	0.544
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	-0.05	0.638	0.672
	LTE Band 7C	20M	QPSK	1	0		Right Side	10mm	Ant 6	DSI 4	21100+ 21298	2535+ 2554.8	19.81	20.00	1.045	-	-	-0.1	0.613	0.641
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	-0.08	0.066	0.070
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	0.14	0.257	0.284
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	0	0.392	0.433
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	0.03	0.088	0.097
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	-0.11	0.694	0.766
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	0.06	0.264	0.294
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	-0.17	0.406	0.451
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	-0.02	0.087	0.097
56	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	0.13	0.719	0.800
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	20850	2510	19.46	20.00	1.132	-	-	0.04	0.663	0.751
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	21350	2560	19.45	20.00	1.135	-	-	0	0.700	0.795
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 4	21100	2535	19.52	20.00	1.117	-	-	0	0.713	0.796
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.03	0.341	0.342
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.13	0.409	0.410
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.13	0.630	0.631
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.06	0.088	0.088
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	0.01	0.357	0.361
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	-0.01	0.420	0.425
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	-0.17	0.666	0.674
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	0.01	0.089	0.090
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	0.19	0.171	0.198
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	-0.02	0.303	0.351
	LTE Band 38	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	0.09	0.061	0.071
	LTE Band 38	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	0.16	0.533	0.618
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0	0.166	0.195
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0.14	0.301	0.353
	LTE Band 38	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0.09	0.059	0.069
	LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0.14	0.542	0.636
	LTE Band 38C	20M	QPSK	1	0		Top Side	10mm	Ant 4	DSI 4	37901+ 38099	2585.1+ 2604.9	19.83	20.50	1.167	62.9	1.006	0.17	0.486	0.571
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.03	0.218	0.228
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.03	0.248	0.259
	LTE Band 38	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.19	0.428	0.447
	LTE Band 38	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.15	0.049	0.051
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	0.02	0.212	0.222
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	-0.05	0.251	0.263
	LTE Band 38	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	-0.01	0.435	0.455
	LTE Band 38C	20M	QPSK	1	0		Right Side	10mm	Ant 6	DSI 4	37901+ 38099	2585.1+ 2604.9	20.69	21.00	1.074	62.9	1.006	-0.02	0.398	0.430
	LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	0	0.045	0.047
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.15	0.248	0.270
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.03	0.388	0.422
	LTE Band 38	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	0.06	0.080	0.087
	LTE Band 38	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.08	0.739	0.804



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	0.15	0.245	0.270
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	0.17	0.461	0.508
	LTE Band 38	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	-0.17	0.073	0.080
57	LTE Band 38	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	-0.14	0.794	0.875
	LTE Band 38	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 4	38000	2595	22.06	22.50	1.107	62.9	1.006	-0.15	0.729	0.812
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	0.15	0.230	0.240
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	-0.03	0.276	0.288
	LTE Band 38	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	-0.13	0.445	0.465
	LTE Band 38	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	0.05	0.065	0.068
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.1	0.224	0.235
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.12	0.274	0.288
	LTE Band 38	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.17	0.429	0.451
	LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.13	0.066	0.069
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	0.03	0.077	0.082
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	0.1	0.151	0.160
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	-0.01	0.254	0.269
	LTE Band 41C	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	40620+ 40818	2593+ 2612.8	16.75	17.20	1.109	62.9	1.006	-0.06	0.231	0.258
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	40620	2593	18.66	18.80	1.033	42.9	1.009	-0.04	0.246	0.256
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	0.1	0.082	0.088
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	-0.12	0.148	0.159
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	0.04	0.221	0.237
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	-0.14	0.162	0.172
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	0.16	0.246	0.261
	LTE Band 41	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	-0.08	0.338	0.358
	LTE Band 41C	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	40620+ 40818	2593+ 2612.8	19.39	19.70	1.074	62.9	1.006	0.08	0.281	0.304
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	-0.03	0.039	0.041
	LTE Band 41	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 4	40620	2593	21.20	21.30	1.023	42.9	1.009	0.1	0.310	0.320
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	0.1	0.160	0.171
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	-0.18	0.253	0.271
	LTE Band 41	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	-0.08	0.325	0.348
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	-0.02	0.110	0.124
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	0.12	0.167	0.188
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	-0.11	0.313	0.352
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	-0.03	0.110	0.126
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	0.03	0.166	0.190
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	-	n/a	n/a
58	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	-0.16	0.349	0.398
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 4	40620	2593	20.01	20.30	1.069	42.9	1.009	0.17	0.338	0.365
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	0.14	0.120	0.125
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	0.11	0.143	0.149
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	-0.08	0.227	0.237
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	0.18	0.122	0.129
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	0.03	0.148	0.156
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	-0.03	0.230	0.242
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	-	n/a	n/a
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 4	40620	2593	18.28	18.30	1.005	42.9	1.009	-0.06	0.232	0.235
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	-0.14	0.226	0.283
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	0.17	0.359	0.449
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	-0.02	0.066	0.083
	FR1 n7	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	0.07	0.617	0.771



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	-0.01	0.225	0.284
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	0.07	0.378	0.477
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	0.17	0.073	0.092
59	FR1 n7	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	-0.12	0.623	0.786
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	-0.12	0.249	0.284
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	0.03	0.391	0.446
	FR1 n7	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	0.05	0.483	0.551
	FR1 n7	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	-0.08	0.051	0.058
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.06	0.261	0.299
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.04	0.437	0.501
	FR1 n7	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.1	0.511	0.586
	FR1 n7	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.06	0.053	0.061
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	0.11	0.206	0.243
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	0.17	0.314	0.370
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	-0.07	0.071	0.084
	FR1 n7	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	-0.13	0.608	0.716
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.13	0.212	0.252
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.17	0.326	0.388
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.02	0.070	0.083
	FR1 n7	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.09	0.603	0.717
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	-0.11	0.324	0.373
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	-0.15	0.389	0.448
	FR1 n7	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	0.19	0.599	0.689
	FR1 n7	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	-0.01	0.084	0.097
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	-0.19	0.339	0.391
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	0.03	0.456	0.526
	FR1 n7	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	-0.13	0.643	0.741
	FR1 n7	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	0.02	0.085	0.098
	FR1 n38	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	-0.06	0.156	0.179
	FR1 n38	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	0.13	0.195	0.224
	FR1 n38	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	-0.04	0.281	0.323
	FR1 n38	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	-	n/a	n/a
	FR1 n38	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	-0.17	0.154	0.177
	FR1 n38	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	-0.12	0.191	0.220
	FR1 n38	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	0.02	0.322	0.371
	FR1 n38	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	-	n/a	n/a
	FR1 n38	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.07	0.178	0.211
	FR1 n38	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.06	0.242	0.287
60	FR1 n38	40M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.08	0.384	0.455
	FR1 n38	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.17	0.062	0.074
	FR1 n38	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	0.15	0.175	0.208
	FR1 n38	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	0.03	0.207	0.246
	FR1 n38	40M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	-0.12	0.301	0.358
	FR1 n38	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	-0.05	0.057	0.068
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	0.1	0.128	0.170
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	-0.11	0.194	0.257
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	0.03	0.049	0.065
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	-0.12	0.365	0.484
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	0.07	0.131	0.174
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	0.12	0.248	0.330
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	-	n/a	n/a
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	0.03	0.406	0.540
	FR1 n41C	100M	QPSK	144	129	DFT-30	Top Side	10mm	Ant 4	DSI 4	509598+528582	2547.99+2642.91	16.40	17.70	1.349	-	-	0.03	0.326	0.440
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	0.05	0.135	0.157
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	0	0.206	0.239
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	0.06	0.265	0.308



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n41C	100M	QPSK	144	129	DFT-30	Right Side	10mm	Ant 6	DSI 4	509598+528582	2547.99+2642.91	16.26	17.20	1.242	-	-	-0.12	0.211	0.262
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	-	n/a	n/a
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	-0.19	0.118	0.137
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	0.02	0.174	0.203
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	0.03	0.236	0.275
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	-	n/a	n/a
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	0.15	0.168	0.207
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	-0.04	0.304	0.375
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	-0.07	0.056	0.069
	FR1 n41	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	0.06	0.470	0.580
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	0.12	0.162	0.202
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	0.17	0.245	0.306
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	-0.13	0.048	0.060
61	FR1 n41	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	0.06	0.479	0.597
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	0.07	0.147	0.173
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	0.16	0.182	0.215
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	-0.13	0.306	0.361
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	0.19	0.065	0.077
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	0.09	0.164	0.194
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	0.18	0.205	0.243
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	-0.11	0.322	0.381
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	0.13	0.056	0.066
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	-0.18	0.107	0.127
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	0.1	0.189	0.224
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	-0.06	0.232	0.275
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	0.11	0.080	0.095
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	-0.05	0.122	0.146
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	0.11	0.186	0.222
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	-0.16	0.225	0.269
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	-0.04	0.088	0.105
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	0.12	0.065	0.078
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	-0.01	0.113	0.135
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	0.15	0.050	0.060
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	0.15	0.234	0.280
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	0.05	0.084	0.103
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	-0.04	0.138	0.168
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	0.12	0.047	0.057
62	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	0.04	0.235	0.287
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.14	0.082	0.086
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.15	0.185	0.193
	LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.08	0.158	0.165
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.14	0.052	0.054
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	-0.07	0.086	0.092
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	0.03	0.182	0.195
	LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	0.08	0.169	0.181
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	0.03	0.069	0.074
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.04	0.135	0.139
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.09	0.196	0.202
	LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.02	0.084	0.086
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.01	0.165	0.170
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	0.1	0.118	0.122
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	0.14	0.151	0.156
	LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	-0.13	0.067	0.069
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	0.13	0.131	0.135
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	0.14	0.183	0.233
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	-0.06	0.201	0.256



