

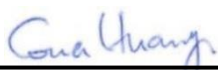
FCC SAR TEST REPORT

FCC ID : 2BEY3FCUN69M
Equipment : 5G Sub-6 GHz M.2 Module
Brand Name : NETPRISMA INC.
Model Name : FCUN69-WWD
Applicant : NETPRISMA INC.
1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES
Manufacturer : Lenovo PC HK Limited
23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry
Bay, Hong Kong, P.R. China
Standard : FCC 47 CFR Part 2 (2.1093)

The product was installed into Notebook Computer (Brand Name: Lenovo, Model Name: TP00151B) during test.

The product was received on Aug. 22, 2024 and testing was started from Aug. 29, 2024 and completed on Oct. 04, 2024. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

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



Approved by: Cona Huang / Deputy Manager



Sporton International Inc. Wensan Laboratory



Table of Contents

1. Statement of Compliance	4
2. Guidance Applied.....	4
3. Equipment Under Test (EUT) Information.....	5
3.1 General Information	5
3.2 General LTE SAR Test and Reporting Considerations	7
3.3 General 5G NR SAR Test and Reporting Considerations	11
4. Proximity Sensor Triggering Test.....	14
5. RF Exposure Limits.....	36
5.1 Uncontrolled Environment.....	36
5.2 Controlled Environment.....	36
5.3 RF Exposure limit for above 6GHz	37
6. Specific Absorption Rate (SAR).....	38
6.1 Introduction	38
6.2 SAR Definition.....	38
7. System Description and Setup	39
7.1 Test Site Location.....	39
7.2 E-Field Probe.....	40
7.1 Data Acquisition Electronics (DAE)	40
7.2 Phantom.....	41
7.3 Device Holder.....	42
8. Measurement Procedures	43
8.1 Spatial Peak SAR Evaluation.....	43
8.2 Power Reference Measurement.....	44
8.3 Area Scan	44
8.4 Zoom Scan.....	45
8.5 Volume Scan Procedures.....	45
8.6 Power Drift Monitoring.....	45
9. Test Equipment List.....	46
10. System Verification	47
10.1 Tissue Verification	47
10.2 System Performance Check Results.....	48
11. RF Exposure Positions	49
11.1 SAR Testing for Tablet	49
12. UL/DL Carrier aggregation	50
13. SAR Test Results	61
13.1 Body SAR	63
13.2 Repeated SAR Measurement	84
13.3 Power Class 2 and Power Class 3 Linearity	85
14. Simultaneous Transmission Analysis	87
14.1 Body Exposure Conditions.....	88
14.2 SPLSR Evaluation and Analysis.....	89
15. Uncertainty Assessment	93
16. References.....	93
Appendix A. Plots of System Performance Check	
Appendix B. Plots of High SAR Measurement	
Appendix C. DASYS Calibration Certificate	
Appendix D. Output Power Measurement	
Appendix E. Test Setup Photos and Antenna Location	



History of this test report

Report No.	Version	Description	Issued Date
FA482037	01	Initial issue of report	Nov. 14, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for NETPRISMA INC., 5G Sub-6 GHz M.2 Module, FCUN69-WWD, are as follows.

Equipment Class	Frequency Band		Highest SAR Summary	Highest Simultaneous Transmission 1g SAR (W/kg)	
			Body (Separation 0mm)		
			1g SAR (W/kg)		
Licensed	WCDMA	WCDMA II	1.12	1.57	
		WCDMA IV	1.10		
		WCDMA V	1.08		
	LTE	LTE Band 7	1.17		
		LTE Band 12/17	1.15		
		LTE Band 13	1.20		
		LTE Band 14	1.20		
		LTE Band 25/2	1.14		
		LTE Band 26/5	1.12		
		LTE Band 30	1.19		
		LTE Band 66/4	1.20		
		LTE Band 71	1.19		
		LTE Band 41/38	1.19		
		LTE Band 42	1.11		
		LTE Band 43	1.14		
		LTE Band 48	1.20		
		FR1	FR1 n7		1.18
			FR1 n12		1.18
	FR1 n13		1.13		
	FR1 n14		1.11		
	FR1 n25/2		1.16		
	FR1 n26/5		1.19		
	FR1 n30		1.09		
	FR1 n66		1.18		
	FR1 n71		1.10		
	FR1 n41/38		1.19		
	FR1 n48		1.15		
	FR1 n77/78		1.15		
Date of Testing:			2024/08/29 ~ 2024/10/04		

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. 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) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Paula Chen

2. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards, the below KDB standard may not including in the TAF code without accreditation.

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02



3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Equipment Name	5G Sub-6 GHz M.2 Module
Brand Name	NETPRISMA INC.
Model Name	FCUN69-WWD
FCC ID	2BEY3FCUN69M
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 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 42: 3450 MHz ~ 3550 MHz LTE Band 43: 3700 MHz ~ 3800 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 n14 : 788 MHz ~ 798 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
Mode	RMC 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM
EUT Stage	Production Unit
Remark: 1. This device has two antenna vendors; RF exposure evaluation selects Speed as the main test, SAA will spot check worst case found in Speed.	

WWAN Antenna Information				
Main Antenna	Manufacturer	Amphenol	Peak gain(dBi)	2.00
	Part number	TKF113-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain(dBi)	1.93
	Part number	F-0G-JV-0228-001-00	Type	PIFA
MIMO2 Antenna	Manufacturer	Amphenol	Peak gain(dBi)	1.95
	Part number	TKF114-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain(dBi)	1.99
	Part number	F-0G-JV-0228-002-00	Type	PIFA
Auxiliary Antenna	Manufacturer	Amphenol	Peak gain(dBi)	0.17
	Part number	TKF114-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain(dBi)	0.25
	Part number	F-0G-JV-0228-002-00	Type	PIFA

Host Information	
Equipment Name	Notebook Computer
Brand Name	Lenovo
Model Name	TP00150B
Integrated WLAN Module	Brand Name: Intel Model Name: BE201D2W
Integrated NFC Module	Brand Name: Foxconn Model Name: T77H747
Remark: 1. The FCC ID: PD9BE201D2, Intel BE201D2W WLAN/BT module is integrated into this host and the WiFi/BT SAR result refers to report no.: 240607-01.TR01 is used for Sim-Tx compliance included in section14. 2. The FCC ID: MCLT77H747 NFC module is integrated into this host, and NFC transmitters are considered to be operating simultaneously when there is overlapping transmission with the exception of transmission during network hand-offs with maximum hand-off duration less than 30seconds.	

3.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																																		
FCC ID	2BEY3FCUN69M																																																																																	
Equipment Name	5G Sub-6 GHz M.2 Module																																																																																	
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 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 42: 3450 MHz ~ 3550 MHz LTE Band 43: 3700 MHz ~ 3800 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																																	
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 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 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 43: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																																	
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																																	
LTE Voice / Data requirements	Data only																																																																																	
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
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																																																																											
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, Proximity Sensor.																																																																																	
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations referred to section 12.																																																																																	
LTE Carrier Aggregation Additional Information	This device supports maximum of 5 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																																																	
Transmission (H, M, L) channel numbers and frequencies in each LTE band																																																																																		
LTE Band 2																																																																																		
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz																																																																							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)																																																																						
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860																																																																						
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880																																																																						
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900																																																																						
LTE Band 4																																																																																		



	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720		
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5		
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745		
LTE Band 5														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20407	824.7	20415	825.5	20425	826.5	20450	829						
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5						
H	20643	848.3	20635	847.5	20625	846.5	20600	844						
LTE Band 7														
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510						
M	21100	2535	21100	2535	21100	2535	21100	2535						
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560						
LTE Band 12														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	23017	699.7	23025	700.5	23035	701.5	23060	704						
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5						
H	23173	715.3	23165	714.5	23155	713.5	23130	711						
LTE Band 13														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)							
L	23205		779.5		23230		782							
M	23230		782											
H	23255		784.5											
LTE Band 14														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Channel #		Channel #		Freq.(MHz)							
L	23305		790.5		23330		793							
M	23330		793											
H	23355		795.5											
LTE Band 17														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)							
L	23755		706.5		23780		709							
M	23790		710		23790		710							
H	23825		713.5		23800		711							

LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26965	841.5
LTE Band 30												
	Bandwidth 5 MHz					Bandwidth 10 MHz						
	Channel #			Freq.(MHz)		Channel #				Freq.(MHz)		
L	27685			2307.5		27710				2310		
M	27710			2310								
H	27735			2312.5								
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	38150	2610
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506	39750	2506
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
M	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680	41490	2680
LTE Band 42												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460	42190	3460	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540	42990	3540	42990	3540

LTE Band 43												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	44615	3702.5	44640	3705	44665	3707.5	44690	3710				
M	45090	3750	45090	3750	45090	3750	45090	3750				
H	45565	3797.5	45540	3795	45515	3792.5	45490	3790				
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				
	56170	3643	56165	3642.5	56160	3642	56150	3641				
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690				
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	133147	665.5	133172	668	133197	670.5	133222	673				
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5				
H	133447	695.5	133422	693	133397	690.5	133372	688				



3.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
FCC ID	2BEY3FCUN69M
Equipment Name	5G Sub-6 GHz M.2 Module
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 n14: 788 MHz ~ 798 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	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n13: 5MHz, 10MHz, 5G NR n14: 5MHz, 10MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz 30MHz, 40MHz 5G NR n26: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 25MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n48: 10MHz, 20MHz, 30MHz, 40MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77/n78: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz
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 MPD) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/5/7/12/13/14/30/66/71
LTE Anchor Bands for n5	LTE B2/7/30/48/66
LTE Anchor Bands for n7	LTE B2/4/5/12/13/66/71
LTE Anchor Bands for n12	LTE B2/7/30/48/66
LTE Anchor Bands for n14	LTE B2/30/66
LTE Anchor Bands for n25	LTE B5/7/12/13/26/48/66/71
LTE Anchor Bands for n30	LTE B2/5/12/14/66
LTE Anchor Bands for n38	LTE B2/4/5/12/66/71
LTE Anchor Bands for n41	LTE B2/4/5/12/25/26/66/71
LTE Anchor Bands for n48	LTE B2/5/13/66
LTE Anchor Bands for n66	LTE B2/5/7/12/13/14/30/48/71
LTE Anchor Bands for n71	LTE B2/7/48/66
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/25/30/41/66/71
LTE Anchor Bands for n78	LTE B2/4/5/7/12/13/25/26/38/41/66/71

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 5MHz				Bandwidth 10MHz									
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)									
L	155900	779.5		156400	782									
M	156400	782												
H	156900	784.5												
NR Band 14														
	Bandwidth 5MHz				Bandwidth 10MHz									
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)									
L	158100	790.5		158600	793									
M	158600	793												
H	159100	795.5												
NR Band 25														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 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	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895
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												



FCC SAR TEST REPORT

Report No. : FA482037

NR Band 38																								
	Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz				Bandwidth 30MHz				Bandwidth 40MHz							
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)					
L	515004		2575.02		515502		2577.51		516000		2580		517002		2585.01		518004		2590.02					
M	519000		2595		519000		2595		519000		2595		519000		2595		519000		2595					
H	522996		2614.98		522498		2612.49		522000		2610		520998		2604.99		519996		2599.98					
NR Band 41																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth40MHz		Bandwidth50MHz		Bandwidth60MHz		Bandwidth70MHz		Bandwidth80MHz		Bandwidth90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	503202	2516.01	504204	2521.02	505200	2526	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640
NR Band 48																								
	Bandwidth10MHz				Bandwidth20MHz				Bandwidth30MHz				Bandwidth40MHz											
	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 66																								
	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	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	346000	1730										
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745										
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	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		13410		670.5		134600		673									
M	136100		680.5		136100		680.5		136100		680.5		136100		680.5									
H	139100		695.5		138600		693		13810		690.5		137600		688									
NR Band 77_Part 270																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth40MHz		Bandwidth50MHz		Bandwidth60MHz		Bandwidth70MHz		Bandwidth80MHz		Bandwidth90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930
NR Band 78_Part 270																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth40MHz		Bandwidth50MHz		Bandwidth60MHz		Bandwidth70MHz		Bandwidth80MHz		Bandwidth90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750		
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.50	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		
NR Band 77/78_Part 27Q																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth40MHz		Bandwidth50MHz		Bandwidth60MHz		Bandwidth70MHz		Bandwidth80MHz		Bandwidth90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633332	3499.98
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	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

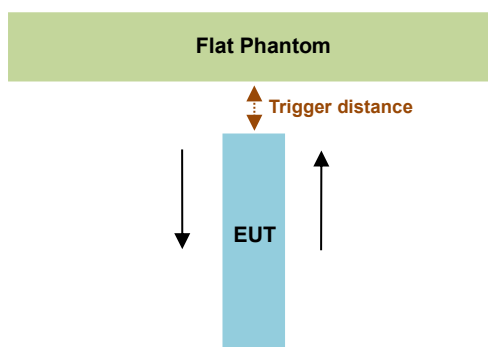
4. Proximity Sensor Triggering Test

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

For the device is fully integrated, touch sensing capacitive sensor. It uses a charge transfer capacitive acquisition method that is capable of near range proximity detection. In this device offers a state of the art capacitive sensing engine with an embedded sampling capacitor and voltage regulator allowing the overall solution cost to be reduced and improving system immunity in noisy environments.

Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed. The details are illustrated as following, and the shortest triggering distances were reported and used for SAR assessment.

In the preliminary triggering distance testing, the tissue-equivalent medium for different frequency bands were used for verification; no other frequency bands tissue-equivalent medium was found to result in shortest triggering distance than that for 1900MHz, and the tissue-equivalent medium for 1900MHz was used for formal proximity sensor triggering testing.



Main Antenna								
Proximity Sensor Trigger Distance (mm)								
Position	NB Mode		TB Mode					
	Bottom Side		Back		Top Edge		Right Edge	
	moving toward	moving away	moving toward	moving away	moving toward	moving away	moving toward	moving away
Minimum	34	36	45	46	31	33	19	21

MIMO 2 Antenna								
Proximity Sensor Trigger Distance (mm)								
Position	NB Mode		TB Mode					
	Bottom Side		Back		Top Edge		Left Edge	
	moving toward	moving away	moving toward	moving away	moving toward	moving away	moving toward	moving away
Minimum	21	21	20	23	43	48	23	23

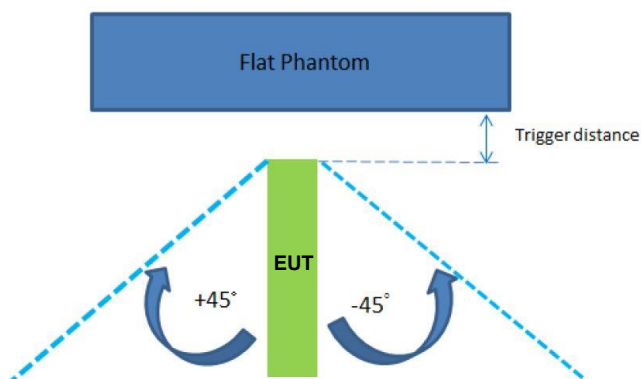
Aux Antenna								
Proximity Sensor Trigger Distance (mm)								
Position	NB Mode		TB Mode					
	Bottom Side		Back		Top Edge		Left Edge	
	moving toward	moving away	moving toward	moving away	moving toward	moving away	moving toward	moving away
Minimum	47	44	48	50	43	48	24	25

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

Since the antenna and sensor are collocated and all of the peak SAR location is overlapping with the sensor pad for this device, therefore, According to KDB 616217 section 6.3, these procedures do not apply and are not required for this device. due to the antenna and sensor are collocated and the peak SAR location is overlapping with the sensor on this device.