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	0.17	0.310	0.395
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	0.01	0.097	0.124
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	0.1	0.184	0.237
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	-0.03	0.199	0.256
63	FR1 n48	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	-0.17	0.335	0.431
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	0.13	0.098	0.126
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	0.05	0.136	0.166
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	0.11	0.216	0.263
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	0.08	0.071	0.087
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	-0.03	0.339	0.413
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	-0.12	0.128	0.159
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	-0.01	0.214	0.266
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	0.02	0.076	0.094
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	-0.05	0.329	0.409
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	0.04	0.171	0.201
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	-0.14	0.248	0.291
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	-0.07	0.318	0.374
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	0.12	0.106	0.125
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	0.13	0.162	0.191
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	0.05	0.244	0.288
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	0.17	0.287	0.339
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	-0.11	0.095	0.112
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	-0.01	0.110	0.153
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	-0.19	0.173	0.240
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	0.12	0.079	0.110
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	-0.01	0.146	0.203
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	0.14	0.106	0.151
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	-0.19	0.158	0.225
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	0.03	0.068	0.097
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	0.13	0.143	0.204
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.17	0.224	0.276
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.17	0.293	0.361
64	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.05	0.537	0.662
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.17	0.135	0.166
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	0.18	0.225	0.281
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	0.13	0.286	0.357
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	0.09	0.492	0.614
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	-0.06	0.122	0.152
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	0.19	0.159	0.195
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	-0.01	0.197	0.241
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	-0.06	0.380	0.466
	FR1 n77C	100M	QPSK	135	138	DFT-30	Right Side	10mm	Ant 9	DSI 4	650000 656664	3750 3849.96	17.98	19.20	1.324	-	-	0.12	0.298	0.395
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	-0.03	0.089	0.109
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	0.08	0.134	0.167
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	-0.16	0.167	0.208
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	0.03	0.311	0.387
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	-0.11	0.064	0.080
	FR1 n77	100M	QPSK	270	0	DFT-30	Right Side	10mm	Ant 9	DSI 4	656000	3840	18.24	19.20	1.247	-	-	0	0.304	0.379
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.11	0.160	0.192
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.14	0.229	0.274
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.02	0.055	0.066
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.05	0.388	0.464
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	0.15	0.157	0.191
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	-0.19	0.232	0.283
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	0.19	0.060	0.073
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	-0.06	0.380	0.463



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	-0.11	0.103	0.122
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	-0.16	0.167	0.198
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	0.08	0.061	0.072
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	-0.08	0.289	0.342
	FR1 n77C	100M	QPSK	135	138	DFT-30	Top Side	10mm	Ant 8	DSI 4	652668+ 659332	3790.02+ 3889.98	17.63	19.30	1.469	-	-	0.01	0.219	0.322
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	-0.03	0.088	0.104
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	-0.02	0.133	0.158
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	-0.07	0.041	0.049
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	0.04	0.232	0.275
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.05	0.186	0.208
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.14	0.280	0.313
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.03	0.304	0.340
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.13	0.062	0.069
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	0.12	0.176	0.200
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	-0.19	0.280	0.318
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	0.19	0.302	0.343
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	0.11	0.086	0.098
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	-0.09	0.092	0.102
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	0.13	0.188	0.209
	FR1 n77C	100M	QPSK	135	138	DFT-30	Back	10mm	Ant 10	DSI 4	652668+ 659332	3790.02+ 3889.98	15.17	16.50	1.358	-	-	0.17	0.139	0.189
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	0.03	0.175	0.195
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	0.19	0.043	0.048
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	0.08	0.071	0.080
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	-0.12	0.154	0.174
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	0.15	0.155	0.175
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	0.1	0.032	0.036
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.03	0.184	0.207
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.1	0.231	0.260
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.02	0.072	0.081
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.17	0.333	0.375
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	0.15	0.167	0.190
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	-0.16	0.220	0.251
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	-0.03	0.095	0.108
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	-0.02	0.259	0.295
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	0.09	0.132	0.143
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	0.1	0.153	0.166
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	-0.15	0.054	0.059
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	0.1	0.220	0.239
	FR1 n77C	100M	QPSK	135	138	DFT-30	Top Side	10mm	Ant 4	DSI 4	652668+ 659332	3790.02+ 3889.98	16.66	18.20	1.426	-	-	-0.03	0.156	0.222
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	0.1	0.112	0.123
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	0.15	0.124	0.136
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	-0.11	0.173	0.190
	FR1 n78	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	-0.1	0.195	0.256
65	FR1 n78	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	0.01	0.219	0.287
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	0.05	0.047	0.062
	FR1 n78	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	0.04	0.215	0.282
	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.16	0.156	0.205
	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.05	0.204	0.268
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.12	0.069	0.091
	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.16	0.190	0.250
	FR1 n78	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	0.19	0.123	0.167
	FR1 n78	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	0.06	0.167	0.227
	FR1 n78	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	0.06	0.064	0.087
	FR1 n78	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	-0.13	0.196	0.267



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	0.08	0.099	0.136
	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	-0.1	0.130	0.179
	FR1 n78	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	-0.14	0.050	0.069
	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	-0.01	0.169	0.233

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																
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	-0.16	0.079	0.100
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	0.18	0.143	0.181
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	0.19	0.059	0.075
66	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	-0.04	0.344	0.435
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	-0.16	0.089	0.096
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	0.02	0.211	0.227
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	0.14	0.128	0.138
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	-0.19	0.144	0.202
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	0.18	0.205	0.287
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	-0.1	0.066	0.092
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	-0.12	0.653	0.914
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 13	Standalone	6	2437	17.33	19.00	1.469	100	1.000	0.04	0.676	0.993
67	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 13	Standalone	11	2462	17.11	19.00	1.545	100	1.000	0.07	0.650	1.004
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-0.06	0.137	0.196
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-0.17	0.272	0.389
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-0.04	0.362	0.517
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-	n/a	n/a
	WLAN2.4GHz	802.11n-HT40 MCS0	Front	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	-0.06	0.117	0.171
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.19	0.143	0.208
	WLAN2.4GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.12	0.156	0.227
	WLAN2.4GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.12	0.223	0.325
5000MHz																
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	0.03	0.126	0.164
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.09	0.109	0.142
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.11	0.154	0.200
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.05	0.071	0.092
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	-0.18	0.228	0.246
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	0.18	0.251	0.271
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	0.03	0.104	0.112
68	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	-0.04	0.536	0.578
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	-0.11	0.170	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	-0.19	0.146	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	0.04	0.156	0.210
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	0.08	0.336	0.453
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	-0.12	0.176	0.207
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	-0.07	0.261	0.306
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	-0.19	0.491	0.576
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	0.15	0.157	0.184
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.1	0.110	0.123
69	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.05	0.521	0.581
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.01	0.079	0.088
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.09	0.302	0.337
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	0.12	0.101	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	-0.12	0.242	0.367
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	-0.16	0.264	0.400



FCC SAR Test Report

Report No. : FA5O1021

	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	-0.13	0.190	0.288
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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)	Measured APD (W/m^2)
	WLAN6GHz	802.11be-EHT320 MCS0	Front	10mm	Ant 9+8	Standalone	31	6105	11.09	11.50	1.099	99.63	1.004	-	n/a	n/a	0
70	WLAN6GHz	802.11be-EHT320 MCS0	Back	10mm	Ant 9+8	Standalone	31	6105	11.09	11.50	1.099	99.63	1.004	0.03	0.004	0.004	0.02
	WLAN6GHz	802.11be-EHT320 MCS0	Right Side	10mm	Ant 9+8	Standalone	31	6105	11.09	11.50	1.099	99.63	1.004	-	n/a	n/a	0
	WLAN6GHz	802.11be-EHT320 MCS0	Top Side	10mm	Ant 9+8	Standalone	31	6105	11.09	11.50	1.099	99.63	1.004	-	n/a	n/a	0
	WLAN6GHz	802.11be-EHT320 MCS0	Back	10mm	Ant 9+8	Standalone	63	6265	10.92	11.50	1.142	99.63	1.004	-	n/a	n/a	0
	WLAN6GHz	802.11be-EHT320 MCS0	Back	10mm	Ant 9+8	Standalone	127	6585	10.70	11.50	1.203	99.63	1.004	-	n/a	n/a	0
	WLAN6GHz	802.11be-EHT320 MCS0	Back	10mm	Ant 9+8	Standalone	159	6745	10.68	11.50	1.207	99.63	1.004	-	n/a	n/a	0
	WLAN6GHz	802.11be-EHT320 MCS0	Back	10mm	Ant 9+8	Standalone	191	6905	10.73	11.50	1.193	99.63	1.004	-	n/a	n/a	0