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

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



Main Antenna				
The Sensor Trigger Distance (mm)				
Position	Top Edge		Right Edge	
	+45	-45	+45	-45
Minimum	30	33	19	21

MIMO 2 Antenna				
The Sensor Trigger Distance (mm)				
Position	Top Edge		Left Edge	
	+45	-45	+45	-45
Minimum	40	30	23	23

Aux Antenna				
The Sensor Trigger Distance (mm)				
Position	Top Edge		Left Edge	
	+45	-45	+45	-45
Minimum	40	30	18	25

Proximity sensor power reduction

Band	Antenna	Bottom Side/Top Side/Right Edge(NB)/ Left Edge(NB)/ Back/Top Edge/Right Edge(TB)/Left Edge(TB) ⁽¹⁾ (dB)
WCDMA II	Main	10.5
WCDMA IV	Main	10
WCDMA V	Main	7.5
LTE Band 2	Main	11
LTE Band 4	Main	10
LTE Band 5	Main	7
LTE Band 7	Main	12
LTE Band 12	Main	10
LTE Band 13	Main	6.5
LTE Band 14	Main	6.5
LTE Band 17	Main	10
LTE Band 25	Main	11
LTE Band 26	Main	7
LTE Band 30	Main	9.5
LTE Band 38	Main	11
LTE Band 41	Main	11
LTE Band 41(HPUE)	Main	11
LTE Band 42	Main	10
LTE Band 48	Main	10
LTE Band 66	Main	10
LTE Band 71	Main	9.5
FR1 n2	Main	10
FR1 n5	Main	7
FR1 n7	Main	12
FR1 n12	Main	9.5
FR1 n13	Main	6.5
FR1 n14	Main	6.5
FR1 n25	Main	10
FR1 n26	Main	7
FR1 n30	Main	10
FR1 n38	Main	12
FR1 n41	Main	12
FR1 n41 HPUE	Main	11.5
FR1 n48	Main	11.5
FR1 n66	Main	10.5
FR1 n71	Main	9.5
FR1 n77	Main	14.5
FR1 n77_HPUE	Main	14
FR1 n78	Main	14.5
FR1 n78_HPUE	Main	14
LTE Band 2	MIMO2	11.5
LTE Band 4	MIMO2	11
LTE Band 7	MIMO2	14.5
LTE Band 25	MIMO2	11.5
LTE Band 30	MIMO2	12.5
LTE Band 38	MIMO2	12.5
LTE Band 41	MIMO2	12.5
LTE Band 42	MIMO2	11
LTE Band 43	MIMO2	11
LTE Band 48	MIMO2	11
LTE Band 66	MIMO2	11
FR1 n2	MIMO2	11.5
FR1 n7	MIMO2	15

FR1 n25	MIMO2	11.5
FR1 n30	MIMO2	13
FR1 n38	MIMO2	14
FR1 n41	MIMO2	14
FR1 n41 HPUE	MIMO2	15
FR1 n48	MIMO2	12
FR1 n66	MIMO2	10.5
FR1 n77	MIMO2	16
FR1 n77_HPUE	MIMO2	15.5
FR1 n78	MIMO2	16
FR1 n78_HPUE	MIMO2	15.5
FR1 n38	AUX	13
FR1 n41	AUX	13
FR1 n41 HPUE	AUX	12.5
FR1 n48	AUX	13
FR1 n77	AUX	16
FR1 n77_HPUE	AUX	15.5
FR1 n78	AUX	16
FR1 n78_HPUE	AUX	15.5

Remark:

- ⁽¹⁾: Reduced maximum limit applied by activation of proximity sensor.
- Tests were performed in accordance with KDB 616217 D04 section 6.1, 6.2, 6.3, 6.4 and 6.5 and compliant results are shown as below.
- For the power verification was selected worst case power reduction level of band of each transmit antenna to verify.
- For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance was performed:

(a) Main

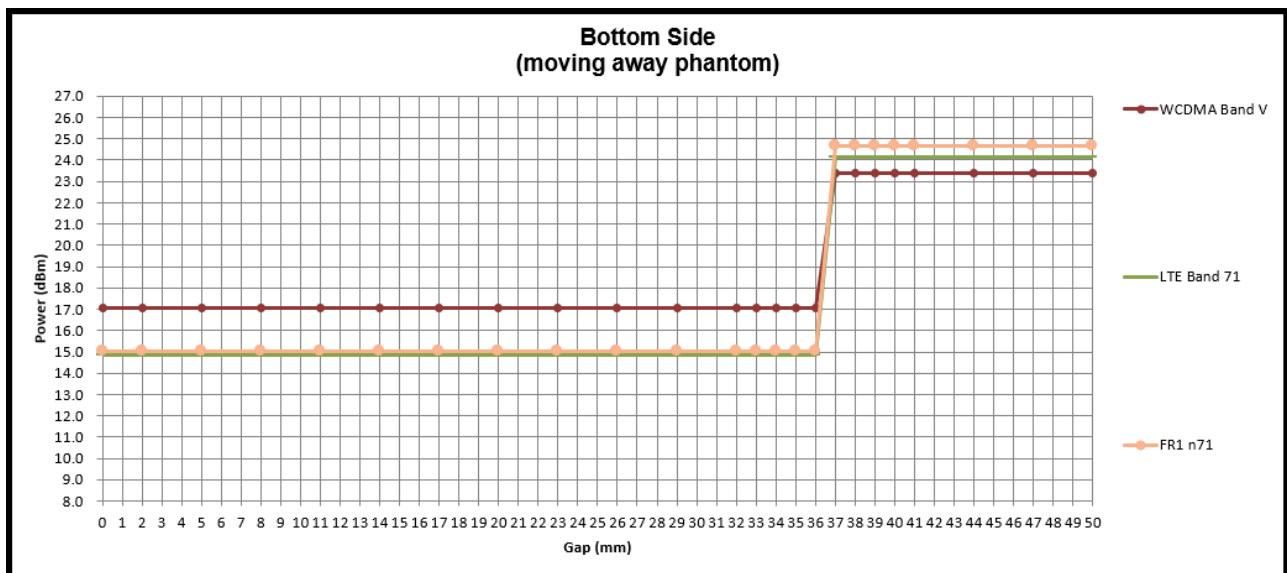
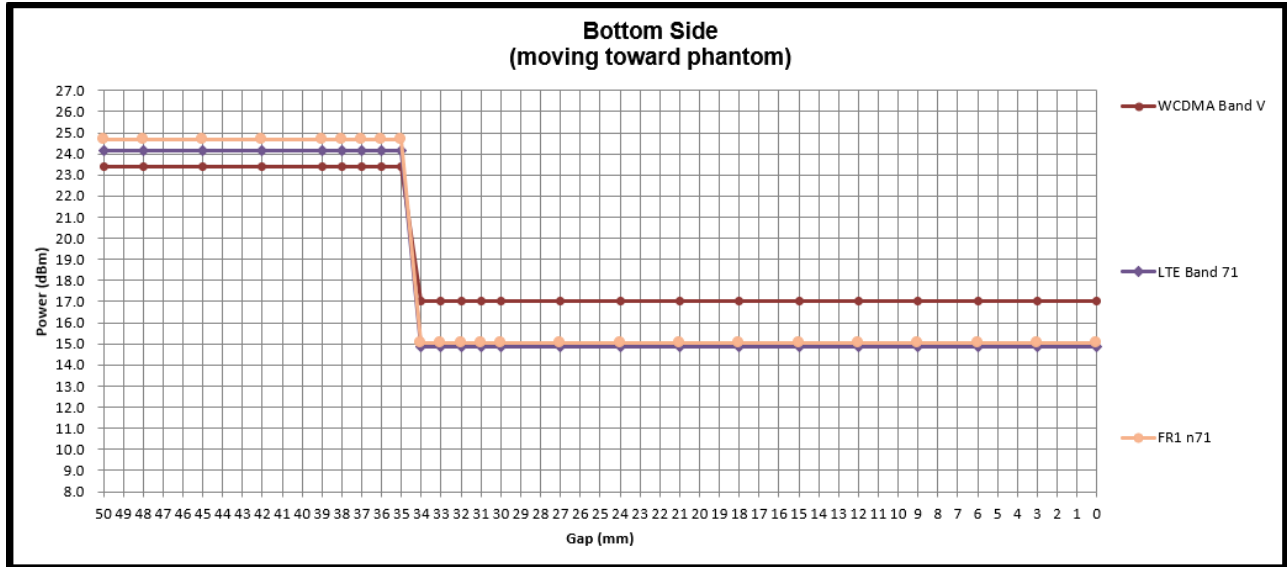
- Bottom Side: [33 mm](#)
- Back: [44 mm](#)
- Top Edge: [29 mm](#)
- Right Edge: [18 mm](#)

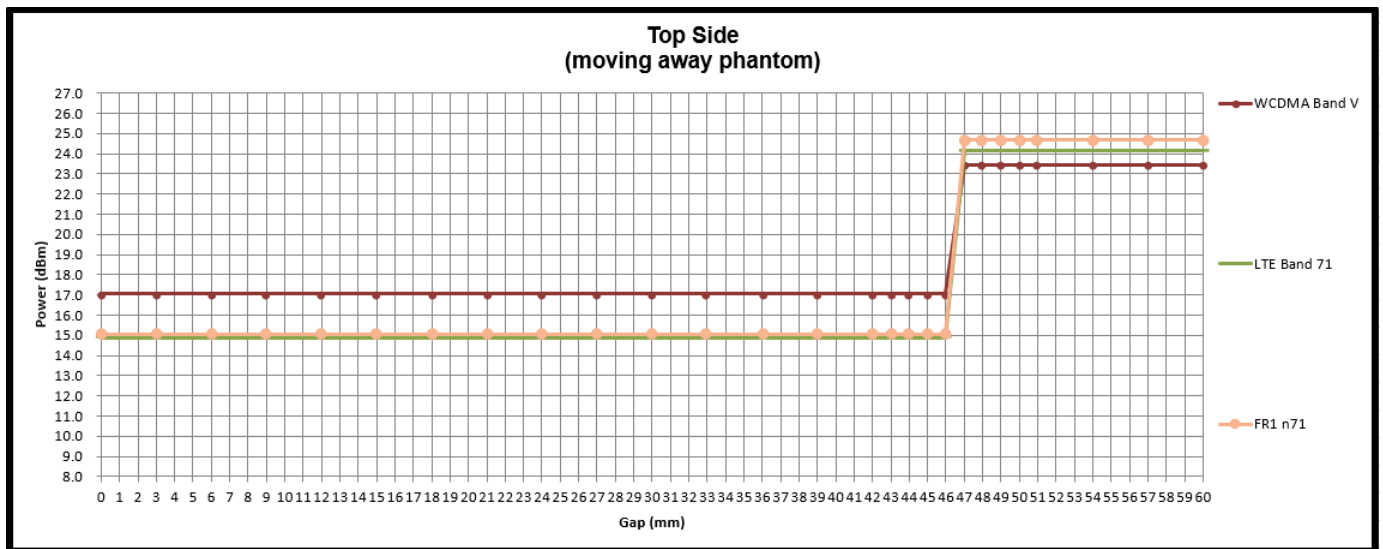
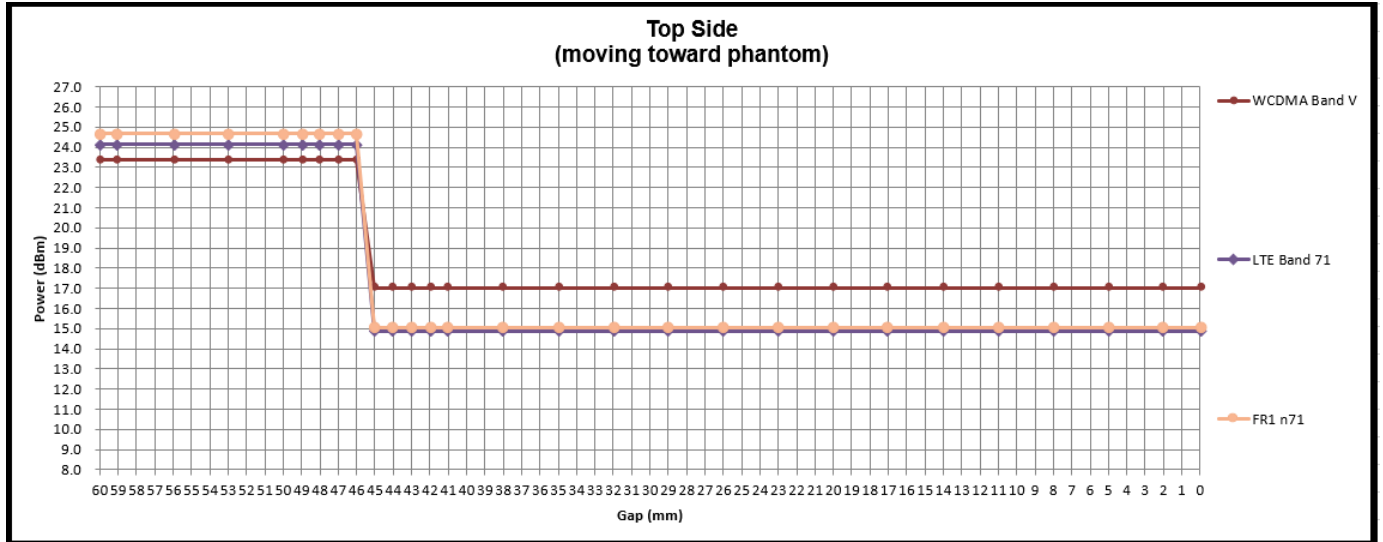
(b) MIMO 2

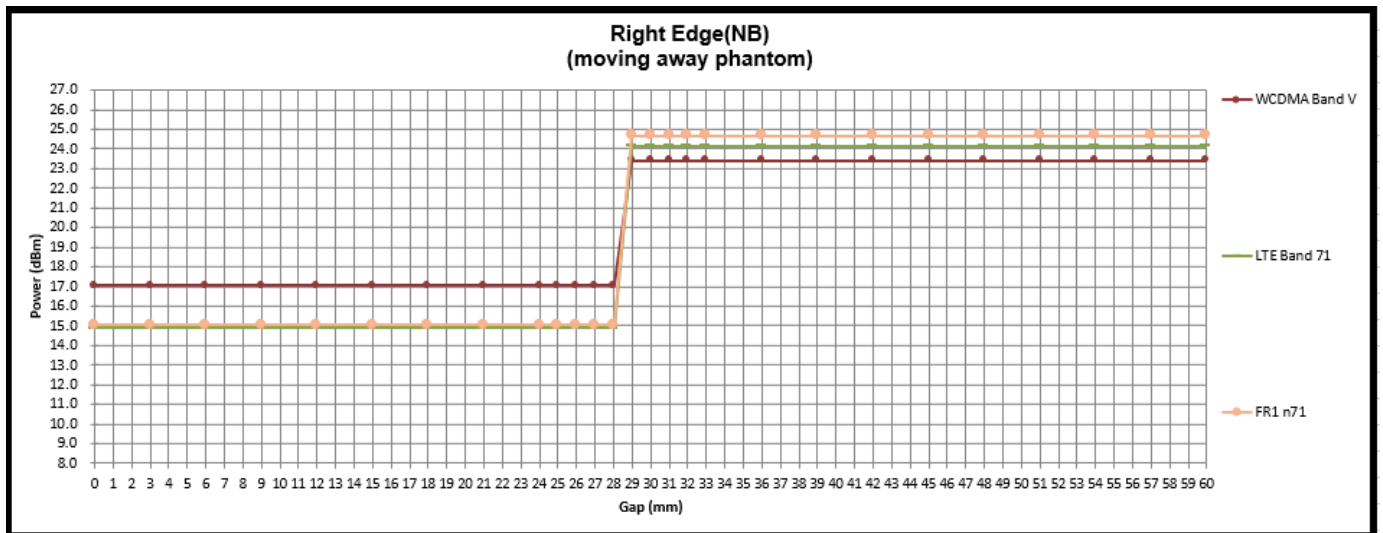
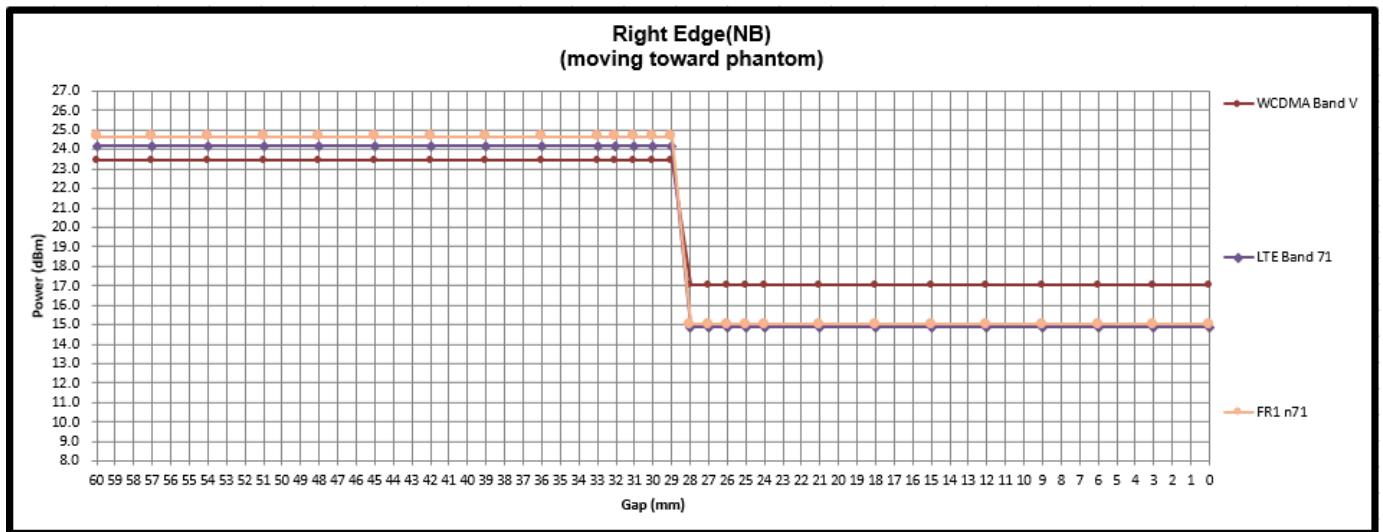
- Bottom Side: [20 mm](#)
- Back: [19 mm](#)
- Top Edge: [29 mm](#)
- Left Edge: [22 mm](#)