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)
750MHz																				
	LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	0.15	0.162	0.167
	LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	133297	680.5	24.18	24.30	1.028	-	-	0.15	0.167	0.172
	LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	0.18	0.122	0.135
	LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 4	133297	680.5	22.87	23.30	1.104	-	-	0.05	0.134	0.148
	LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	0.12	0.253	0.257
71	LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	133297	680.5	23.33	23.40	1.016	-	-	0.18	0.312	0.317
	LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	-0.12	0.235	0.243
	LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	133297	680.5	22.26	22.40	1.033	-	-	0.06	0.249	0.257
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	-0.02	0.089	0.100
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	23095	707.5	23.79	24.30	1.125	-	-	0	0.100	0.113
	LTE Band 12B	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	23048+23120	702.8+710	23.68	23.80	1.028	-	-	0.18	0.089	0.091
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-0.02	0.072	0.080
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 4	23095	707.5	22.82	23.30	1.117	-	-	-0.19	0.085	0.095
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	-0.06	0.263	0.290
72	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	23095	707.5	22.97	23.40	1.104	-	-	0.07	0.307	0.339
	LTE Band 12B	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	23048+23120	702.8+710	22.71	22.90	1.045	-	-	-0.02	0.296	0.309
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-0.04	0.218	0.242
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 4	23095	707.5	21.94	22.40	1.112	-	-	-0.13	0.240	0.267
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	-0.06	0.172	0.222
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	23230	782	23.70	24.80	1.288	-	-	-0.11	0.218	0.281
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	0.18	0.138	0.179
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 4	23230	782	22.68	23.80	1.294	-	-	-0.1	0.178	0.230
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	0.12	0.265	0.330
73	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	23230	782	22.95	23.90	1.245	-	-	0.09	0.294	0.366
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-0.11	0.214	0.269
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 4	23230	782	21.90	22.90	1.259	-	-	-0.1	0.226	0.285
	FR1 n71	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	0.05	0.162	0.196
	FR1 n71	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	136100	680.5	23.88	24.70	1.208	-	-	0.16	0.180	0.217
	FR1 n71	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	-0.06	0.159	0.193
	FR1 n71	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 1	DSI 4	136100	680.5	23.86	24.70	1.213	-	-	0.03	0.175	0.212
	FR1 n71	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	0	0.279	0.329
	FR1 n71	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	136100	680.5	23.09	23.80	1.178	-	-	-0.12	0.299	0.352
	FR1 n71	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	-0.04	0.306	0.362
74	FR1 n71	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	DSI 4	136100	680.5	23.07	23.80	1.183	-	-	0.09	0.340	0.402
	FR1 n12	15M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	-0.03	0.086	0.098
	FR1 n12	15M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	141500	707.5	24.12	24.70	1.143	-	-	-0.05	0.103	0.118
	FR1 n12	15M	QPSK	36	22	DFT-15	Front	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	0.03	0.107	0.131
	FR1 n12	15M	QPSK	36	22	DFT-15	Back	10mm	Ant 1	DSI 4	141500	707.5	23.82	24.70	1.225	-	-	-0.02	0.121	0.148
	FR1 n12	15M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	0.08	0.275	0.324
	FR1 n12	15M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	141500	707.5	23.09	23.80	1.178	-	-	0.06	0.299	0.352
	FR1 n12	15M	QPSK	36	22	DFT-15	Front	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	-0.01	0.299	0.369
75	FR1 n12	15M	QPSK	36	22	DFT-15	Back	10mm	Ant 0	DSI 4	141500	707.5	22.89	23.80	1.233	-	-	-0.13	0.320	0.395
	FR1 n13	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.08	0.164	0.217
	FR1 n13	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	156400	782	23.98	25.20	1.324	-	-	-0.01	0.198	0.262
	FR1 n13	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	-0.08	0.177	0.261
	FR1 n13	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 1	DSI 4	156400	782	23.52	25.20	1.472	-	-	0.07	0.225	0.331
	FR1 n13	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	0.11	0.271	0.381
76	FR1 n13	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	156400	782	22.82	24.30	1.406	-	-	-0.14	0.300	0.422
	FR1 n13	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	-0.18	0.261	0.383



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n13	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 0	DSI 4	156400	782	22.63	24.30	1.469	-	-	-0.07	0.264	0.388
835MHz																				
	GSM850	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	0.03	0.203	0.299
77	GSM850	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 1	DSI 4	189	836.4	26.82	28.50	1.472	-	-	-0.04	0.269	0.396
	GSM850	-	-	-	-	DTM Multi-slot class 9	Back	10mm	Ant 1	DSI 4	189	836.4	23.70	24.98	1.341	-	-	0.16	0.241	0.323
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	-0.09	0.221	0.256
78	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 4	4182	836.4	24.36	25.00	1.159	-	-	-0.05	0.330	0.382
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	-0.13	0.230	0.263
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 4	4182	836.4	23.52	24.10	1.143	-	-	-0.02	0.241	0.275
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	-0.09	0.164	0.189
79	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 4	26865	831.5	24.39	25.00	1.151	-	-	-0.05	0.202	0.233
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	0.01	0.144	0.169
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI 4	26865	831.5	23.30	24.00	1.175	-	-	-0.15	0.184	0.216
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-0.09	0.191	0.219
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	26865	831.5	23.50	24.10	1.148	-	-	-0.14	0.197	0.226
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	0	0.170	0.196
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	DSI 4	26865	831.5	22.48	23.10	1.153	-	-	-0.01	0.177	0.204
	FR1 n26	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	0.12	0.156	0.183
	FR1 n26	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	DSI 4	166300	831.5	24.51	25.20	1.172	-	-	-0.17	0.195	0.229
	FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	0.08	0.200	0.245
80	FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 1	DSI 4	166300	831.5	24.32	25.20	1.225	-	-	-0.12	0.237	0.290
	FR1 n26	20M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-0.14	0.193	0.235
	FR1 n26	20M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	166300	831.5	23.45	24.30	1.216	-	-	-0.07	0.200	0.243
	FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	0.1	0.216	0.268
	FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	DSI 4	166300	831.5	23.36	24.30	1.242	-	-	0.06	0.223	0.277
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	0.09	0.209	0.235
81	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 4	DSI 4	1413	1732.6	18.99	19.50	1.125	-	-	-0.06	0.371	0.417
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	0.14	0.229	0.279
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 6	DSI 4	1413	1732.6	17.14	18.00	1.219	-	-	-0.11	0.239	0.291
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	0.14	0.256	0.306
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	20175	1732.5	20.23	21.00	1.194	-	-	0.03	0.437	0.522
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	-0.18	0.253	0.306
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	20175	1732.5	20.18	21.00	1.208	-	-	0.08	0.458	0.553
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	0.09	0.337	0.405
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	20175	1732.5	19.20	20.00	1.202	-	-	-0.02	0.345	0.415
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	0.15	0.352	0.426
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	20175	1732.5	19.17	20.00	1.211	-	-	-0.13	0.361	0.437
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	-0.06	0.371	0.423
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	20175	1732.5	21.93	22.50	1.140	-	-	-0.03	0.436	0.497
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	0.08	0.361	0.413
82	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	20175	1732.5	21.92	22.50	1.143	-	-	-0.12	0.507	0.580
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	0.13	0.314	0.349
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	20175	1732.5	18.34	18.80	1.112	-	-	-0.01	0.445	0.495
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	0.07	0.328	0.366
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	20175	1732.5	18.32	18.80	1.117	-	-	0.11	0.507	0.566
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	-0.09	0.223	0.263
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	132322	1745	19.79	20.50	1.178	-	-	-0.01	0.382	0.450
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	0.09	0.229	0.272
83	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	132322	1745	19.75	20.50	1.189	-	-	-0.04	0.383	0.455
	LTE Band 66C	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	132322+132520	1745+1764.8	19.73	20.50	1.194	-	-	0.11	0.362	0.432
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	-0.07	0.315	0.374
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	132322	1745	18.76	19.50	1.186	-	-	0.17	0.324	0.384
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	-0.18	0.328	0.391
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	132322	1745	18.74	19.50	1.191	-	-	0.19	0.340	0.405



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 66C	20M	QPSK	1	0		Back	10mm	Ant 6	DSI 4	132322+ 132520	1745+ 1764.8	18.71	19.50	1.199	-	-	0.15	0.320	0.384
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.17	0.277	0.330
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	132322	1745	20.74	21.50	1.191	-	-	0.15	0.326	0.388
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.02	0.280	0.337
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	132322	1745	20.70	21.50	1.202	-	-	-0.09	0.306	0.368
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	-0.18	0.271	0.296
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	132322	1745	17.92	18.30	1.091	-	-	0.17	0.359	0.392
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	-0.07	0.292	0.322
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	132322	1745	17.87	18.30	1.104	-	-	0.16	0.372	0.411
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	0.08	0.248	0.322
84	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	349000	1745	19.06	20.20	1.300	-	-	-0.11	0.402	0.523
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.04	0.244	0.319
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	349000	1745	19.04	20.20	1.306	-	-	-0.01	0.373	0.487
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	-0.03	0.312	0.408
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	349000	1745	18.53	19.70	1.309	-	-	-0.07	0.328	0.429
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	-0.14	0.314	0.412
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	349000	1745	18.52	19.70	1.312	-	-	-0.18	0.330	0.433
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	0.12	0.314	0.387
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	349000	1745	20.79	21.70	1.233	-	-	0.12	0.370	0.456
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	0.15	0.303	0.378
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	349000	1745	20.74	21.70	1.247	-	-	0.17	0.354	0.441
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	0.12	0.253	0.343
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	349000	1745	16.88	18.20	1.355	-	-	0.13	0.367	0.497
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.05	0.260	0.356
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	349000	1745	16.83	18.20	1.371	-	-	0.13	0.359	0.492
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	-0.1	0.115	0.149
85	GSM1900	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 4	DSI 4	810	1909.8	22.57	23.70	1.297	-	-	0.13	0.446	0.578
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Back	10mm	Ant 4	DSI 4	810	1909.8	19.48	20.68	1.318	-	-	0.06	0.401	0.529
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Front	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	0.03	0.115	0.158
	GSM1900	-	-	-	-	GPRS (4Tx slots)	Back	10mm	Ant 6	DSI 4	810	1909.8	18.82	20.20	1.374	-	-	-0.14	0.122	0.168
	GSM1900	-	-	-	-	DTM Multi-slot class 9	Back	10mm	Ant 6	DSI 4	810	1909.8	16.35	17.18	1.209	-	-	-0.07	0.103	0.125
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	0.19	0.234	0.238
86	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 4	DSI 4	9400	1880	19.23	19.30	1.016	-	-	0.14	0.427	0.434
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	0.03	0.283	0.289
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 6	DSI 4	9400	1880	18.71	18.80	1.021	-	-	0.01	0.330	0.337
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	-0.18	0.245	0.254
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	26340	1880	20.65	20.80	1.035	-	-	-0.09	0.441	0.456
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	0	0.241	0.255
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	26340	1880	20.55	20.80	1.059	-	-	0.09	0.428	0.453
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.07	0.412	0.438
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	26340	1880	19.53	19.80	1.064	-	-	-0.12	0.420	0.447
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	-0.1	0.416	0.447
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	26340	1880	19.49	19.80	1.074	-	-	0.1	0.430	0.462
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.07	0.330	0.380
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	26340	1880	22.38	23.00	1.153	-	-	-0.04	0.495	0.571
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	0.01	0.342	0.399
87	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	26340	1880	22.33	23.00	1.167	-	-	-0.12	0.531	0.620
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	-0.02	0.216	0.221
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	26340	1880	18.91	19.00	1.021	-	-	0.05	0.311	0.318
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	-0.08	0.224	0.231
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	26340	1880	18.87	19.00	1.030	-	-	-0.09	0.307	0.316
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.15	0.225	0.287
88	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	376500	1882.5	20.15	21.20	1.274	-	-	0.19	0.514	0.655
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	0.1	0.220	0.283



FCC SAR Test Report

Report No. : FA5O1021

	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	376500	1882.5	20.11	21.20	1.285	-	-	0.06	0.359	0.461
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	-0.05	0.302	0.394
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	376500	1882.5	19.05	20.20	1.303	-	-	-0.08	0.334	0.435
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	-0.03	0.315	0.412
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	376500	1882.5	19.03	20.20	1.309	-	-	0.09	0.343	0.449
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	-0.16	0.268	0.335
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	376500	1882.5	21.23	22.20	1.250	-	-	0.17	0.320	0.400
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	0.03	0.277	0.350
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	376500	1882.5	21.19	22.20	1.262	-	-	0.11	0.332	0.419
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	-0.01	0.328	0.403
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	376500	1882.5	18.30	19.20	1.230	-	-	-0.18	0.348	0.428
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	-0.18	0.302	0.376
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	376500	1882.5	18.25	19.20	1.245	-	-	-0.09	0.359	0.447
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	-0.11	0.225	0.265
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	27710	2310	20.59	21.30	1.178	-	-	0.05	0.381	0.449
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	0.05	0.222	0.262
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 4	DSI 4	27710	2310	20.58	21.30	1.180	-	-	0.11	0.384	0.453
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	0.08	0.256	0.302
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	27710	2310	19.88	20.60	1.180	-	-	-0.07	0.443	0.523
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	0.06	0.262	0.313
89	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 6	DSI 4	27710	2310	19.83	20.60	1.194	-	-	-0.11	0.456	0.544
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	-0.14	0.203	0.273
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	462000	2310	20.12	21.40	1.343	-	-	0.1	0.344	0.462
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.13	0.201	0.272
90	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 4	DSI 4	462000	2310	20.08	21.40	1.355	-	-	0.14	0.359	0.486
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	0.19	0.185	0.237
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	462000	2310	18.33	19.40	1.279	-	-	-0.03	0.321	0.411
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	0.11	0.189	0.245
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 6	DSI 4	462000	2310	18.28	19.40	1.294	-	-	-0.05	0.318	0.411
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	-0.1	0.235	0.261
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	21100	2535	19.04	19.50	1.112	-	-	0.19	0.396	0.440
	LTE Band 7C	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	21100+ 21298	2535+ 2554.8	18.64	19.50	1.219	-	-	-0.05	0.311	0.379
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.16	0.234	0.263
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	21100	2535	18.99	19.50	1.125	-	-	0.18	0.385	0.433
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	-0.19	0.310	0.323
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	21100	2535	19.82	20.00	1.042	-	-	0.15	0.488	0.508
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	-0.04	0.326	0.344
91	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	21100	2535	19.77	20.00	1.054	-	-	0.01	0.516	0.544
	LTE Band 7C	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	21100+ 21298	2535+ 2554.8	19.81	20.00	1.045	-	-	0.06	0.504	0.527
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	0.14	0.257	0.284
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	21100	2535	19.57	20.00	1.104	-	-	0	0.392	0.433
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	0.06	0.264	0.294
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	21100	2535	19.54	20.00	1.112	-	-	-0.17	0.406	0.451
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.03	0.341	0.342
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	21100	2535	19.79	19.80	1.002	-	-	0.13	0.409	0.410
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	0.01	0.357	0.361
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	21100	2535	19.75	19.80	1.012	-	-	-0.01	0.420	0.425
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	0.19	0.171	0.198
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	38000	2595	19.88	20.50	1.153	62.9	1.006	-0.02	0.303	0.351
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0	0.166	0.195
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	38000	2595	19.83	20.50	1.167	62.9	1.006	0.14	0.301	0.353
	LTE Band 38C	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	37901+ 38099	2585.1+ 2604.9	19.83	20.50	1.167	62.9	1.006	0.14	0.238	0.279
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.03	0.218	0.228



FCC SAR Test Report

Report No. : FA5O1021

	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	38000	2595	20.84	21.00	1.038	62.9	1.006	-0.03	0.248	0.259
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	0.02	0.212	0.222
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	38000	2595	20.83	21.00	1.040	62.9	1.006	-0.05	0.251	0.263
	LTE Band 38C	20M	QPSK	1	0		Back	10mm	Ant 6	DSI 4	37901+38099	2585.1+2604.9	20.69	21.00	1.074	62.9	1.006	-0.05	0.205	0.221
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.15	0.248	0.270
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	38000	2595	22.16	22.50	1.081	62.9	1.006	-0.03	0.388	0.422
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	0.15	0.245	0.270
92	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	38000	2595	22.10	22.50	1.096	62.9	1.006	0.17	0.461	0.508
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	0.15	0.230	0.240
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	38000	2595	19.34	19.50	1.038	62.9	1.006	-0.03	0.276	0.288
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.1	0.224	0.235
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	38000	2595	19.31	19.50	1.045	62.9	1.006	-0.12	0.274	0.288
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	0.03	0.077	0.082
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	40620	2593	16.97	17.20	1.054	62.9	1.006	0.1	0.151	0.160
	LTE Band 41C	20M	QPSK	1	0		Back	10mm	Ant 4	DSI 4	40620+40818	2593+2612.8	16.75	17.20	1.109	62.9	1.006	0.06	0.122	0.136
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	40620	2593	18.66	18.80	1.033	42.9	1.009	0.03	0.143	0.149
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	0.1	0.082	0.088
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	40620	2593	16.92	17.20	1.067	62.9	1.006	-0.12	0.148	0.159
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	-0.14	0.162	0.172
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 4	40620	2593	19.47	19.70	1.054	62.9	1.006	0.16	0.246	0.261
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	0.1	0.160	0.171
93	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	40620	2593	19.43	19.70	1.064	62.9	1.006	-0.18	0.253	0.271
	LTE Band 41C	20M	QPSK	1	0		Back	10mm	Ant 6	DSI 4	40620+40818	2593+2612.8	19.39	19.70	1.074	62.9	1.006	0.08	0.205	0.221
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 4	40620	2593	21.18	21.30	1.028	42.9	1.009	-0.11	0.238	0.247
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	-0.02	0.110	0.124
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	40620	2593	18.21	18.70	1.119	62.9	1.006	0.12	0.167	0.188
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	-0.03	0.110	0.126
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	40620	2593	18.15	18.70	1.135	62.9	1.006	0.03	0.166	0.190
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 4	40620	2593	20.01	20.30	1.069	42.9	1.009	0.06	0.160	0.173
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	0.14	0.120	0.125
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 4	40620	2593	16.54	16.70	1.038	62.9	1.006	0.11	0.143	0.149
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	0.18	0.122	0.129
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	40620	2593	16.50	16.70	1.047	62.9	1.006	0.03	0.148	0.156
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 4	40620	2593	18.25	18.30	1.012	42.9	1.009	0.01	0.136	0.139
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	-0.14	0.226	0.283
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 4	DSI 4	507000	2535	18.73	19.70	1.250	-	-	0.17	0.359	0.449
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	-0.01	0.225	0.284
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 4	DSI 4	507000	2535	18.69	19.70	1.262	-	-	0.07	0.378	0.477
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	-0.12	0.249	0.284
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 6	DSI 4	507000	2535	19.13	19.70	1.140	-	-	0.03	0.391	0.446
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.06	0.261	0.299
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 6	DSI 4	507000	2535	19.11	19.70	1.146	-	-	-0.04	0.437	0.501
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	0.11	0.206	0.243
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	DSI 4	507000	2535	18.99	19.70	1.178	-	-	0.17	0.314	0.370
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.13	0.212	0.252
	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	DSI 4	507000	2535	18.95	19.70	1.189	-	-	0.17	0.326	0.388
	FR1 n7	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	-0.11	0.324	0.373
	FR1 n7	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	DSI 4	507000	2535	19.39	20.00	1.151	-	-	-0.15	0.389	0.448
	FR1 n7	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	-0.19	0.339	0.391
94	FR1 n7	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	DSI 4	507000	2535	19.38	20.00	1.153	-	-	0.03	0.456	0.526
	FR1 n38	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	-0.06	0.156	0.179
	FR1 n38	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	DSI 4	519000	2595	17.10	17.70	1.148	-	-	0.13	0.195	0.224
	FR1 n38	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	-0.17	0.154	0.177
	FR1 n38	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 6	DSI 4	519000	2595	17.09	17.70	1.151	-	-	-0.12	0.191	0.220
	FR1 n38	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.07	0.178	0.211