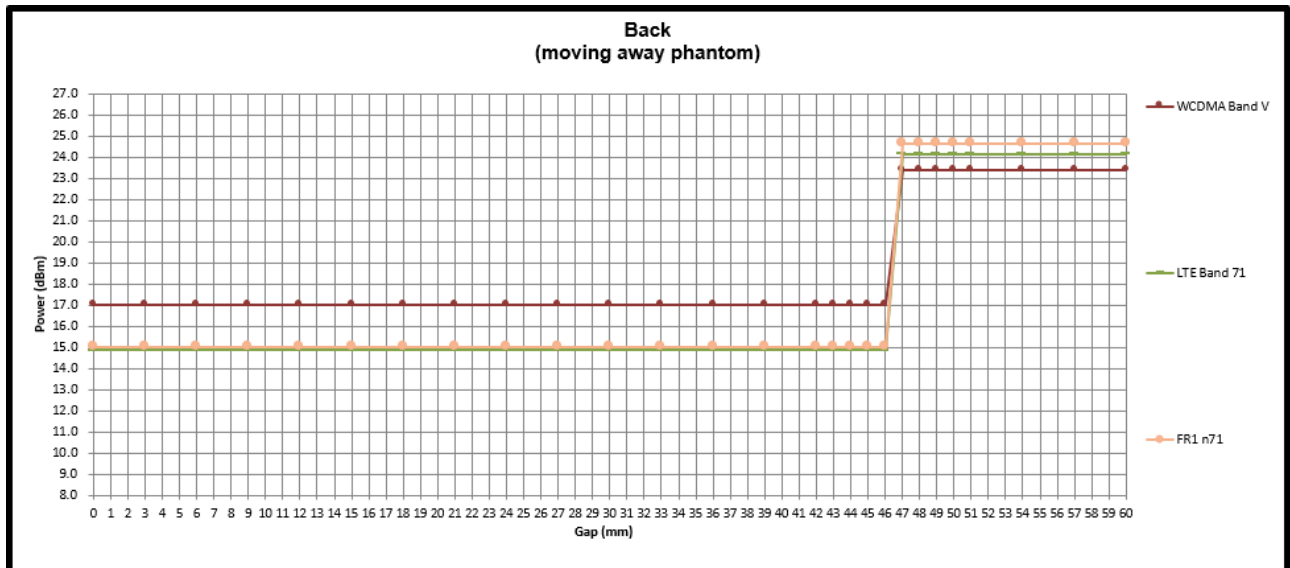
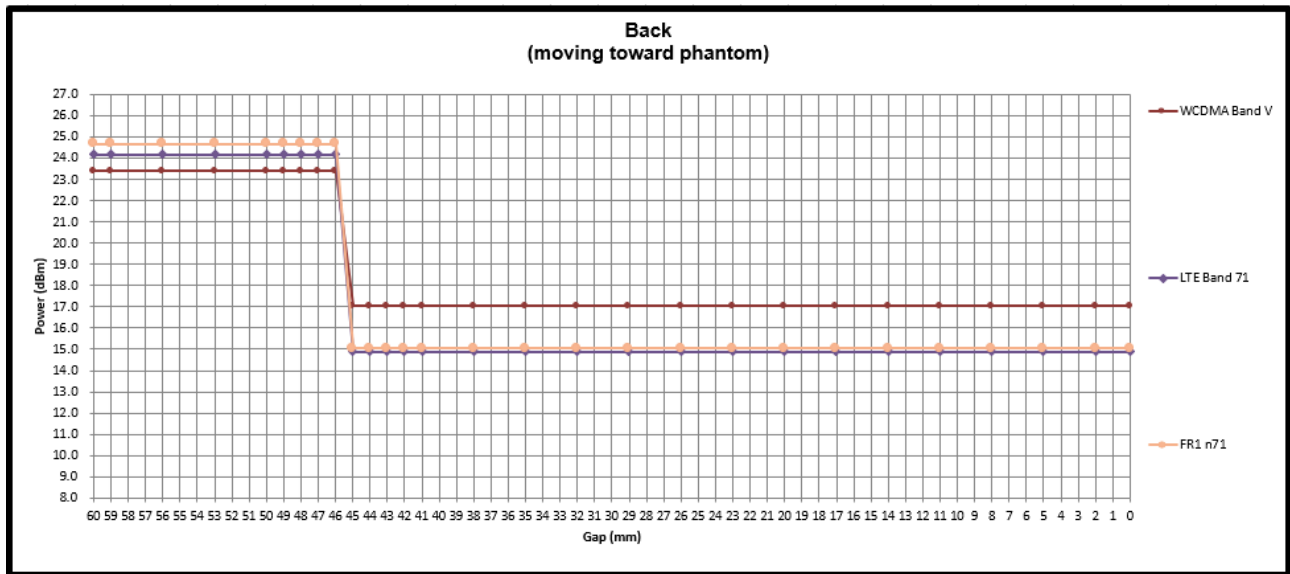
(c) Aux

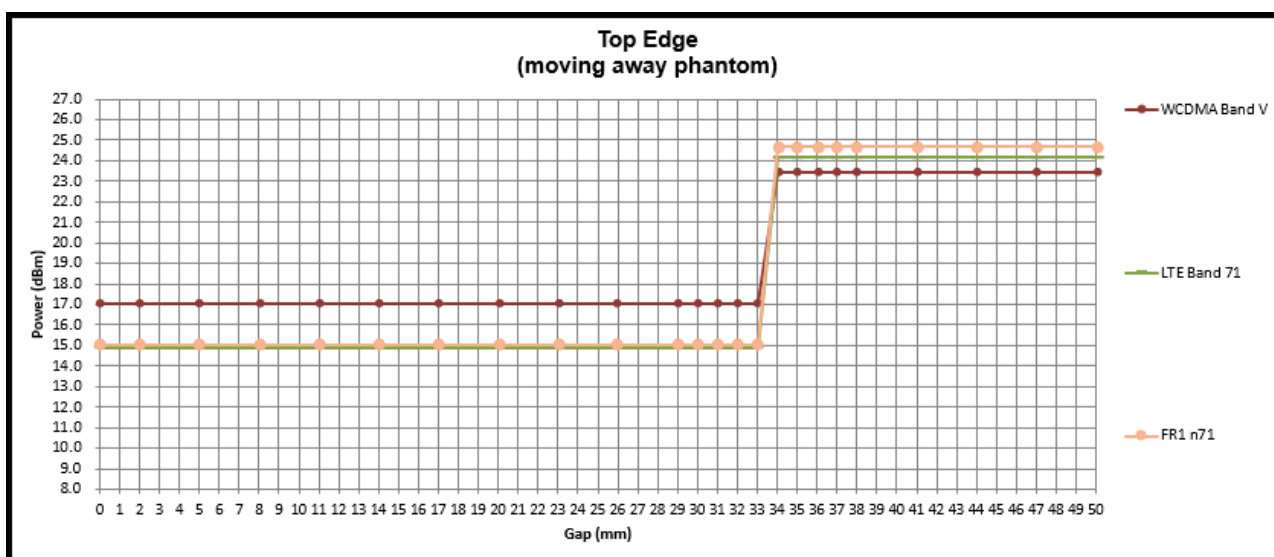
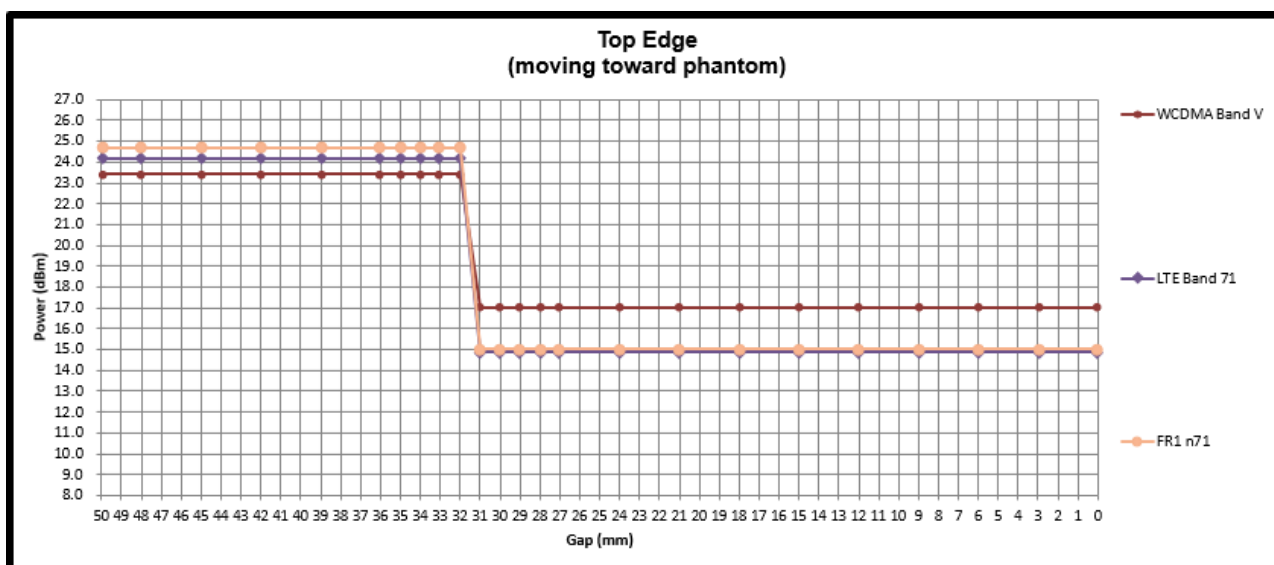
- Bottom Side: [43 mm](#)
- Back: [47 mm](#)
- Top Edge: [29 mm](#)
- Left Edge: [17 mm](#)

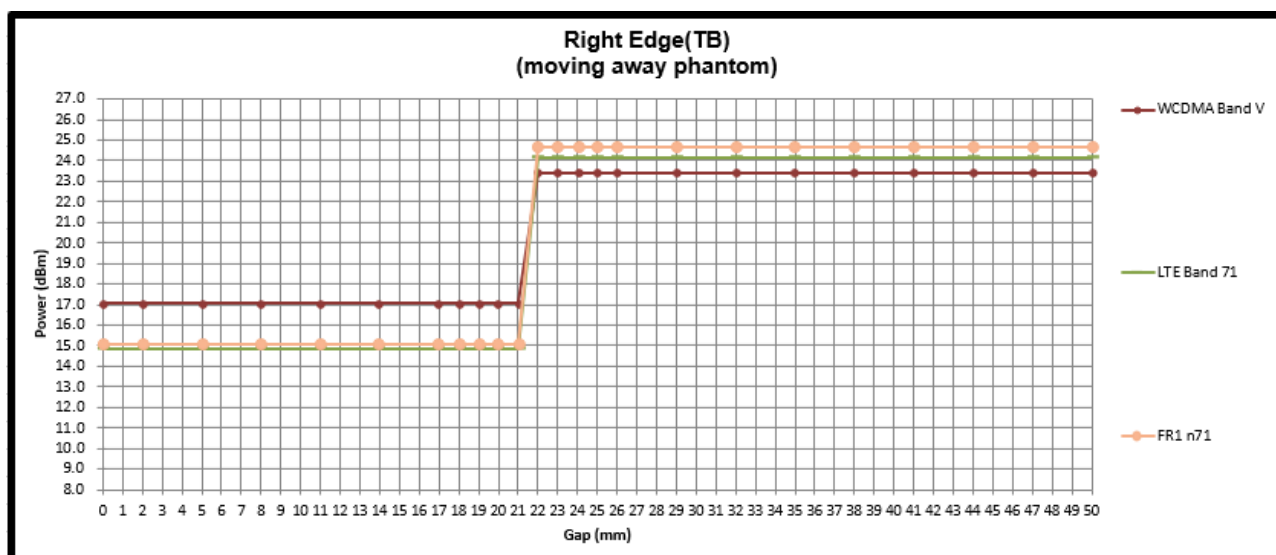
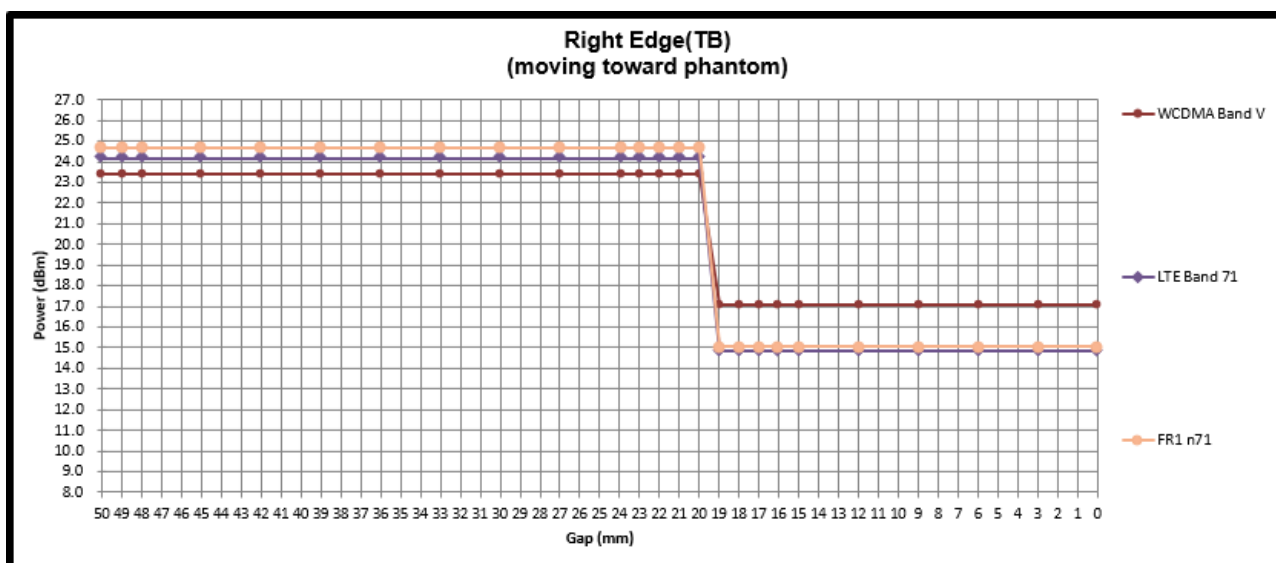
Power Measurement during Sensor Trigger distance testing
<Main Antenna>




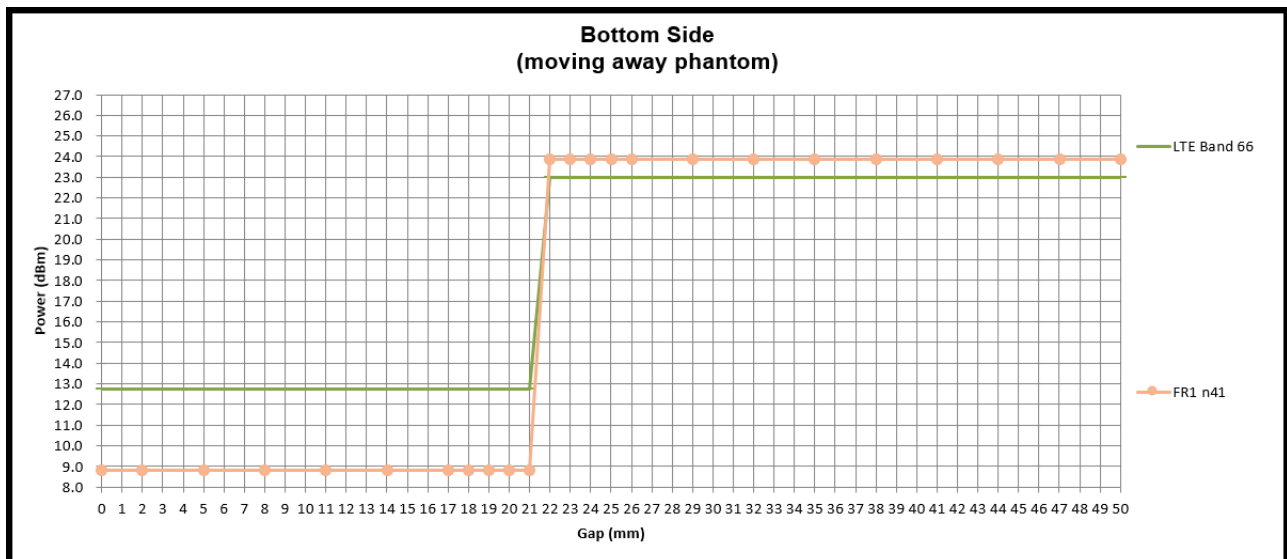
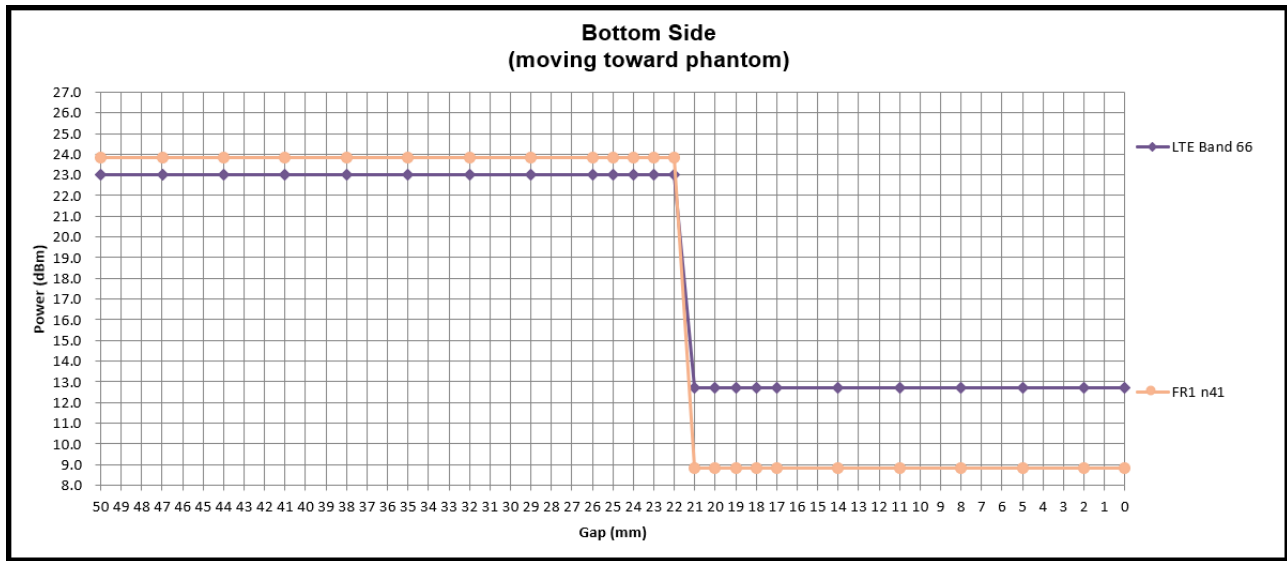


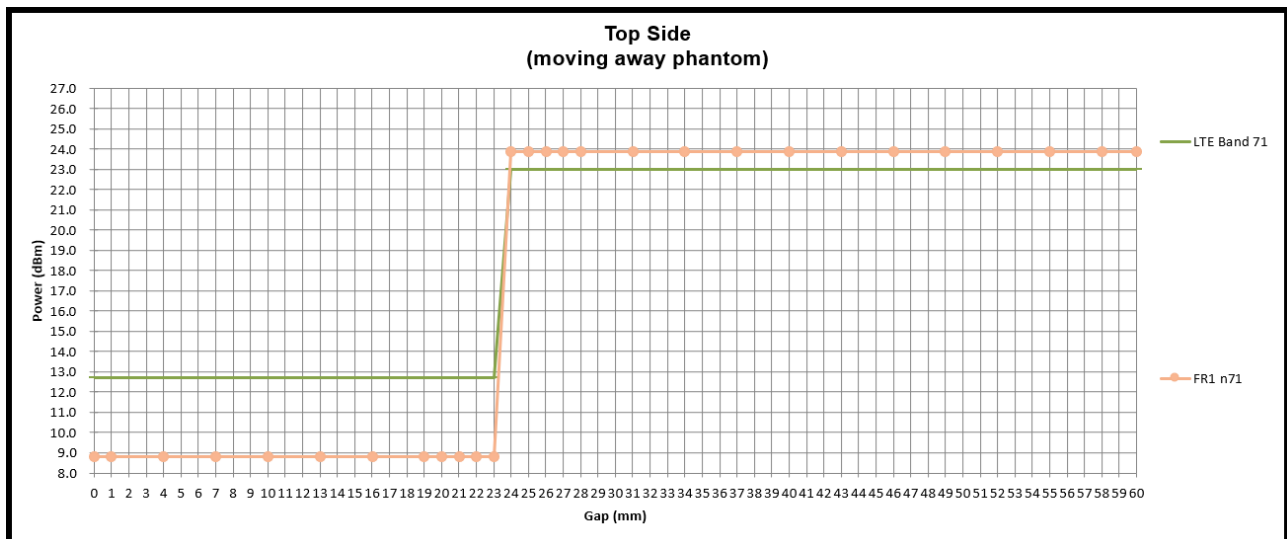
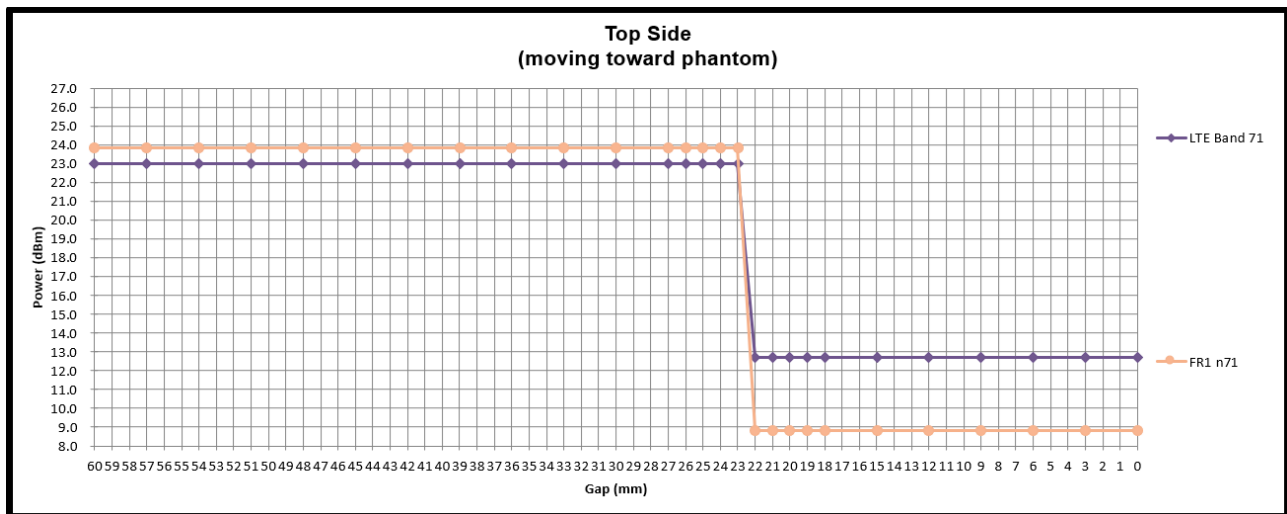


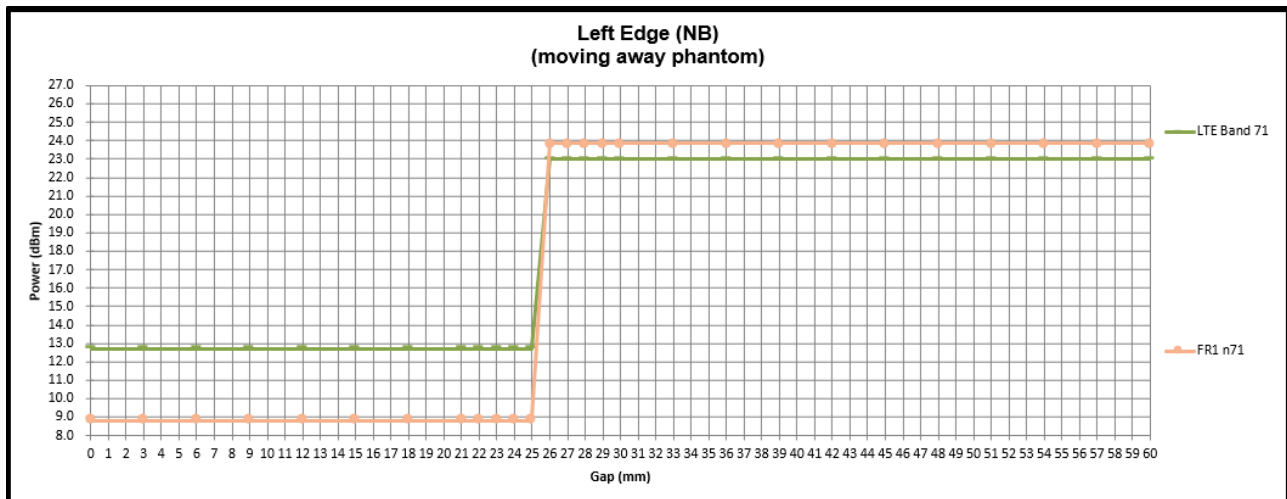
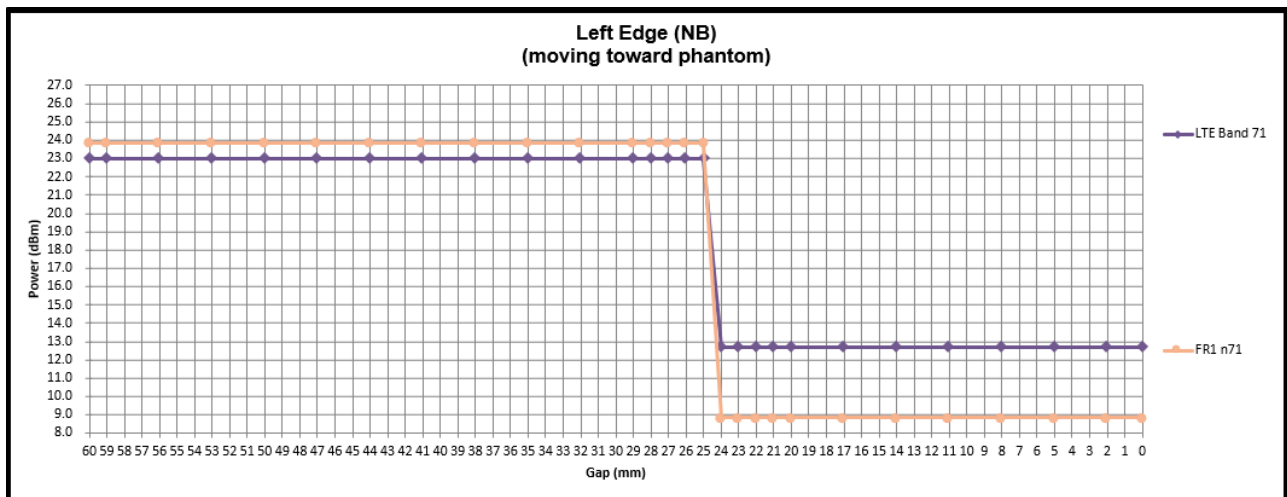


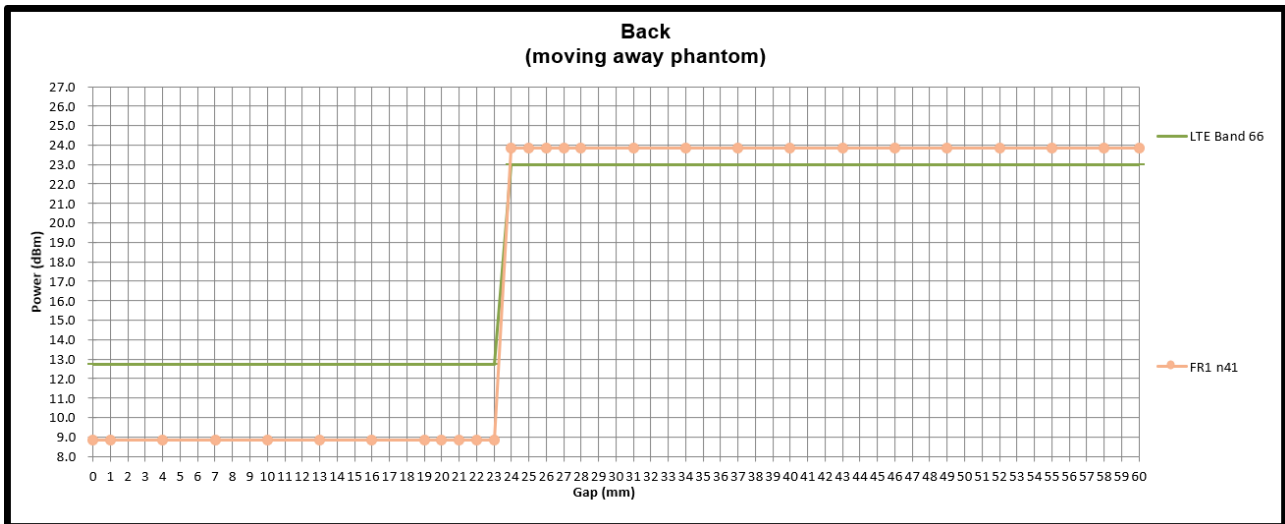
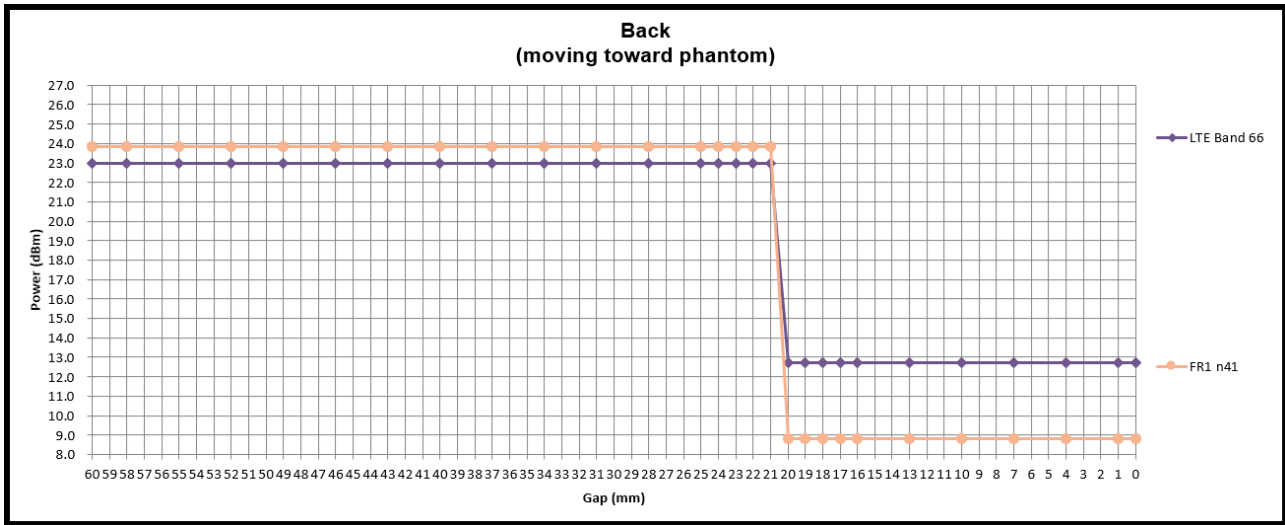