FCC SAR Test Report

Report No. : FA5O1021

95	FR1 n38	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 0	DSI 4	519000	2595	16.46	17.20	1.186	-	-	0.06	0.242	0.287
	FR1 n38	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	0.15	0.175	0.208
	FR1 n38	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 0	DSI 4	519000	2595	16.45	17.20	1.189	-	-	0.03	0.207	0.246
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	0.1	0.128	0.170
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	518598	2592.99	16.47	17.70	1.327	-	-	-0.11	0.194	0.257
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	0.07	0.131	0.174
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	518598	2592.99	16.46	17.70	1.330	-	-	0.12	0.248	0.330
	FR1 n41C	100M	QPSK	144	129	DFT-30	Back	10mm	Ant 4	DSI 4	509598+528582	2547.99+2642.91	16.40	17.70	1.349	-	-	0.09	0.221	0.298
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	0.05	0.135	0.157
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	DSI 4	518598	2592.99	16.55	17.20	1.161	-	-	0	0.206	0.239
	FR1 n41C	100M	QPSK	144	129	DFT-30	Back	10mm	Ant 6	DSI 4	509598+528582	2547.99+2642.91	16.26	17.20	1.242	-	-	0.16	0.156	0.194
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	-0.19	0.118	0.137
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 6	DSI 4	518598	2592.99	16.54	17.20	1.164	-	-	0.02	0.174	0.203
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	0.15	0.168	0.207
96	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 5	DSI 4	518598	2592.99	17.79	18.70	1.233	-	-	-0.04	0.304	0.375
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	0.12	0.162	0.202
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 5	DSI 4	518598	2592.99	17.74	18.70	1.247	-	-	0.17	0.245	0.306
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	0.07	0.147	0.173
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 0	DSI 4	518598	2592.99	15.98	16.70	1.180	-	-	0.16	0.182	0.215
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	0.09	0.164	0.194
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 0	DSI 4	518598	2592.99	15.97	16.70	1.183	-	-	0.18	0.205	0.243
3500-3900MHz																				
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	-0.18	0.107	0.127
97	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 9	DSI 4	55830	3609	20.28	21.00	1.180	62.9	1.006	0.1	0.229	0.272
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	-0.05	0.122	0.146
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 9	DSI 4	55830	3609	20.25	21.00	1.189	62.9	1.006	0.11	0.186	0.222
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	0.12	0.065	0.078
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 4	55830	3609	19.54	20.30	1.191	62.9	1.006	-0.01	0.213	0.255
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	0.05	0.084	0.103
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 4	55830	3609	19.46	20.30	1.213	62.9	1.006	-0.04	0.138	0.168
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.14	0.082	0.086
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 10	DSI 4	55830	3609	18.84	19.00	1.038	62.9	1.006	0.15	0.185	0.193
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	-0.07	0.086	0.092
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 10	DSI 4	55830	3609	18.72	19.00	1.067	62.9	1.006	0.03	0.182	0.195
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.04	0.135	0.139
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 4	55830	3609	20.20	20.30	1.023	62.9	1.006	-0.09	0.196	0.202
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	0.1	0.118	0.122
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 4	55830	3609	19.18	19.30	1.028	62.9	1.006	0.14	0.151	0.156
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	0.14	0.183	0.233
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	641666	3624.99	16.65	17.70	1.274	-	-	-0.06	0.201	0.256
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	0.1	0.184	0.237
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 9	DSI 4	641666	3624.99	16.60	17.70	1.288	-	-	-0.03	0.199	0.256
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	0.05	0.136	0.166
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	641666	3624.99	16.94	17.80	1.219	-	-	0.11	0.216	0.263
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	-0.12	0.128	0.159
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 8	DSI 4	641666	3624.99	16.86	17.80	1.242	-	-	-0.01	0.214	0.266
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	0.04	0.171	0.201
98	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	641666	3624.99	16.50	17.20	1.175	-	-	-0.14	0.248	0.291
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	0.13	0.162	0.191
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 10	DSI 4	641666	3624.99	16.48	17.20	1.180	-	-	0.05	0.244	0.288
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	-0.01	0.110	0.153
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	641666	3624.99	18.78	20.20	1.387	-	-	-0.19	0.173	0.240
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	0.14	0.106	0.151
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 4	DSI 4	641666	3624.99	18.66	20.20	1.426	-	-	-0.19	0.158	0.225
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.17	0.224	0.276



FCC SAR Test Report

Report No. : FA5O1021

99	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	633332	3499.98	18.29	19.20	1.233	-	-	0.17	0.293	0.361
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	0.18	0.225	0.281
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 9	DSI 4	633332	3499.98	18.24	19.20	1.247	-	-	0.13	0.286	0.357
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	0.19	0.159	0.195
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 9	DSI 4	656000	3840	18.32	19.20	1.225	-	-	-0.01	0.197	0.241
	FR1 n77C	100M	QPSK	135	138	DFT-30	Back	10mm	Ant 9	DSI 4	650000+ 656664	3750+ 3849.96	17.98	19.20	1.324	-	-	0.03	0.157	0.208
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	0.08	0.134	0.167
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 9	DSI 4	656000	3840	18.25	19.20	1.245	-	-	-0.16	0.167	0.208
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.11	0.160	0.192
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	633332	3499.98	18.52	19.30	1.197	-	-	0.14	0.229	0.274
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	0.15	0.157	0.191
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 8	DSI 4	633332	3499.98	18.44	19.30	1.219	-	-	-0.19	0.232	0.283
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	-0.11	0.103	0.122
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 8	DSI 4	656000	3840	18.57	19.30	1.183	-	-	-0.16	0.167	0.198
	FR1 n77C	100M	QPSK	135	138	DFT-30	Back	10mm	Ant 8	DSI 4	652668+ 659332	3790.02+ 3889.98	17.63	19.30	1.469	-	-	0.17	0.114	0.167
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	-0.03	0.088	0.104
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 8	DSI 4	656000	3840	18.56	19.30	1.186	-	-	-0.02	0.133	0.158
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.05	0.186	0.208
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	633332	3499.98	16.02	16.50	1.117	-	-	0.14	0.280	0.313
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	0.12	0.176	0.200
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 10	DSI 4	633332	3499.98	15.95	16.50	1.135	-	-	-0.19	0.280	0.318
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	-0.09	0.092	0.102
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 10	DSI 4	656000	3840	16.04	16.50	1.112	-	-	0.13	0.188	0.209
	FR1 n77C	100M	QPSK	135	138	DFT-30	Back	10mm	Ant 10	DSI 4	652668+ 659332	3790.02+ 3889.98	15.17	16.50	1.358	-	-	0.16	0.140	0.190
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	0.08	0.071	0.080
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 10	DSI 4	656000	3840	15.98	16.50	1.127	-	-	-0.12	0.154	0.174
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.03	0.184	0.207
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.69	18.20	1.125	-	-	-0.1	0.231	0.260
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	0.15	0.167	0.190
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.63	18.20	1.140	-	-	-0.16	0.220	0.251
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	0.09	0.132	0.143
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	656000	3840	17.84	18.20	1.086	-	-	0.1	0.153	0.166
	FR1 n77C	100M	QPSK	135	138	DFT-30	Back	10mm	Ant 4	DSI 4	652668+ 659332	3790.02+ 3889.98	16.66	18.20	1.426	-	-	-0.13	0.109	0.155
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	0.1	0.112	0.123
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	656000	3840	17.79	18.20	1.099	-	-	0.15	0.124	0.136
	FR1 n78	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	-0.1	0.195	0.256
100	FR1 n78	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.82	19.00	1.312	-	-	0.01	0.219	0.287
	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.16	0.156	0.205
	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	633332	3499.98	17.81	19.00	1.315	-	-	0.05	0.204	0.268
	FR1 n78	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	0.19	0.123	0.167
	FR1 n78	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	DSI 4	650000	3750	17.66	19.00	1.361	-	-	0.06	0.167	0.227
	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	0.08	0.099	0.136
	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	DSI 4	650000	3750	17.61	19.00	1.377	-	-	-0.1	0.130	0.179

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																
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	-0.16	0.079	0.100
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 13	Standalone	39	2441	18.01	19.00	1.256	77.07	1.007	0.18	0.143	0.181
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	-0.16	0.089	0.096
101	Bluetooth	DH5 1Mbps	Back	10mm	Ant 6	Standalone	0	2402	17.21	17.50	1.069	77.07	1.007	0.02	0.211	0.227
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	-0.19	0.144	0.202
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 13	Standalone	1	2412	17.54	19.00	1.400	100	1.000	0.18	0.205	0.287
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-0.06	0.137	0.196
102	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Standalone	6	2437	15.95	17.50	1.429	100	1.000	-0.17	0.272	0.389
	WLAN2.4GHz	802.11n-HT40 MCS0	Front	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	-0.06	0.117	0.171
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	10mm	Ant 13+6	Standalone	6	2437	17.37	19.00	1.455	99.82	1.002	0.19	0.143	0.208
5000MHz																
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	-0.09	0.127	0.164
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	-0.06	0.207	0.268
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	0.13	0.223	0.255
103	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	0.06	0.318	0.363
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	0.06	0.150	0.204
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	0.14	0.227	0.309
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	-0.01	0.157	0.180
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	0.09	0.168	0.193
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	-	n/a	n/a
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	-0.09	0.192	0.194
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	0.03	0.130	0.170
104	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	-0.17	0.253	0.330
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	-0.12	0.176	0.207
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9	Standalone	155	5775	17.33	18.00	1.167	99.45	1.006	-0.07	0.261	0.306
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.1	0.110	0.123
105	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 8	Standalone	155	5775	16.55	17.00	1.109	99.45	1.006	-0.05	0.521	0.581
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	0.12	0.101	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 9+8	Standalone	155	5775	17.22	19.00	1.507	99.45	1.006	-0.12	0.242	0.367

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)	Measured APD (W/m^2)
	WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-	n/a	n/a	0
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-	n/a	n/a	0
106	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 9+8	Standalone	15	6025	11.43	12.50	1.280	99.82	1.002	-0.06	0.010	0.013	0.04
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 9+8	Standalone	111	6505	11.30	12.50	1.319	99.82	1.002	0.01	0.006	0.008	0
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 9+8	Standalone	143	6665	11.00	12.50	1.414	99.82	1.002	0.02	0.006	0.009	0.009
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 9+8	Standalone	207	6985	11.05	12.50	1.398	99.82	1.002	-	n/a	n/a	0