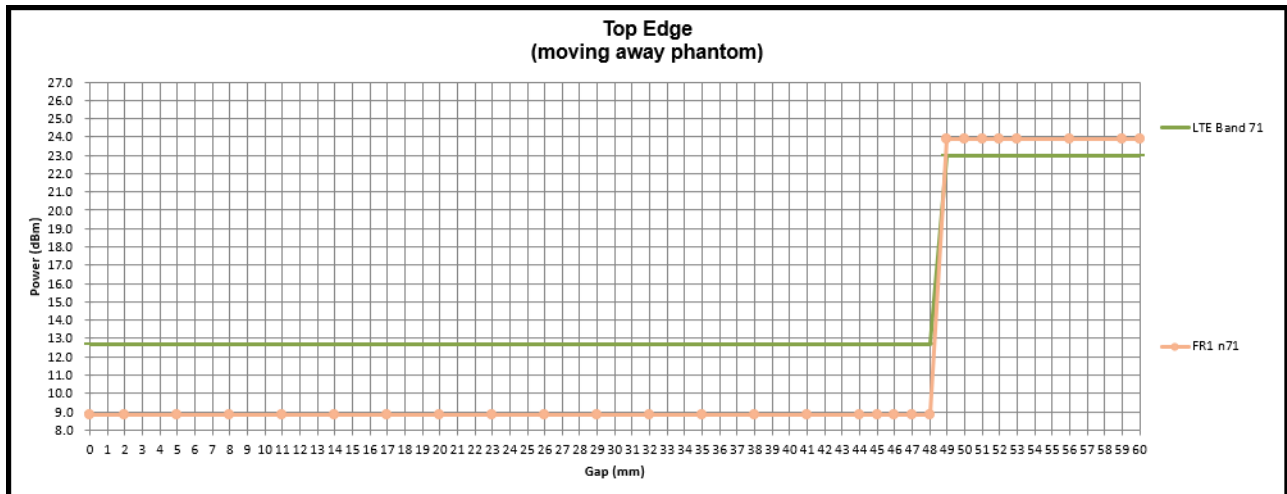
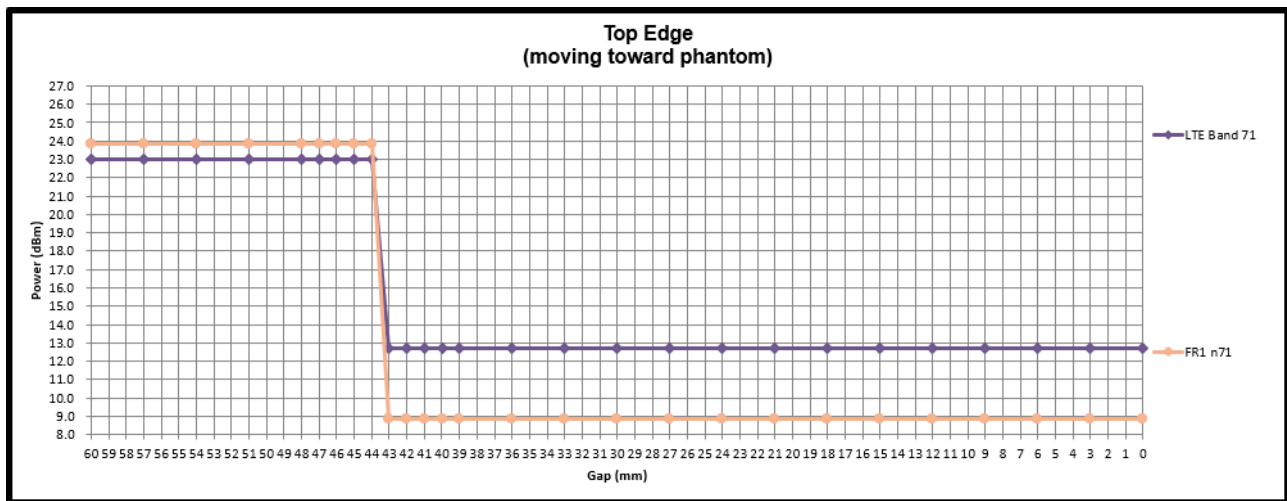
<MIMO 2 Antenna>

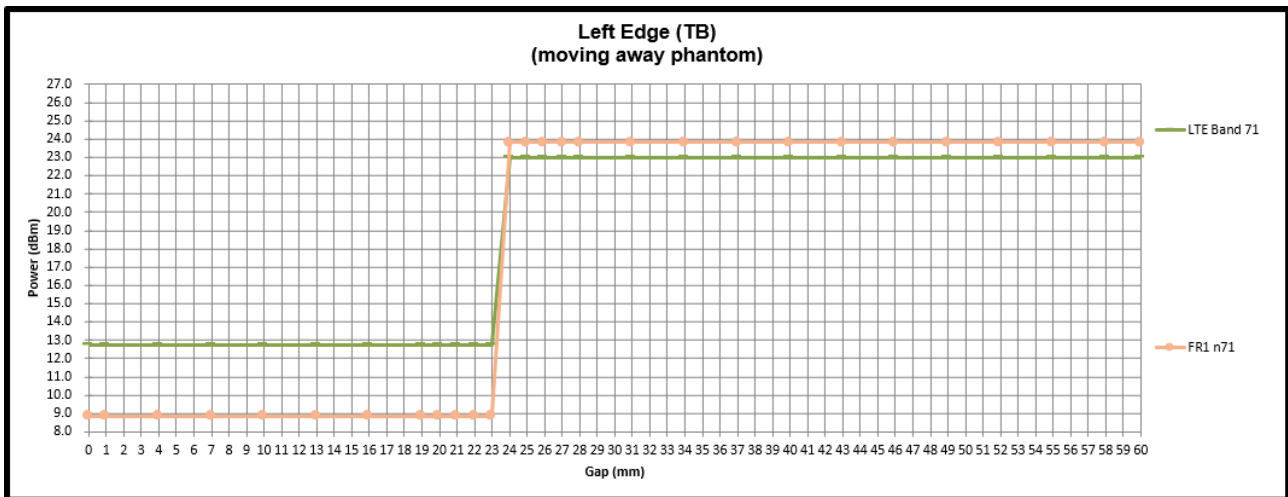
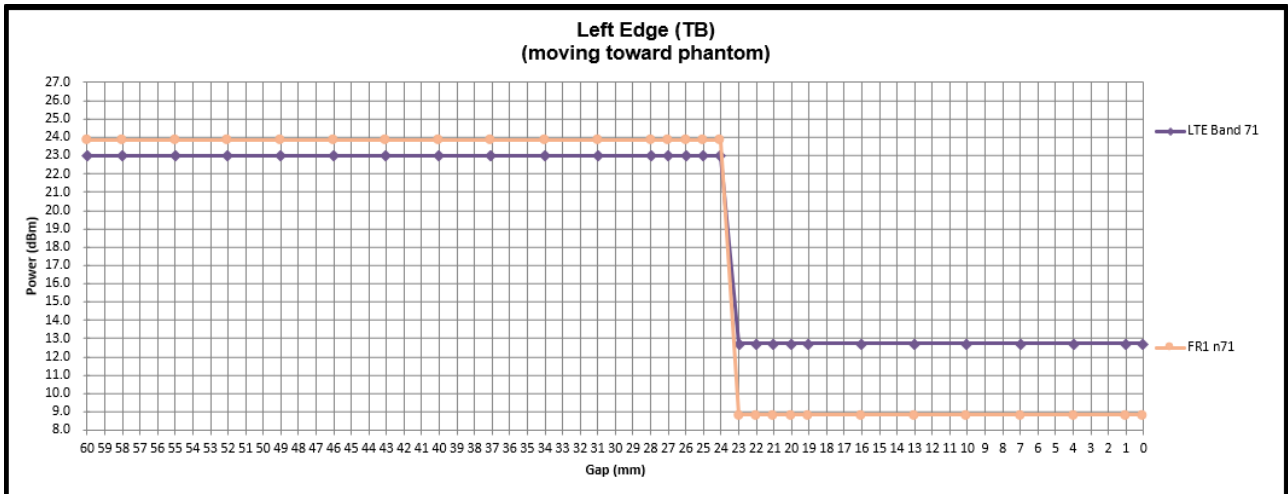




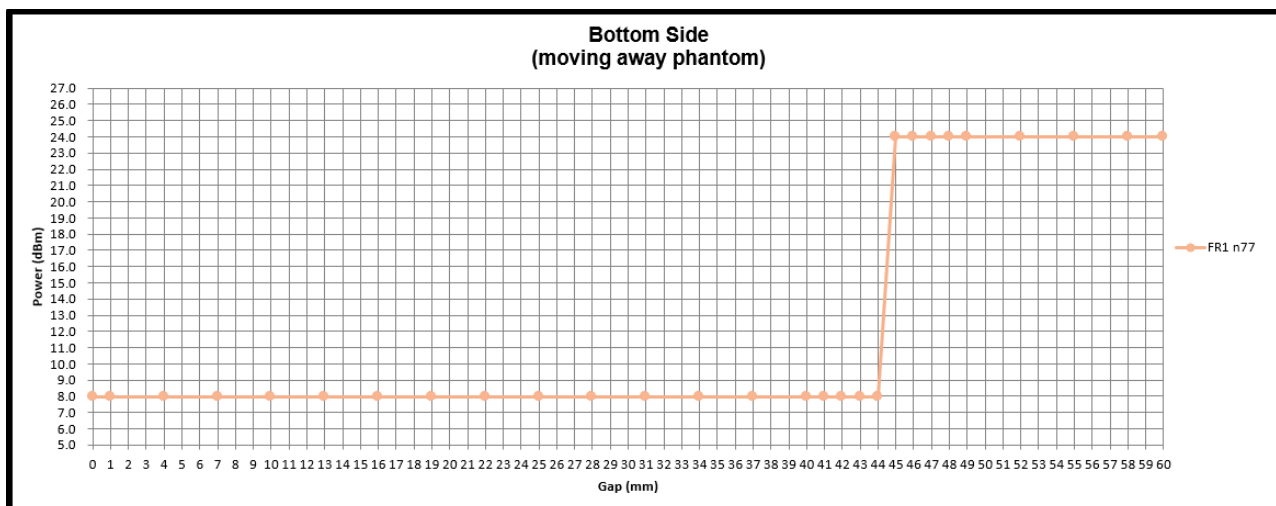
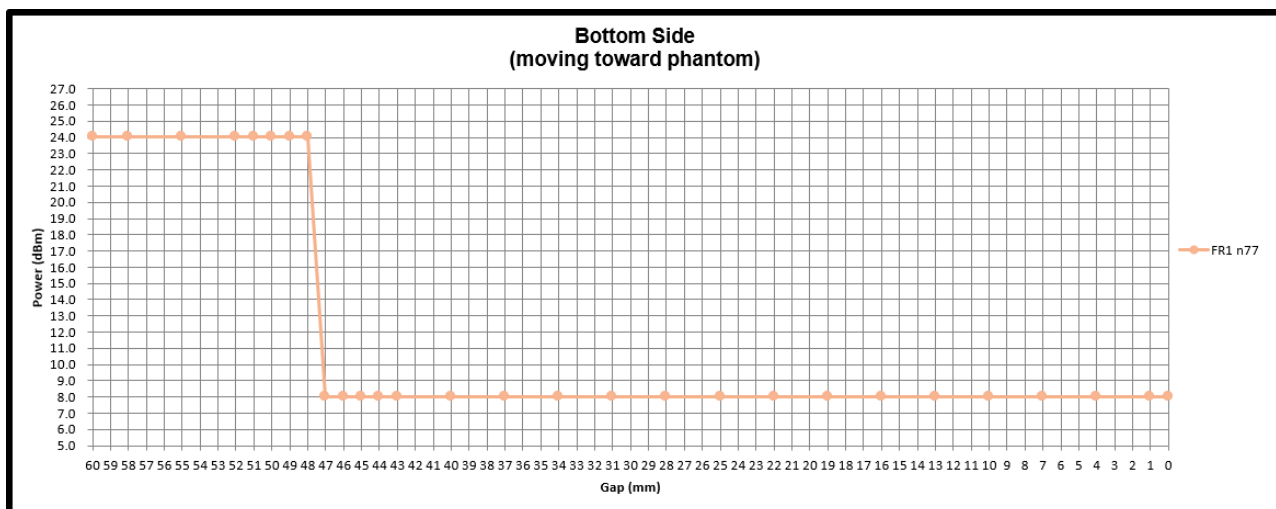


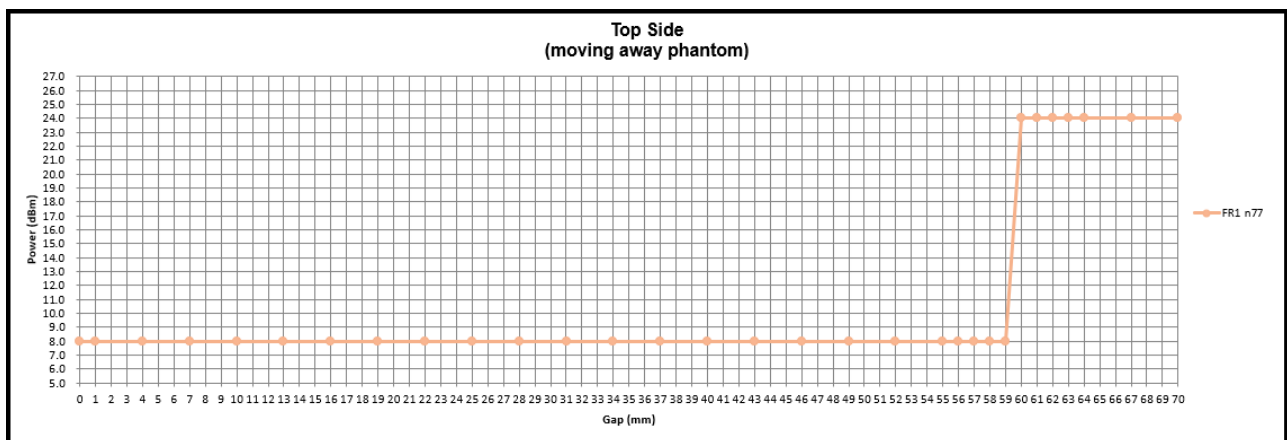
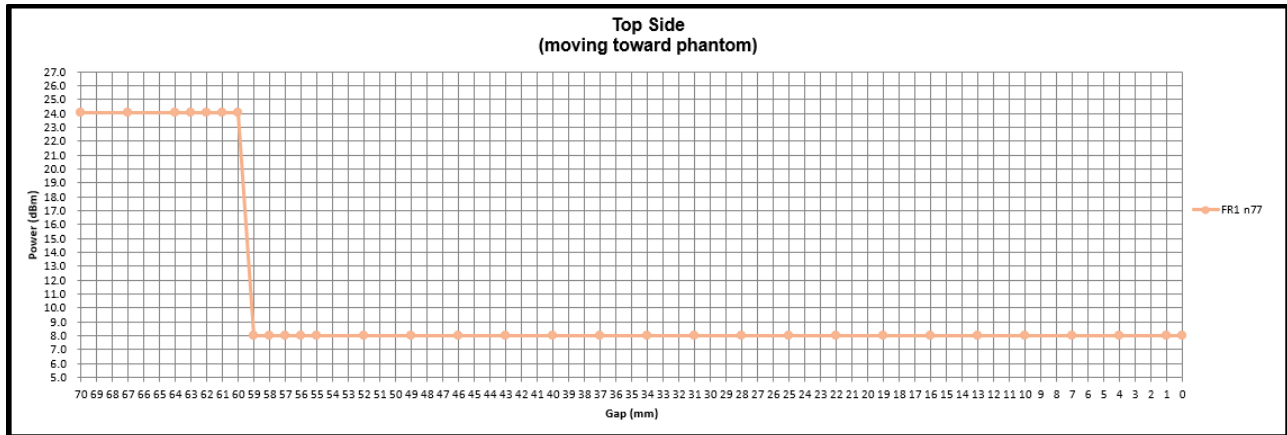


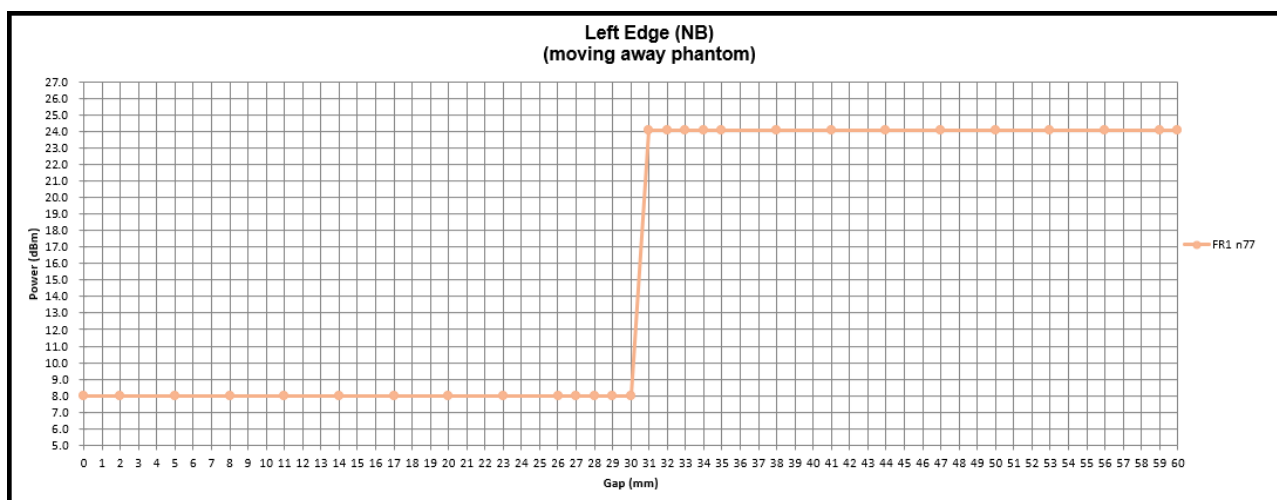
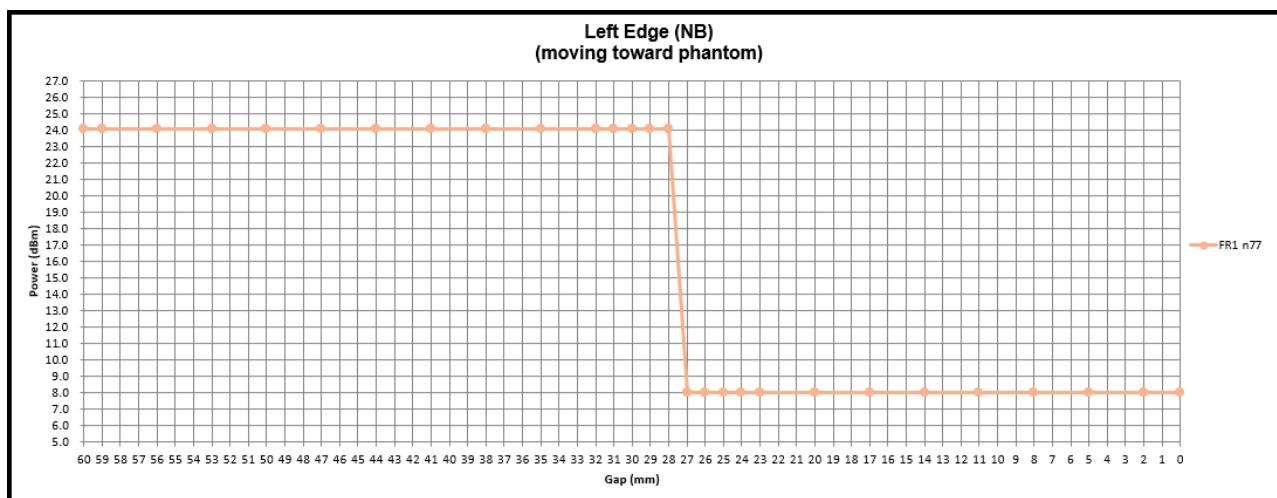


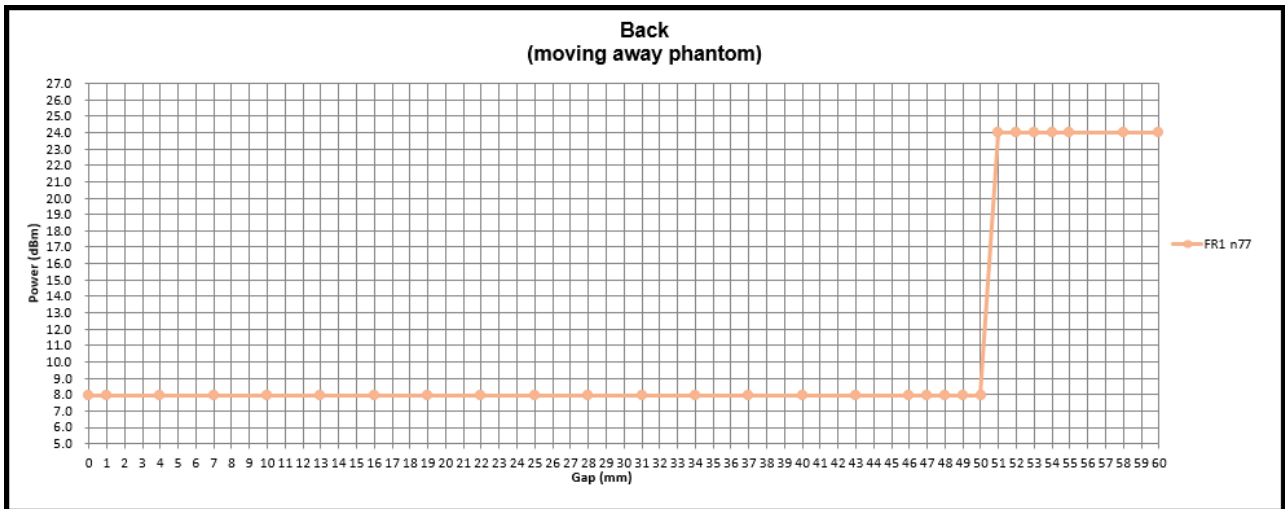
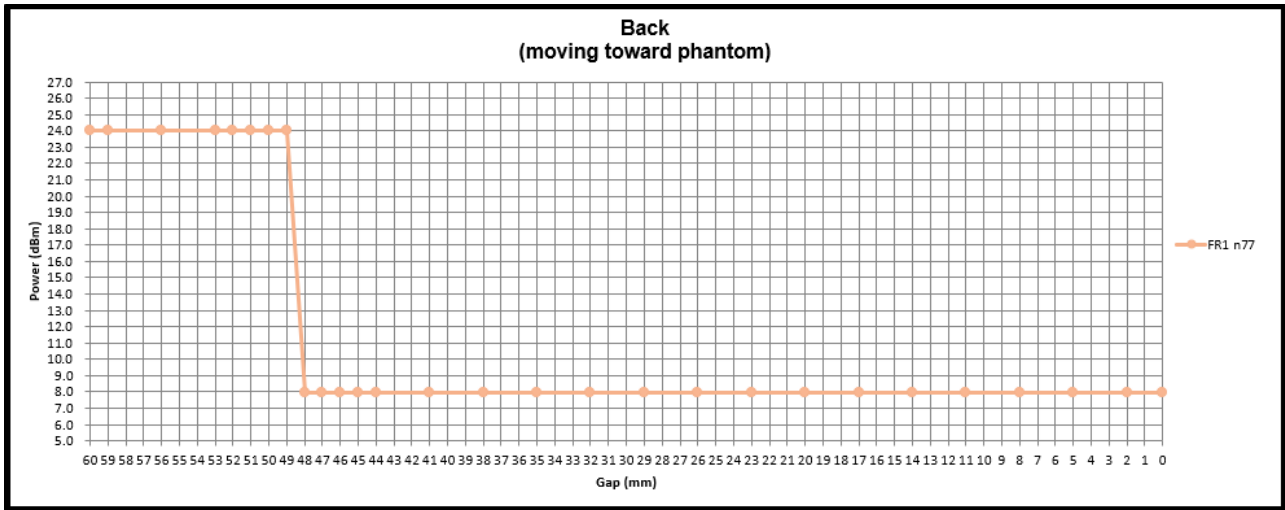


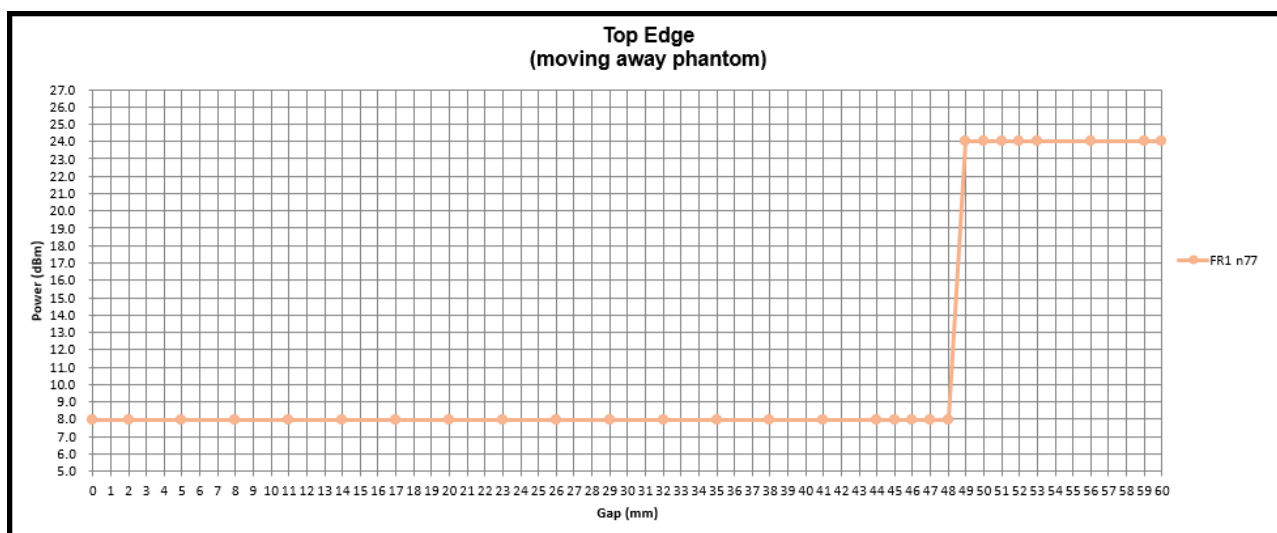
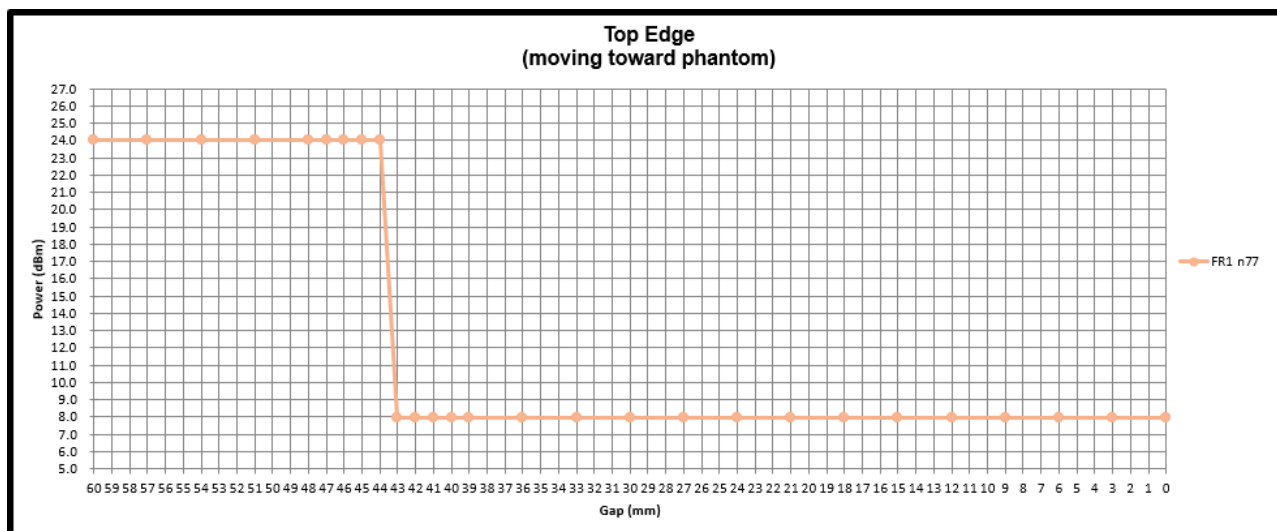
<Aux Antenna>

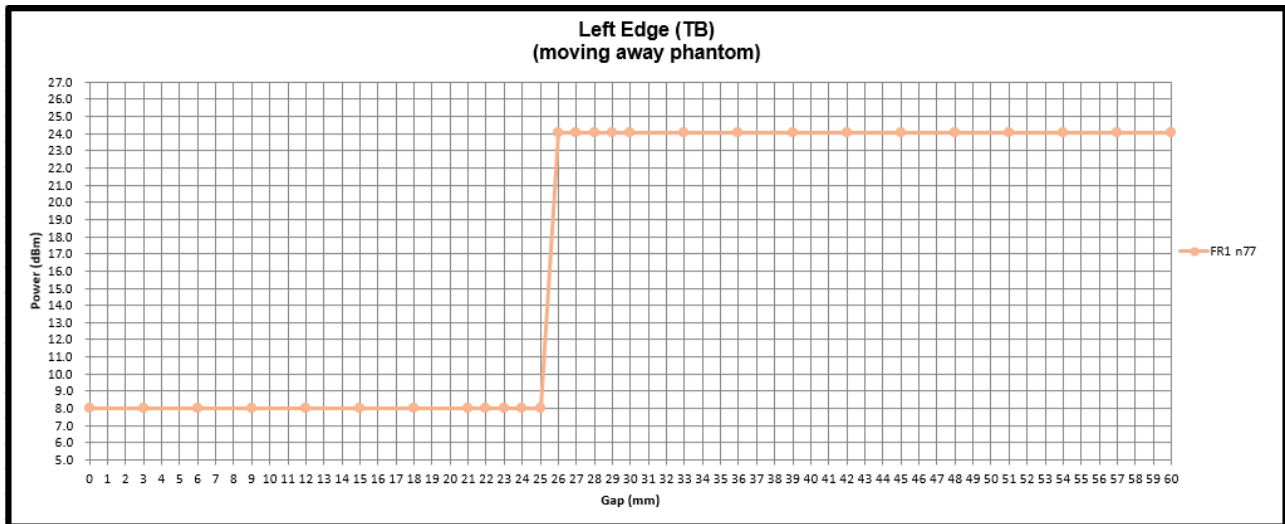
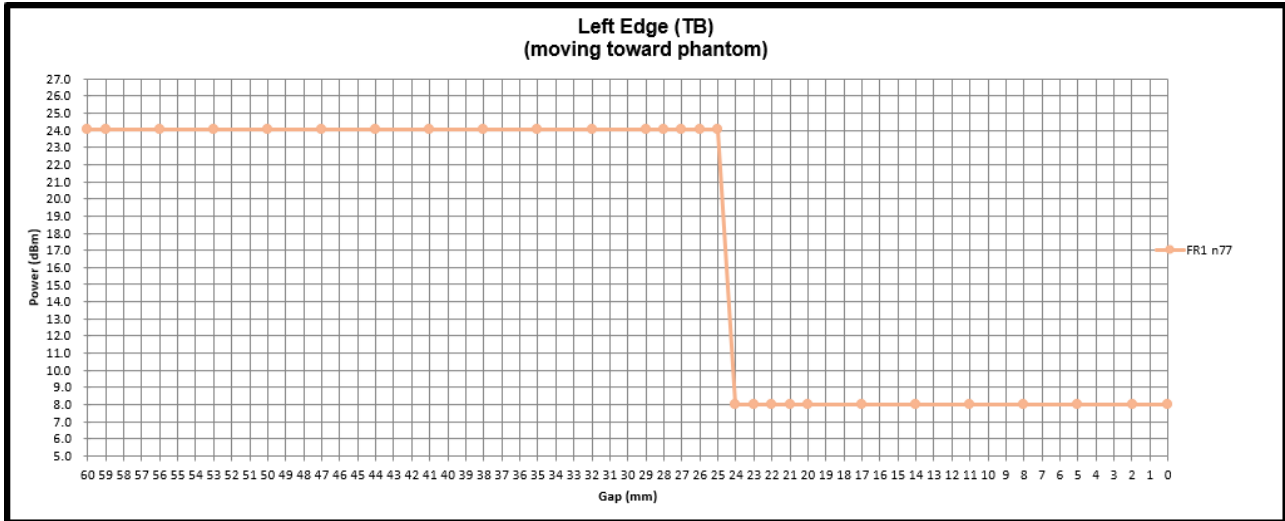












5. RF Exposure Limits

5.1 Uncontrolled Environment

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

5.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

5.3 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.