15.4 Product specific 10g SAR

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																
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.19	0.583	0.758
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.13	0.235	0.306
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	0.19	0.402	0.523
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 9	Standalone	42	5210	14.38	15.50	1.293	99.45	1.006	-0.1	0.128	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	0.04	0.910	0.981
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	0.08	0.522	0.563
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	-0.09	0.183	0.197
107	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 8	Standalone	42	5210	17.20	17.50	1.072	99.45	1.006	0.09	1.700	1.833
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	0.14	0.586	0.790
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	0.09	0.234	0.315
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	0.14	0.438	0.590
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 9+8	Standalone	42	5210	17.23	18.50	1.340	99.45	1.006	-0.15	1.070	1.442
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	0.17	0.695	0.899
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	0.07	0.293	0.379
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	0.04	0.508	0.657
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 9	Standalone	50	5250	14.38	15.50	1.294	100	1.000	0.09	0.125	0.162
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	-0.06	0.981	1.121
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	-0.02	0.566	0.647
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	-0.1	0.198	0.226
108	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 8	Standalone	50	5250	16.92	17.50	1.143	100	1.000	0.01	1.700	1.943
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	0.16	0.638	0.868
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	-0.03	0.259	0.352
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	-0.01	0.471	0.641
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 9+8	Standalone	50	5250	17.16	18.50	1.361	100	1.000	-0.02	1.060	1.443
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	0.11	0.811	0.931
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	0.01	0.466	0.535
109	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	-0.09	0.893	1.025
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 9	Standalone	114	5570	15.40	16.00	1.148	100	1.000	0.13	0.234	0.269
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	0.07	0.322	0.325
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	0.07	0.281	0.284
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	0.03	0.099	0.100
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 8	Standalone	114	5570	13.96	14.00	1.009	100	1.000	-0.02	0.733	0.740
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	0.09	0.645	0.842
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	0.11	0.390	0.509
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	-0.04	0.739	0.965
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 9+8	Standalone	114	5570	17.34	18.50	1.306	100	1.000	0.17	0.770	1.006

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)	Measured APD (W/m ²)
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.01	0.055	0.068	1.29
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.08	0.026	0.032	0.623
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	-0.06	0.025	0.031	0.562
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	0mm	Ant 9+8	Standalone	47	6185	11.59	12.50	1.232	99.82	1.002	0.04	0.038	0.047	0.873
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 9+8	Standalone	15	6025	11.43	12.50	1.280	99.82	1.002	0.01	0.055	0.071	1.29
110	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 9+8	Standalone	111	6505	11.30	12.50	1.319	99.82	1.002	0.1	0.055	0.073	1.3
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 9+8	Standalone	143	6665	11.00	12.50	1.414	99.82	1.002	0.14	0.046	0.065	1.07
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 9+8	Standalone	207	6985	11.05	12.50	1.398	99.82	1.002	-0.06	0.026	0.036	1.18

15.5 6GHz PD Test Result
<WLAN PD>

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	15	6025	11.43	0.0625	2.32	2.721	1.45	1.59
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 9+8	15	6025	11.43	0.25	1.24		0.357	0.404
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	207	6985	11.05	0.0625	1.06	6.154	0.421	0.66
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 9+8	207	6985	11.05	0.25	0.257		0.057	0.069

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grid Step (λ)	Scaling Factor for Measurement Uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	15	6025	11.43	12.50	1.279	99.63	1.004	0.0625	1.5535	0.05	1.45	2.89	1.59	3.17
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	47	6185	11.59	12.50	1.233	99.63	1.004	0.0625	1.5535	-0.07	1.03	1.98	1.21	2.33
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	111	6505	11.30	12.50	1.318	99.63	1.004	0.0625	1.5535	0.03	1.05	2.16	1.14	2.34
01	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	-0.14	1.24	2.73	1.46	3.22
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 9+8	207	6985	11.05	12.50	1.396	99.63	1.004	0.0625	1.5535	0.01	0.421	0.92	0.66	1.44
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	-0.08	0.187	0.41	0.311	0.69
	WLAN6GHz	802.11ax-HE160 MCS0	Back-Left	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	0.05	0.057	0.13	0.071	0.16
	WLAN6GHz	802.11ax-HE160 MCS0	Back-Top	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	0.11	0.234	0.52	0.256	0.56
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	0.05	0.178	0.39	0.201	0.44
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	2mm	Ant 9+8	143	6665	11.00	12.50	1.413	99.63	1.004	0.0625	1.5535	0.03	0.181	0.40	0.2	0.44



15.6 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	-0.19	0.826	1	1.074
2nd	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 4	DSI 5	349000	1745	17.56	18.70	1.300	-	-	0.07	0.803	1.029	1.044
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	9262	1852.4	17.77	17.80	1.007	-	-	-0.09	0.967	1	0.974
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 4	DSI 5	9262	1852.4	17.77	17.80	1.007	-	-	-0.11	0.946	1.022	0.953
1st	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	-0.04	0.807	1	0.961
2nd	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 4	DSI 5	27710	2310	17.54	18.30	1.191	-	-	-0.17	0.779	1.036	0.928
1st	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	21350	2560	17.21	17.50	1.069	-	-	0.10	1.010	1	1.080
2nd	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 5	21350	2560	17.21	17.50	1.069	-	-	-0.09	0.996	1.014	1.065
1st	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	-0.18	0.845	1	1.030
2nd	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	641666	3624.99	16.94	17.80	1.219	-	-	-0.14	0.821	1.029	1.001
1st	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	638000	3570	16.89	17.80	1.233	-	-	0.09	0.965	1	1.190
2nd	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	638000	3570	16.89	17.80	1.233	-	-	0.03	0.943	1.023	1.163
1st	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	-0.02	0.995	1	1.172
2nd	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 8	DSI 5	633332	3499.98	16.59	17.30	1.178	-	-	-0.01	0.981	1.014	1.156
1st	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	0.14	1.050	1	1.067
2nd	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	50	5250	14.93	15.00	1.016	100	1.000	0.05	1.010	1.040	1.026
1st	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	0.13	1.060	1	1.077
2nd	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 8	Standalone	114	5570	16.93	17.00	1.016	100	1.000	-0.19	1.030	1.029	1.046
1st	WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	-0.09	0.915	1	1.055
2nd	WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	155	5775	17.41	18.00	1.146	99.45	1.006	-0.11	0.902	1.014	1.040

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, 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.



15.7 TDD LTE Linearity Data Analysis

General Note:

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

Head			Hopspot		
LTE Band 41_Ant 4(HPUE)-Linearity Data for DSI 5			LTE Band 41_Ant 4(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)		LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	17.70	19.30	Maximum Tune up Power (dBm)	17.20	18.80
Reported 1g SAR (W/kg)	0.586	0.539	Reported 1g SAR (W/kg)	0.269	0.256
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	37.27	36.85	Frame Averaged (mW)	33.22	32.85
Linearity SAR (W/kg)	0.579		Linearity SAR (W/kg)	0.266	
% deviation from expected linearity		-6.97%	% deviation from expected linearity		-3.75%
LTE Band 41_Ant 6(HPUE)-Linearity Data for DSI 5			LTE Band 41_Ant 6(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)		LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	17.20	18.80	Maximum Tune up Power (dBm)	19.70	21.30
Reported 1g SAR (W/kg)	0.471	0.460	Reported 1g SAR (W/kg)	0.358	0.320
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	33.22	32.85	Frame Averaged (mW)	59.07	58.41
Linearity SAR (W/kg)	0.466		Linearity SAR (W/kg)	0.354	
% deviation from expected linearity		-1.22%	% deviation from expected linearity		-9.60%
LTE Band 41_Ant 5(HPUE)-Linearity Data for DSI 5			LTE Band 41_Ant 5(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)		LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.70	20.30	Maximum Tune up Power (dBm)	18.70	20.30
Reported 1g SAR (W/kg)	0.080	0.074	Reported 1g SAR (W/kg)	0.398	0.365
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	46.92	46.40	Frame Averaged (mW)	46.92	46.40
Linearity SAR (W/kg)	0.079		Linearity SAR (W/kg)	0.394	
% deviation from expected linearity		-6.45%	% deviation from expected linearity		-7.25%
LTE Band 41_Ant 0(HPUE)-Linearity Data for DSI 5			LTE Band 41_Ant 0(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)		LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	16.20	17.80	Maximum Tune up Power (dBm)	16.70	18.30
Reported 1g SAR (W/kg)	0.511	0.469	Reported 1g SAR (W/kg)	0.242	0.235
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	26.39	26.09	Frame Averaged (mW)	29.61	29.27
Linearity SAR (W/kg)	0.505		Linearity SAR (W/kg)	0.239	
% deviation from expected linearity		-7.17%	% deviation from expected linearity		-1.79%

Body-worn-10mm		
LTE Band 41_Ant 4(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	17.20	18.80
Reported 1g SAR (W/kg)	0.160	0.149
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	33.22	32.85
Linearity SAR (W/kg)	0.158	
% deviation from expected linearity		-5.81%
LTE Band 41_Ant 6(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	19.70	21.30
Reported 1g SAR (W/kg)	0.271	0.247
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	59.07	58.41
Linearity SAR (W/kg)	0.268	
% deviation from expected linearity		-7.82%
LTE Band 41_Ant 5(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.70	20.30
Reported 1g SAR (W/kg)	0.190	0.173
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	46.92	46.40
Linearity SAR (W/kg)	0.188	
% deviation from expected linearity		-7.91%
LTE Band 41_Ant 0(HPUE)-Linearity Data for DSI 4		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	16.70	18.30
Reported 1g SAR (W/kg)	0.156	0.139
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	29.61	29.27
Linearity SAR (W/kg)	0.154	
% deviation from expected linearity		-9.88%

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
2.	WWAN + 5GHz WLAN	Yes	Yes	Yes	Yes
3.	WWAN + 6GHz WLAN	Yes	Yes	Yes	Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
6.	6GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
7.	WWAN + 5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
8.	WWAN + 6GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
9.	WWAN + 2.4GHz WLAN+ NFC				Yes
10.	WWAN + 5GHz WLAN+ NFC				Yes
11.	WWAN + 6GHz WLAN+ NFC				Yes
12.	WWAN + Bluetooth+ NFC				Yes
13.	5GHz WLAN + Bluetooth+ NFC				Yes
14.	6GHz WLAN + Bluetooth+ NFC				Yes
15.	WWAN + 5GHz WLAN + Bluetooth+ NFC				Yes
16.	WWAN + 6GHz WLAN + Bluetooth+ NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation.
- The equipment under test (EUT) contains the Qualcomm modems supporting 2G/3G/4G/5G technologies and WLAN/BT technologies. These modems are always enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure follows the FCC requirement. Smart Transmit algorithm controls the total RF exposure from all WWAN/WLAN/BT to not exceed FCC limit and each antenna group has controlled the total RF exposure from all transmitter to not exceed FCC limit. Therefore, in Part.1 report, it is evaluated whether the sum of the groups of each antenna does not exceed FCC limit or spatial separation is applied. In addition, each antenna needs to satisfy simultaneous transmission analysis with External radios (NFC) in this report at extremity exposure condition.
- This device WLAN 2.4GHz and 6GHz VLP 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).
- The Bluetooth can transmit in SISO mode only and they have no MIMO mode.
- According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz can't 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.
- For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
- The maximum SAR summation is calculated based on the same configuration and test position.
- 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.