Peak Spatially Averaged Power Density was evaluated over a circular 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

6. Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

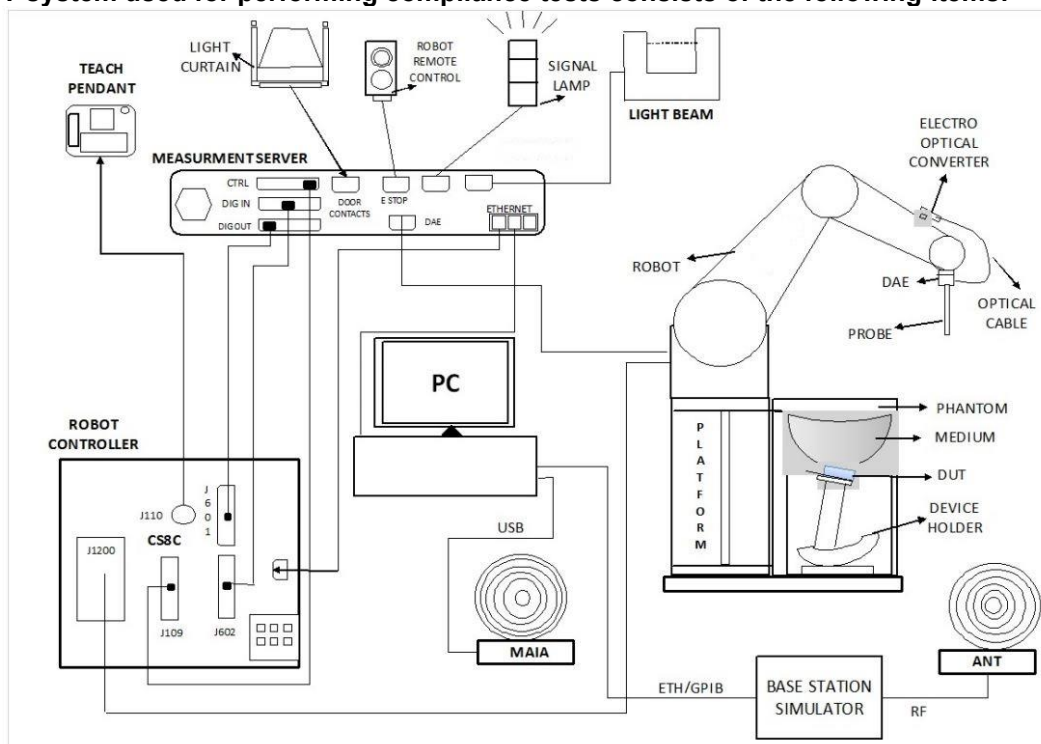
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. System Description and Setup

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



- The DASY system in SAR Configuration is shown above
- 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 windows software and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 Test Site Location

The SAR measurement facilities used to collect data are within both Sporton Lab list below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 3786) and the FCC designation No. TW1190 and TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Laboratory	EMC & Wireless Communications Laboratory			Wensan Laboratory				
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333			TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010				
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY	SAR18-HY	SAR21-HY	
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	SAR16-HY	SAR19-HY	SAR22-HY	
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	SAR17-HY	SAR20-HY		

7.2 E-Field Probe

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

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 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: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 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	

7.1 Data Acquisition Electronics (DAE)

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

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

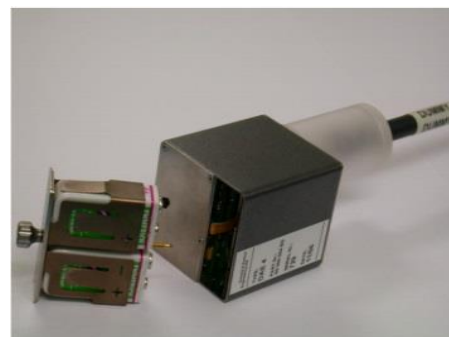


Fig 5.1 Photo of DAE

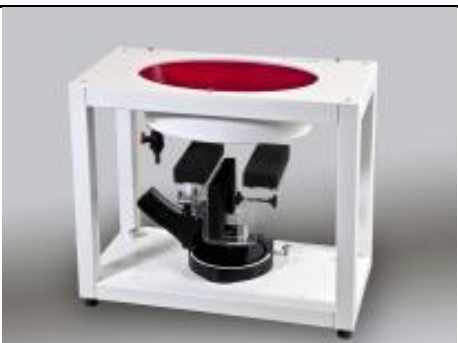
7.2 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

7.3 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm $2 - 3$ GHz: ≤ 5 mm*	$3 - 4$ GHz: ≤ 5 mm* $4 - 6$ GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	$3 - 4$ GHz: ≤ 4 mm $4 - 5$ GHz: ≤ 3 mm $5 - 6$ GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	$3 - 4$ GHz: ≤ 3 mm $4 - 5$ GHz: ≤ 2.5 mm $5 - 6$ GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	$3 - 4$ GHz: ≥ 28 mm $4 - 5$ GHz: ≥ 25 mm $5 - 6$ GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

8.5 Volume Scan Procedures

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

8.6 Power Drift Monitoring

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

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit ⁽²⁾	D750V3	1107	Jun. 22, 2022	Jun. 19, 2025
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	4d167	Nov. 24, 2022	Nov. 22, 2024
SPEAG	1750MHz System Validation Kit ⁽²⁾	D1750V2	1112	Jun. 22, 2022	Jun. 19, 2025
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d185	Jun. 17, 2022	Jun. 14, 2025
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1006	Jan. 18, 2022	Jan. 15, 2025
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1078	Jun. 23, 2022	Jun. 20, 2025
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1089	Mar. 24, 2022	Mar. 21, 2025
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 17, 2022	Jan. 14, 2025
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1006	Jun. 20, 2022	Jun. 17, 2025
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1092	May. 15, 2023	May. 13, 2025
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 18, 2024	Jan. 17, 2025
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 18, 2024	Jan. 17, 2025
SPEAG	Data Acquisition Electronics	DAE4	1424	Dec. 07, 2023	Dec. 06, 2024
SPEAG	Data Acquisition Electronics	DAE4	1694	Nov. 17, 2023	Nov. 16, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 22, 2024	Jan. 21, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Dec. 14, 2023	Dec. 13, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	Jun. 04, 2024	Jun. 03, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7700	Feb. 01, 2024	Jan. 31, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7791	Feb. 21, 2024	Feb. 20, 2025
Testo	Hygro meter	608-H1	45196600	Nov. 02, 2023	Nov. 01, 2024
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 13, 2023	Nov. 12, 2024
Keysight	5G Wireless Test Platform	E7515B	MY58300712	Apr. 22, 2024	Apr. 21, 2025
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3692C	212506	Nov. 07, 2023	Nov. 06, 2024
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 30, 2023	Oct. 29, 2024
SPEAG	Dielectric Probe Kit	DAK-3.5	1146	Jul. 15, 2024	Jul. 14, 2025
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3690	Aug. 07, 2024	Aug. 06, 2025
Anritsu	Power Meter	ML2495A	1419002	Aug. 13, 2024	Aug. 12, 2025
Anritsu	Power Sensor	MA2411B	1911176	Aug. 13, 2024	Aug. 12, 2025
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 09, 2024	Jul. 08, 2025
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 16, 2023	Oct. 15, 2024
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Warison	Directional Coupler	WCOU-10-50S-10	WR889BMC4B1	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

10. System Verification

10.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18°C to 25°C, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized. The tissue dielectric measurement system must be calibrated before use. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements.

The liquid tissue depth was at least 15cm in the phantom for all SAR testing

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.4	0.885	41.700	0.89	41.90	-0.56	-0.48	± 5	2024/9/1
750	22.6	0.896	42.300	0.89	41.90	0.67	0.95	± 5	2024/9/2
750	22.3	0.904	42.200	0.89	41.90	1.57	0.72	± 5	2024/9/3
750	22.6	0.893	41.800	0.89	41.90	0.34	-0.24	± 5	2024/9/5
750	22.5	0.883	41.800	0.89	41.90	-0.79	-0.24	± 5	2024/9/12
835	22.4	0.919	41.400	0.90	41.50	2.11	-0.24	± 5	2024/9/1
835	22.6	0.930	42.000	0.90	41.50	3.33	1.20	± 5	2024/9/6
835	22.3	0.940	41.900	0.90	41.50	4.44	0.96	± 5	2024/9/7
835	22.5	0.916	41.500	0.90	41.50	1.78	0.00	± 5	2024/9/12
1750	22.6	1.380	40.200	1.37	40.10	0.73	0.25	± 5	2024/8/30
1750	22.8	1.340	40.700	1.37	40.10	-2.19	1.50	± 5	2024/9/8
1750	22.4	1.360	40.800	1.37	40.10	-0.73	1.75	± 5	2024/9/9
1750	22.5	1.360	40.200	1.37	40.10	-0.73	0.25	± 5	2024/9/10
1900	22.6	1.440	38.700	1.40	40.00	2.86	-3.25	± 5	2024/8/30
1900	22.8	1.410	40.600	1.40	40.00	0.71	1.50	± 5	2024/9/11
1900	22.7	1.440	39.100	1.40	40.00	2.86	-2.25	± 5	2024/9/13
1900	22.4	1.440	39.200	1.40	40.00	2.86	-2.00	± 5	2024/9/14
2300	22.2	1.660	39.600	1.67	39.50	-0.60	0.25	± 5	2024/8/29
2300	22.9	1.620	40.400	1.67	39.50	-2.99	2.28	± 5	2024/9/15
2300	22.5	1.700	39.100	1.67	39.50	1.80	-1.01	± 5	2024/9/16
2600	22.2	1.980	38.500	1.96	39.00	1.02	-1.28	± 5	2024/8/29
2600	22.9	1.920	39.100	1.96	39.00	-2.04	0.26	± 5	2024/9/17
2600	22.5	1.950	38.200	1.96	39.00	-0.51	-2.05	± 5	2024/9/18
2600	22.3	1.980	39.800	1.96	39.00	1.02	2.05	± 5	2024/9/19
2600	22.5	2.030	37.900	1.96	39.00	3.57	-2.82	± 5	2024/9/20
2600	22.4	1.980	38.600	1.96	39.00	1.02	-1.03	± 5	2024/9/21
2600	22.5	1.990	38.700	1.96	39.00	1.53	-0.77	± 5	2024/9/22
3500	22.6	2.900	37.800	2.91	37.90	-0.34	-0.26	± 5	2024/9/4
3500	22.5	2.990	38.100	2.91	37.90	2.75	0.53	± 5	2024/9/23
3500	22.8	2.950	37.600	2.91	37.90	1.37	-0.79	± 5	2024/9/24
3500	22.2	2.970	38.000	2.91	37.90	2.06	0.26	± 5	2024/9/25
3500	22.7	2.980	38.300	2.91	37.90	2.41	1.06	± 5	2024/9/26
3500	22.6	3.000	38.500	2.91	37.90	3.09	1.58	± 5	2024/9/27
3700	22.6	3.080	37.600	3.12	37.70	-1.28	-0.27	± 5	2024/9/4
3700	22.4	3.100	37.700	3.12	37.70	-0.64	0.00	± 5	2024/9/13
3700	22.5	3.150	37.900	3.12	37.70	0.96	0.53	± 5	2024/9/28
3700	22.8	3.140	37.300	3.12	37.70	0.64	-1.06	± 5	2024/9/29
3700	22.2	3.130	37.800	3.12	37.70	0.32	0.27	± 5	2024/9/30
3700	22.5	3.170	38.100	3.12	37.70	1.60	1.06	± 5	2024/10/1
3700	22.3	3.210	38.200	3.12	37.70	2.88	1.33	± 5	2024/10/2
3900	22.6	3.250	37.200	3.33	37.51	-2.40	-0.83	± 5	2024/9/4
3900	22.5	3.330	37.700	3.33	37.51	0.00	0.51	± 5	2024/10/3
3900	22.2	3.300	37.600	3.33	37.51	-0.90	0.24	± 5	2024/10/4

10.2 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.

Test Site	Date	Frequency (MHz)	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 (%)
SAR-14	2024/9/1	750	50	D750V3-1107	EX3DV4 - SN7791	DAE4 Sn656	0.395	8.540	7.9	-7.49
SAR-17	2024/9/2	750	50	D750V3-1107	EX3DV4 - SN7695	DAE4 Sn1424	0.412	8.540	8.24	-3.51
SAR-18	2024/9/3	750	50	D750V3-1107	EX3DV4 - SN3976	DAE4 Sn1424	0.403	8.540	8.06	-5.62
SAR-18	2024/9/5	750	50	D750V3-1107	EX3DV4 - SN3976	DAE4 Sn1424	0.387	8.540	7.74	-9.37
SAR-20	2024/9/12	750	50	D750V3-1107	EX3DV4 - SN7700	DAE4 Sn316	0.397	8.540	7.94	-7.03
SAR-14	2024/9/1	835	50	D835V2-4d167	EX3DV4 - SN7791	DAE4 Sn656	0.459	9.800	9.18	-6.33
SAR-17	2024/9/6	835	50	D835V2-4d167	EX3DV4 - SN7695	DAE4 Sn1424	0.489	9.800	9.78	-0.20
SAR-18	2024/9/7	835	50	D835V2-4d167	EX3DV4 - SN3976	DAE4 Sn1424	0.472	9.800	9.44	-3.67
SAR-20	2024/9/12	835	50	D835V2-4d167	EX3DV4 - SN7700	DAE4 Sn316	0.462	9.800	9.24	-5.71
SAR-14	2024/8/30	1750	50	D1750V2-1112	EX3DV4 - SN7791	DAE4 Sn656	1.820	36.900	36.4	-1.36
SAR-17	2024/9/8	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn1424	1.810	36.900	36.2	-1.90
SAR-18	2024/9/9	1750	50	D1750V2-1112	EX3DV4 - SN3976	DAE4 Sn1424	1.700	36.900	34	-7.86
SAR-14	2024/9/10	1750	50	D1750V2-1112	EX3DV4 - SN7791	DAE4 Sn656	1.770	36.900	35.4	-4.07
SAR-14	2024/8/30	1900	50	D1900V2-5d185	EX3DV4 - SN7791	DAE4 Sn656	2.000	39.000	40	2.56
SAR-17	2024/9/11	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn1424	1.810	39.000	36.2	-7.18
SAR-14	2024/9/13	1900	50	D1900V2-5d185	EX3DV4 - SN7791	DAE4 Sn656	1.900	39.000	38	-2.56
SAR-18	2024/9/14	1900	50	D1900V2-5d185	EX3DV4 - SN3976	DAE4 Sn1424	1.920	39.000	38.4	-1.54
SAR-14	2024/8/29	2300	50	D2300V2-1006	EX3DV4 - SN7791	DAE4 Sn656	2.200	48.300	44	-8.90
SAR-17	2024/9/15	2300	50	D2300V2-1006	EX3DV4 - SN7695	DAE4 Sn1424	2.240	48.300	44.8	-7.25
SAR-18	2024/9/16	2300	50	D2300V2-1006	EX3DV4 - SN3976	DAE4 Sn1424	2.230	48.300	44.6	-7.66
SAR-14	2024/8/29	2600	50	D2600V2-1089	EX3DV4 - SN7791	DAE4 Sn656	2.630	55.400	52.6	-5.05
SAR-17	2024/9/17	2600	50	D2600V2-1078	EX3DV4 - SN7695	DAE4 Sn1424	2.590	55.400	51.8	-6.50
SAR-14	2024/9/18	2600	50	D2600V2-1078	EX3DV4 - SN7791	DAE4 Sn656	2.730	55.400	54.6	-1.44
SAR-15	2024/9/19	2600	50	D2600V2-1078	EX3DV4 - SN7625	DAE4 Sn1694	2.760	55.400	55.2	-0.36
SAR-18	2024/9/20	2600	50	D2600V2-1078	EX3DV4 - SN3976	DAE4 Sn1424	2.700	55.400	54	-2.53
SAR-14	2024/9/21	2600	50	D2600V2-1078	EX3DV4 - SN7791	DAE4 Sn656	2.620	55.400	52.4	-5.42
SAR-14	2024/9/22	2600	50	D2600V2-1078	EX3DV4 - SN7791	DAE4 Sn656	2.640	55.400	52.8	-4.69