- iii) If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
- iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.

16.1 Sub6 Antenna Groups

Qualcomm® Smart Transmit™ Plus of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG. This is accomplished by demonstrating below conditions for all exposure positions under each DSI for a given exposure category.

- 1) Case 1: Demonstrate that Sum of maximum reported SAR from each of the sub6 AGs and the reported normalized SAR values from radios outside Smart Transmit should be less than regulatory limits for each supported DSI. This condition must be demonstrated for all antenna combinations of sub6 AGs.
 - i. For a given DSI, obtain the highest *reported* SAR for each antenna out of all supported technologies and frequency bands. Obtain the maximum *reported* SAR for each AG by taking the maximum out of *reported* SAR for all antennas belonging to each AG.
 - ii. Demonstrate that the sum of maximum reported SAR (normalized to regulatory limit) from each of the sub6 AGs and the sum of reported SAR (normalized to regulatory limit) from all supported radios outside of Smart Transmit should be less than 1.0
- 2) Case 2: If the Case 1 is NOT met, then for a given antenna grouping scheme plus external radios/antennas (ERs) (referred to as 'configuration'), demonstrate all AG pairs, all ER pairs and all (AG, ER) pairs in the configuration meet SPLSR criteria (Section 4.3.2 (c) in FCC KDB 447498 D01 v06) for each exposure position under each supported DSI. For a given exposure position under a given DSI, prove all AG pairs, all ER pairs and all (AG, ER) pairs (if there are external radios outside Smart Transmit) in the configuration meet SPLSR.
- 3) Case 3: When One or more antenna(s) can be placed as shared antenna(s) among multiple AGs as described in this Section. Repeat the same procedure to check if the new antenna grouping scheme (using shared antenna) with all supported external radios meets Case 1 or Case 2 so that each AG in the new antenna grouping scheme can operate independently.
 - a) For antenna grouping, only Case 1 or Case 2 (not both) needs to be met for each exposure position of all supported DSIs under a given exposure category. To further clarify, only one of the two conditions (either Case 1 or Case 2) should be used for a given exposure position to demonstrate RF exposure is mutually exclusive among all antenna groups (including external radios). In other words, a combination of Case 1 and Case 2 CANNOT be used for a given exposure position, i.e., mutual exclusivity between AGs CANNOT be demonstrated by using Case 1 for some antenna combinations and using Case 2 for remaining antenna combinations.
 - b) New antenna grouping analysis with one or more antenna(s) as a shared antenna (sAnt). AG0, AG1 and WLAN must be demonstrated to transmit independently with a shared antenna (sAnt) configured in AG0/AG1. The TER for simultaneous analysis for sub6 radios should be given by the sum of these RF exposures meets (i) and (ii) :
 - i. $\{ [\max.SAR.without.sAnt.AG0 + \max.SAR.without.sAnt.AG1] + \text{WIFI/BT worst-case reported SAR} \} \leq 1.6$ (for 1g, or 4.0 for 10g).
 - ii. $\{ [\max.SAR.sAnt] + \text{WIFI/BT worst-case reported SAR} \} \leq 1.6$ (for 1g, or 4.0 for 10g).
 - c) For a given exposure position under a given DSI, prove all AG pairs, all ER pairs and all (AG, ER) pairs (if there are external radios outside Smart Transmit) in the configuration meet SPLSR.

This device supports two sub6 AG: AG0 and AG1, the detailed please refer to the below table:

Antenna Group 0 (AG0)	ANT4 & ANT8 & ANT9 & ANT10 & ANT13 & ANT6 & ANT0
Antenna Group 1 (AG1)	ANT5 & ANT1 & ANT0 & ANT6

Note: Ant0 and Ant6 as shared antennas (sAnt) among AG0 and AG1.

The conditions are verified through the following criterias:

- i) (SAR1 + SAR2 criteria): If SPLSR criteria is not used, then the highest reported SAR at *Plimit* for each antenna should be obtained out of all supported technologies and frequency bands for each DSI. Demonstrate that the sum of reported SAR of one antenna from each of the sub6 AGs and the sum of RF exposure from all supported radios outside of Smart Transmit should be less than the regulatory limit as given below for each DSI.
 1. Obtain the worst-case reported SAR for each antenna group (i.e., maximum *reported* SAR at *Plimit* out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and obtain the worst-case RF exposure for each external radio, and demonstrate that the sum of these RF exposures meets: $\{ [\max.SAR.AG0 + \max.SAR.AG1] + \text{WIFI/BT worst-case reported SAR} \} \leq 1.6$ (for 1g, or

4.0 for 10g). (WIFI/BT worst-case reported SAR is the worst SAR in all combinations of WIFI and BT simultaneous transmission)

- ii) (SPLSR criteria): For each antenna, obtain the highest reported SAR value at *Plimit* out of all supported technologies for each frequency band. Using these values, demonstrate for a given DSI that every antenna from one sub6 AG meets SPLSR criteria with every antenna in another sub6 AG for all frequency bands. This criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios as given below for each DSI:
 - a. SPLSR criteria should be met for all antenna pair combinations of AG0 and AG1. As it can be seen, these include all combinations of antenna groups, antennas, and frequency bands.
 - b. Obtain combined SAR per AG: Obtain the worst-case conservative combined SAR and its peak location for each AG.
 - c. Use the 'closest' peak location out of all antennas of AGj to evaluate SPLSR with other AGs in the configuration. Note, by 'closest', select the peak location out of all antennas (ϵ AGj) that is closest to the peak location of other AG where SPLSR is evaluated.
- iii) (combination of SPLSR & SAR1+SAR2 criteria): If SPLSR criteria for all the combinations of sub6 antenna groups in (i) is demonstrated to show that each AG is mutually exclusive from other AGs, and if the WIFI/BT antennas supported outside of Smart Transmit do not meet SPLSR criteria, then the condition in (ii) reduces to: {max.SAR.AG0 + worst-case reported SAR} $\leq$ 1.6 and {max.SAR.AG1+ worst-case reported SAR } $\leq$ 1.6 for compliance demonstration (for 1g, or 4.0 for 10g).

For summed SAR results and SPLSR detailed analysis, please refer to section 16.2/ 16.3 / 16.4 / 16.5 of this report. All of the combinations of sub6 antenna groups are sufficient to show that AG0 is mutually exclusive from AG1 and that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

16.2 Head Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant 4	Ant 8	Ant 9	Ant 10	Ant 13	Ant 13+6	Ant 9+8	All Antenna MAX SAR 1g W/kg
Right Cheek	1.141	0.794	0.290	0.962	0.546	0.423	0.518	1.141
Right Tilted	1.138	0.854	0.271	0.350	0.664	0.418	0.557	1.138
Left Cheek	0.715	1.005	1.021	0.226	0.884	0.793	0.885	1.021
Left Tilted	0.725	1.190	0.661	0.100	0.786	0.690	0.803	1.190

<AG1 maximum reported SAR>:

Test Position	Ant 5	Ant 1	All Antenna MAX SAR 1g W/kg
Right Cheek	0.147	0.431	0.431
Right Tilted	0.092	0.218	0.218
Left Cheek	0.152	0.212	0.212
Left Tilted	0.074	0.130	0.130

<sAnt maximum reported SAR>:

Test Position	Ant 0	Ant 6	All Antenna MAX SAR 1g W/kg
Right Cheek	1.113	1.080	1.113
Right Tilted	0.293	0.120	0.293
Left Cheek	0.733	1.186	1.186
Left Tilted	0.141	0.207	0.207

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case>:

Test Position	AG0	AG1	AG0+AG1 worse case
Right Cheek	1.141	0.431	1.57
Right Tilted	1.138	0.218	1.36
Left Cheek	1.021	0.212	1.23
Left Tilted	1.190	0.130	1.32

<N41 UL-MIMO>:

Test Position	Ant 4	Ant 0	Ant4+0
Right Cheek	0.749	0.818	1.57
Right Tilted	0.939	0.293	1.23
Left Cheek	0.462	0.433	0.90
Left Tilted	0.591	0.101	0.69

Test Position	Ant 4	Ant 5	Ant4+5
Right Cheek	0.817	0.147	0.96
Right Tilted	0.939	0.074	1.01
Left Cheek	0.462	0.152	0.61
Left Tilted	0.591	0.074	0.67

Test Position	Ant 6	Ant 0	Ant6+0
Right Cheek	0.654	0.868	1.52
Right Tilted	0.059	0.306	0.37
Left Cheek	0.434	0.457	0.89
Left Tilted	0.103	0.108	0.21

Test Position	Ant 6	Ant 5	Ant6+5
Right Cheek	0.654	0.147	0.80
Right Tilted	0.059	0.074	0.13
Left Cheek	0.434	0.152	0.59
Left Tilted	0.103	0.074	0.18

16.3 Hotspot Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant 4	Ant 8	Ant 9	Ant 10	Ant 13	Ant 13+6	Ant 9+8	All Antenna MAX SAR 1g W/kg
Front	0.322	0.246	0.281	0.208	0.202	0.171	0.229	0.322
Back	0.655	0.581	0.361	0.730	0.287	0.208	0.367	0.730
Left side	0.154			0.374				0.374
Right side		0.112	0.662		0.092	0.227	0.400	0.662
Top side	0.786	0.578	0.184	0.125	1.004	0.325	0.453	1.004
Bottom side								0.000

<AG1 maximum reported SAR>:

Test Position	Ant 5	Ant 1	All Antenna MAX SAR 1g W/kg
Front	0.423	0.299	0.423
Back	0.620	0.396	0.620
Left side	0.156		0.156
Right side		0.662	0.662
Top side			0.000
Bottom side	0.932	0.269	0.932

<sAnt maximum reported SAR>:

Test Position	Ant 0	Ant 6	All Antenna MAX SAR 1g W/kg
Front	0.403	0.447	0.447
Back	0.566	0.544	0.566
Left side	0.852		0.852
Right side		1.056	1.056
Top side	0.098	0.076	0.098
Bottom side			0.000

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case>:

Test Position	AG0	AG1	AG0+AG1 worse case
Front	0.322	0.423	0.75
Back	0.730	0.620	1.35
Left side	0.374	0.156	0.53
Right side	0.662	0.662	1.32
Top side	1.004	0.000	1.00
Bottom side	0.000	0.932	0.93

<N41 UL-MIMO>:

Test Position	Ant 4	Ant 0	Ant4+0
Front	0.174	0.194	0.37
Back	0.330	0.243	0.57
Left side	0.065	0.381	0.45
Right side			0.00
Top side	0.540	0.077	0.62
Bottom side			0.00

Test Position	Ant 4	Ant 5	Ant4+5
Front	0.174	0.207	0.38
Back	0.330	0.375	0.71
Left side	0.065	0.069	0.13
Right side			0.00
Top side	0.540		0.54
Bottom side		0.597	0.60

Test Position	Ant 6	Ant 0	Ant6+0
Front	0.157	0.194	0.35
Back	0.239	0.243	0.48
Left side		0.381	0.38
Right side	0.308		0.31
Top side		0.077	0.08
Bottom side			0.00

Test Position	Ant 6	Ant 5	Ant6+5
Front	0.157	0.207	0.36
Back	0.239	0.375	0.61
Left side		0.069	0.07
Right side	0.308		0.31
Top side			0.00
Bottom side		0.597	0.60

16.4 Body-Worn Accessory Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant 4	Ant 8	Ant 9	Ant 10	Ant 13	Ant 13+6	Ant 9+8	All Antenna MAX SAR 1g W/kg
Front	0.322	0.228	0.281	0.208	0.202	0.171	0.204	0.322
Back	0.655	0.581	0.361	0.730	0.287	0.208	0.367	0.730

<AG1 maximum reported SAR>:

Test Position	Ant 5	Ant 1	All Antenna MAX SAR 1g W/kg
Front	0.423	0.299	0.423
Back	0.620	0.396	0.620

<sAnt maximum reported SAR>:

Test Position	Ant 0	Ant 6	All Antenna MAX SAR 1g W/kg
Front	0.403	0.447	0.447
Back	0.566	0.544	0.566

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case>:

Test Position	AG0	AG1	AG0+AG1 worse case
Front	0.322	0.423	0.75
Back	0.730	0.620	1.35

<N41 UL-MIMO>:

Test Position	Ant 4	Ant 0	Ant4+0
Front	0.174	0.194	0.37
Back	0.330	0.243	0.57

Test Position	Ant 4	Ant 5	Ant4+5
Front	0.174	0.207	0.38
Back	0.330	0.375	0.71

Test Position	Ant 6	Ant 0	Ant6+0
Front	0.157	0.194	0.35
Back	0.239	0.243	0.48

Test Position	Ant 6	Ant 5	Ant6+5
Front	0.157	0.207	0.36
Back	0.239	0.375	0.61

16.5 Product specific 10g SAR Exposure Conditions

Remark:

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

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT+NFC:
<AG0 maximum reported SAR>:

Test Position	Ant 4	Ant 8	Ant 9	Ant 10	Ant 13	Ant 13+6	Ant 9+8	All Antenna MAX SAR 10g W/kg
Front		1.121	0.931				0.868	1.121
Back		0.647	0.535				0.509	0.647
Left side								0.000
Right side		0.226	1.025				0.965	1.025
Top side		1.943	0.269				1.443	1.943
Bottom side								0.000

<NFC maximum reported SAR>:

Test Position	NFC
Front	0.000
Back	0.030
Left side	0.000
Right side	0.000
Top side	0.000
Bottom side	0.000

<Simultaneous Transmission analysis of AG0 + AG1 + NFC Worse-case>:

Test Position	AG0	AG1	NFC	AG0+AG1 worse case
Front	1.121	0.000	0.000	1.12
Back	0.647	0.000	0.030	0.68
Left side	0.000	0.000	0.000	0.00
Right side	1.025	0.000	0.000	1.03
Top side	1.943	0.000	0.000	1.94
Bottom side	0.000	0.000	0.000	0.00

Test Engineer : Kevin Xu, David Dai, Bin He, Bran Yin, Seth Jin

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.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is 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.

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

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

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

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

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

(b) k is the coverage factor

Standard Uncertainty for Assumed Distribution

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

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

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 4 MHz - 10 GHz range)							
Error Description	Uncert. Value (±%)	Prob. Dist.	Div.	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System errors							
Probe calibration	18.6	N	2	1	1	9.3	9.3
Probe calibration drift	1.7	R	1.732	1	1	1.0	1.0
Probe linearity and detection Limit	4.7	R	1.732	1	1	2.7	2.7
Broadband signal	2.8	R	1.732	1	1	1.6	1.6
Probe isotropy	7.6	R	1.732	1	1	4.4	4.4
Other probe and data acquisition errors	2.4	N	1	1	1	2.4	2.4
RF ambient and noise	1.8	N	1	1	1	1.8	1.8
Probe positioning errors	0.006	N	1	0.5	0.5	0.0	0.0
Data processing errors	4.0	N	1	1	1	4.0	4.0
Phantom and Device Errors							
Measurement of phantom conductivity (σ)	2.5	N	1	0.78	0.71	2.0	1.8
Temperature effects (medium)	5.4	R	1.732	0.78	0.71	2.4	2.2
Shell permittivity	14.0	R	1.732	0.5	0.5	4.0	4.0
Distance between the radiating element of the DUT and the phantom medium	2.0	N	1	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	1.0	N	1	1	1	1.0	1.0
Device holder effects	3.6	N	1	1	1	3.6	3.6
Effect of operating mode on probe sensitivity	2.4	R	1.732	1	1	1.4	1.4
Time-average SAR	1.7	R	1.732	1	1	1.0	1.0
Variation in SAR due to drift in output of DUT	2.5	N	1	1	1	2.5	2.5
Validation antenna uncertainty (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Correction to the SAR results							
Phantom deviation from target (ϵ' , σ)	1.9	N	1	1	0.84	1.9	1.6
SAR scaling	0.0	R	1.732	1	1	0.0	0.0
Combined Std. Uncertainty						14.5%	14.4%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						29.0%	28.8%

SAR Uncertainty Budget for frequency range 4MHz to 10GHz

cDASY6 Module mmWave Uncertainty Budget Evaluation Distances to the Antennas > $\lambda/2\pi$ In Compliance with IEC TR 63170					
Error Description	Uncertainty Value (±dB)	Probability	Divisor	(Ci)	Standard Uncertainty (±dB)
Uncertainty terms dependent on the measurement system					
Probe Calibration	0.49	N	1	1	0.49
Probe correction	0.00	R	1.732	1	0.00
Frequency response	0.20	R	1.732	1	0.12
Sensor cross coupling	0.00	R	1.732	1	0.00
Isotropy	0.50	R	1.732	1	0.29
Linearity	0.20	R	1.732	1	0.12
Probe scattering	0.00	R	1.732	1	0.00
Probe positioning offset	0.30	R	1.732	1	0.17
Probe positioning repeatability	0.04	R	1.732	1	0.02
Sensor mechanical offset	0.00	R	1.732	1	0.00
Probe spatial resolution	0.00	R	1.732	1	0.00
Field impedance dependence	0.00	R	1.732	1	0.00
Amplitude and phase drift	0.00	R	1.732	1	0.00
Amplitude and phase noise	0.04	R	1.732	1	0.02
Measurement area truncation	0.00	R	1.732	1	0.00
Data acquisition	0.03	N	1	1	0.03
Sampling	0.00	R	1.732	1	0.00
Field reconstruction	2.00	R	1.732	1	1.15
Forward transformation	0.00	R	1.732	1	0.00
Power density scaling	0.00	R	1.732	1	0.00
Spatial averaging	0.10	R	1.732	1	0.06
System detection limit	0.04	R	1.732	1	0.02
Uncertainty terms dependent on the DUT and environmental factors					
Probe coupling with DUT	0.00	R	1.732	1	0.0
Modulation response	0.40	R	1.732	1	0.2
Integration time	0.00	R	1.732	1	0.0
Response time	0.00	R	1.732	1	0.0
Device holder influence	0.10	R	1.732	1	0.1
DUT alignment	0.00	R	1.732	1	0.0
RF ambient conditions	0.04	R	1.732	1	0.0
Ambient reflections	0.04	R	1.732	1	0.0
Immunity / secondary reception	0.00	R	1.732	1	0.0
Drift of the DUT		R	1.732	1	
Combined Std. Uncertainty					1.34
Expanded STD Uncertainty (95%)					2.68
PD Uncertainty Budget					

18. References

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- [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
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- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
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- [13] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
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- [15] IEC 62479:2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
- [16] IEC TR 63170: 2018 Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz
- [17] SPEAG DASY System Handbook
- [18] SPEAG DASY6 Application Note (Interim Procedures for Devices Operating at 6-10 GHz)

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR and PD Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table

Appendix G. Power reduction mechanism verification

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