Test Site	Date	Frequency (MHz)	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 (%)
SAR-14	2024/9/4	3500	100	D3500V2-1014	EX3DV4 - SN7791	DAE4 Sn656	6.210	67.200	62.1	-7.59
SAR-17	2024/9/23	3500	50	D3500V2-1014	EX3DV4 - SN7695	DAE4 Sn1424	3.220	67.200	64.4	-4.17
SAR-14	2024/9/24	3500	50	D3500V2-1014	EX3DV4 - SN7791	DAE4 Sn656	3.050	67.200	61	-9.23
SAR-18	2024/9/25	3500	50	D3500V2-1014	EX3DV4 - SN3976	DAE4 Sn1424	3.160	67.200	63.2	-5.95
SAR-14	2024/9/26	3500	100	D3500V2-1014	EX3DV4 - SN7791	DAE4 Sn656	6.430	67.200	64.3	-4.32
SAR-14	2024/9/27	3500	100	D3500V2-1014	EX3DV4 - SN7791	DAE4 Sn656	6.500	67.200	65	-3.27
SAR-14	2024/9/4	3700	50	D3700V2-1006	EX3DV4 - SN7791	DAE4 Sn656	3.070	65.600	61.4	-6.40
SAR-20	2024/9/13	3700	50	D3700V2-1006	EX3DV4 - SN7700	DAE4 Sn316	3.430	65.600	68.6	4.57
SAR-17	2024/9/28	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn1424	3.260	65.600	65.2	-0.61
SAR-14	2024/9/29	3700	50	D3700V2-1006	EX3DV4 - SN7791	DAE4 Sn656	3.050	65.600	61	-7.01
SAR-18	2024/9/30	3700	50	D3700V2-1006	EX3DV4 - SN3976	DAE4 Sn1424	3.300	65.600	66	0.61
SAR-14	2024/10/1	3700	100	D3700V2-1006	EX3DV4 - SN7791	DAE4 Sn656	6.470	65.600	64.7	-1.37
SAR-14	2024/10/2	3700	100	D3700V2-1006	EX3DV4 - SN7791	DAE4 Sn656	6.560	65.600	65.6	0.00
SAR-14	2024/9/4	3900	100	D3900V2-1092	EX3DV4 - SN7791	DAE4 Sn656	6.200	67.000	62	-7.46
SAR-17	2024/10/3	3900	50	D3900V2-1092	EX3DV4 - SN7695	DAE4 Sn1424	3.040	67.000	60.8	-9.25
SAR-18	2024/10/4	3900	50	D3900V2-1092	EX3DV4 - SN3976	DAE4 Sn1424	3.020	67.000	60.4	-9.85

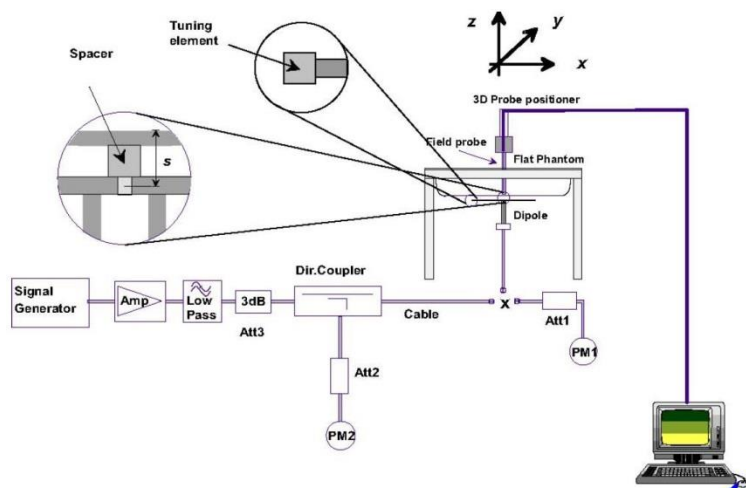

Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

11. RF Exposure Positions

11.1 SAR Testing for Tablet

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

12. UL/DL Carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports combination bands and configurations are according to 3GPP.
2. According to 202410 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.
3. According to 202410 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.
4. Pick one from the largest DL combinations for internal investigation that 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.

2CC Downlink Carrier Aggregation Combination	3CC Downlink Carrier Aggregation Combination	4CC Downlink Carrier Aggregation Combination	5CC Downlink Carrier Aggregation Combination
CA_43C	CA_48D	CA_48E	CA_48A-48E
CA_48B	CA_66D	CA_48A-48D	CA_48C-48D
CA_48C	CA_25A-25A-25A	CA_48C-48C	CA_2A-2A-46D
CA_66B	CA_48A-48C	CA_2A-2A-4A-4A	CA_2A-2A-66A-66B
CA_2A-2A	CA_66A-66A-66A	CA_2A-2A-5B	CA_2A-2A-66A-66C
CA_4A-4A	CA_66A-66B	CA_2A-2A-7A-7A	CA_2A-46A-46D
CA_25A-25A	CA_66A-66C	CA_2A-2A-7C	CA_2A-46E
CA_43A-43A	CA_2A-2A-4A	CA_2A-2A-12A-12A	CA_2A-48A-48D
CA_48A-48A	CA_2A-2A-5A	CA_2A-2A-46C	CA_2A-48C-48C
CA_2A-4A	CA_2A-2A-7A	CA_2A-2A-66A-66A	CA_2A-48E
CA_2A-5A	CA_2A-2A-12A	CA_2A-2A-66B	CA_4A-46A-46D
CA_2A-12A	CA_2A-2A-13A	CA_2A-2A-66C	CA_4A-48E
CA_2A-13A	CA_2A-2A-14A	CA_2A-46A-46C	CA_5B-66A-66B
CA_2A-14A	CA_2A-2A-29A	CA_2A-46D	CA_5B-66A-66C
CA_2A-26A	CA_2A-2A-30A	CA_2A-48A-48C	CA_7A-7A-46D
CA_2A-29A	CA_2A-2A-46A	CA_2A-48D	CA_13A-48A-48D
CA_2A-30A	CA_2A-2A-66A	CA_2A-66A-66A-66A	CA_13A-48C-48C
CA_2A-46A	CA_2A-2A-71A	CA_2A-66A-66B	CA_25A-25A-41D
CA_2A-48A	CA_2A-4A-4A	CA_2A-66A-66C	CA_25A-41E
CA_2A-66A	CA_2A-5B	CA_2C-66A-66A	CA_41A-46E
CA_2A-71A	CA_2C-5A	CA_2A-66D	CA_46A-46D-66A
CA_4A-12A	CA_2A-7A-7A	CA_4A-4A-5B	CA_46D-66A-66A
CA_4A-13A	CA_2A-7C	CA_4A-4A-12A-12A	CA_46E-66A
CA_4A-29A	CA_2A-12A-12A	CA_4A-46A-46C	CA_48A-48C-66B
CA_4A-30A	CA_2C-12A	CA_4A-46D	CA_48A-48C-66C
CA_4A-46A	CA_2C-29A	CA_4A-48D	CA_48A-48D-66A
CA_4A-48A	CA_2C-30A	CA_5A-5A-66A-66A	CA_48C-48C-66A
CA_4A-71A	CA_2A-46A-46A	CA_5A-5A-66B	CA_48E-66A
CA_5A-25A	CA_2A-46C	CA_5A-5A-66C	CA_2A-2A-5A-66A-66A
CA_5A-30A	CA_2A-48A-48A	CA_5A-48D	CA_2A-2A-5A-66B
CA_5A-38A	CA_2A-48C	CA_5A-66A-66B	CA_2A-2A-5A-66C
CA_5A-41A	CA_2A-66A-66A	CA_5A-66A-66C	CA_2A-2A-5B-66A
CA_5A-48A	CA_2A-66B	CA_5B-66A-66A	CA_2A-2A-7A-7A-13A
CA_7A-12A	CA_2A-66C	CA_5A-66D	CA_2A-2A-7C-13A
CA_7A-13A	CA_2C-66A	CA_5B-66B	CA_2A-2A-12A-66A-66A
CA_7A-25A	CA_4A-4A-5A	CA_5B-66C	CA_2A-2A-13A-66A-66A
CA_7A-26A	CA_4A-4A-7A	CA_7A-7A-25A-25A	CA_2A-2A-13A-66B
CA_7A-29A	CA_4A-4A-12A	CA_7A-7A-46C	CA_2A-2A-14A-66A-66A
CA_7A-66A	CA_4A-4A-13A	CA_7A-7A-66A-66A	CA_2A-2A-29A-66A-66A
CA_12A-25A	CA_4A-4A-29A	CA_7C-25A-25A	CA_2C-5B-30A
CA_12A-30A	CA_4A-4A-30A	CA_13A-48A-48C	CA_2A-5A-46D



FCC SAR TEST REPORT

Report No. : FA482037

CA_12A-66A	CA_4A-4A-71A	CA_13A-48D	CA_2A-5B-66A-66A
CA_13A-48A	CA_4A-5B	CA_13A-66A-66B	CA_2A-5B-66B
CA_13A-66A	CA_4A-7A-7A	CA_13A-66A-66C	CA_2A-5B-66C
CA_14A-30A	CA_4A-12A-12A	CA_13A-66D	CA_2A-7A-7A-46C
CA_14A-66A	CA_4A-46A-46A	CA_14A-66A-66A-66A	CA_2A-7A-7A-66A-66A
CA_25A-26A	CA_4A-46C	CA_25A-25A-41C	CA_2A-7A-46D
CA_25A-41A	CA_4A-48C	CA_25A-41D	CA_2A-7C-66A-66A
CA_25A-46A	CA_5A-5A-66A	CA_25A-46D	CA_2A-13A-46D
CA_25A-66A	CA_5B-30A	CA_41A-46D	CA_2A-13A-48D
CA_26A-41A	CA_5A-66A-66A	CA_46A-46C-66A	CA_2A-13A-66A-66B
CA_29A-30A	CA_5A-66B	CA_46C-66A-66A	CA_2A-13A-66A-66C
CA_29A-66A	CA_5A-66C	CA_46D-66A	CA_2A-13A-66D
CA_30A-66A	CA_5B-66A	CA_48A-48A-66A-66A	CA_2A-46D-66A
CA_41A-46A	CA_7A-7A-13A	CA_48A-48A-66B	CA_2A-48D-66A
CA_41A-48A	CA_7A-7A-25A	CA_48A-48A-66C	CA_4A-4A-5B-30A
CA_46A-66A	CA_7A-7A-26A	CA_48A-48C-66A	CA_5A-7A-46D
CA_48A-66A	CA_7A-7A-29A	CA_48C-66A-66A	CA_5B-30A-66A-66A
CA_48A-71A	CA_7A-7A-46A	CA_48C-66B	CA_5A-46D-66A
CA_66A-71A	CA_7A-7A-66A	CA_48C-66C	CA_7A-7A-25A-25A-66A
	CA_7C-13A	CA_48D-66A	CA_7C-25A-25A-66A
	CA_7A-25A-25A	CA_2A-2A-4A-5A	CA_13A-46D-66A
	CA_7C-25A	CA_2A-2A-4A-12A	CA_13A-48D-66A
	CA_7C-29A	CA_2A-2A-4A-71A	CA_25A-25A-26A-41C
	CA_7A-66A-66A	CA_2A-2A-5A-30A	
	CA_7C-66A	CA_2A-2A-5A-66A	
	CA_12A-66A-66A	CA_2A-2A-7A-12A	
	CA_12A-66C	CA_2A-2A-7A-13A	
	CA_13A-48A-48A	CA_2A-2A-7A-66A	
	CA_13A-48C	CA_2A-2A-12A-30A	
	CA_13A-66A-66A	CA_2A-2A-12A-66A	
	CA_13A-66B	CA_2A-2A-13A-66A	
	CA_13A-66C	CA_2A-2A-14A-30A	
	CA_14A-66A-66A	CA_2A-2A-14A-66A	
	CA_25A-25A-26A	CA_2A-2A-29A-30A	
	CA_25A-25A-41A	CA_2A-2A-29A-66A	
	CA_25A-25A-66A	CA_2A-2A-30A-66A	
	CA_25A-41C	CA_2A-2A-66A-71A	
	CA_25A-46C	CA_2A-4A-4A-5A	
	CA_26A-41C	CA_2A-4A-4A-12A	
	CA_29A-66A-66A	CA_2A-4A-5B	
	CA_30A-66A-66A	CA_2A-4A-7A-7A	
	CA_41A-46C	CA_2A-4A-7C	
	CA_46A-46A-66A	CA_2A-5A-7A-7A	
	CA_46A-66A-66A	CA_2A-5A-7C	
	CA_46A-66C	CA_2A-5B-30A	
	CA_46C-66A	CA_2C-5A-30A	
	CA_48A-48A-66A	CA_2A-5A-46C	
	CA_48A-48A-71A	CA_2A-5A-66A-66A	
	CA_48A-66A-66A	CA_2A-5A-66B	
	CA_48A-66B	CA_2A-5A-66C	
	CA_48A-66C	CA_2A-5B-66A	
	CA_48C-66A	CA_2A-7A-7A-13A	
	CA_48C-71A	CA_2A-7A-7A-29A	
	CA_66A-66A-71A	CA_2A-7A-7A-46A	
	CA_66C-71A	CA_2A-7A-7A-66A	
	CA_2A-4A-12A	CA_2A-7C-13A	



FCC SAR TEST REPORT

Report No. : FA482037

	CA_2A-4A-13A	CA_2A-7C-29A	
	CA_2A-4A-29A	CA_2A-7A-46C	
	CA_2A-4A-30A	CA_2A-7A-66A-66A	
	CA_2A-4A-71A	CA_2A-7C-66A	
	CA_2A-5A-7A	CA_2C-12A-30A	
	CA_2A-5A-30A	CA_2A-12A-66A-66A	
	CA_2A-5A-46A	CA_2A-12A-66C	
	CA_2A-5A-48A	CA_2A-13A-46C	
	CA_2A-5A-66A	CA_2A-13A-48C	
	CA_2A-7A-12A	CA_2A-13A-66A-66A	
	CA_2A-7A-13A	CA_2A-13A-66B	
	CA_2A-7A-26A	CA_2A-13A-66C	
	CA_2A-7A-29A	CA_2A-14A-66A-66A	
	CA_2A-7A-46A	CA_2C-29A-30A	
	CA_2A-7A-66A	CA_2A-29A-66A-66A	
	CA_2A-12A-30A	CA_2A-30A-66A-66A	
	CA_2A-12A-66A	CA_2A-46C-66A	
	CA_2A-13A-46A	CA_2A-48A-66A-66A	
	CA_2A-13A-48A	CA_2A-48C-66A	
	CA_2A-13A-66A	CA_2A-66A-66A-71A	
	CA_2A-14A-30A	CA_2A-66C-71A	
	CA_2A-14A-66A	CA_4A-4A-5A-30A	
	CA_2A-26A-66A	CA_4A-4A-12A-30A	
	CA_2A-29A-30A	CA_4A-4A-29A-30A	
	CA_2A-29A-66A	CA_4A-5B-30A	
	CA_2A-30A-66A	CA_5A-7A-7A-66A	
	CA_2A-46A-66A	CA_5A-7A-46C	
	CA_2A-48A-66A	CA_5A-7A-66A-66A	
	CA_2A-66A-71A	CA_5A-30A-66A-66A	
	CA_4A-5A-30A	CA_5B-30A-66A	
	CA_4A-7A-12A	CA_5A-46C-66A	
	CA_4A-12A-30A	CA_5A-48A-66A-66A	
	CA_4A-29A-30A	CA_7A-7A-13A-66A	
	CA_5A-7A-46A	CA_7A-7A-25A-66A	
	CA_5A-30A-66A	CA_7A-7A-29A-66A	
	CA_5A-46A-66A	CA_7A-12A-66A-66A	
	CA_5A-48A-66A	CA_7C-13A-66A	
	CA_7A-12A-66A	CA_7A-25A-25A-66A	
	CA_7A-13A-66A	CA_7C-25A-66A	
	CA_7A-25A-66A	CA_7C-29A-66A	
	CA_7A-26A-66A	CA_12A-30A-66A-66A	
	CA_7A-29A-66A	CA_13A-46C-66A	
	CA_7A-46A-66A	CA_13A-48A-66A-66A	
	CA_12A-30A-66A	CA_13A-48A-66B	
	CA_13A-46A-66A	CA_13A-48A-66C	
	CA_13A-48A-66A	CA_13A-48C-66A	
	CA_14A-30A-66A	CA_14A-30A-66A-66A	
	CA_25A-26A-41A	CA_25A-25A-26A-41A	
	CA_29A-30A-66A	CA_25A-26A-41C	
	CA_29A-46A-66A	CA_29A-30A-66A-66A	

<LTE Uplink carrier aggregation>

2CC Uplink Carrier Aggregation	
Number	Combination
1	2C
2	5B
3	7C
4	66B
5	66C
6	38C
7	41C
8	42C
9	43C
10	48C

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- ii. The device supports uplink carrier aggregation with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre the 3GPP requirement.
- iii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iv. Additional SAR measurement for LTE UL CA whit 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.

Sensor OFF

CA_2C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	23.39	25
18900	18702	QPSK	1	0	0	0	1	0	23.54	25
19100	18902	QPSK	1	0	0	0	1	0	23.35	25

CA_5B_Main										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	23.65	25
20475	20574	QPSK	1	49	1	0	2	0	23.65	25
20600	20501	QPSK	1	0	1	49	2	0	23.66	25

CA_7C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	23.36	25
21100	20902	QPSK	1	0	1	99	2	0	23.3	25
21350	21152	QPSK	1	0	1	99	2	0	23.42	25

CA_66B_Main										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	23.35	25
132229	132322	QPSK	1	0	0	0	2	0	23.37	25
132504	132597	QPSK	1	0	0	0	2	0	23.4	25

CA_66C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	23.39	25
132322	132124	QPSK	1	0	1	99	2	0	23.42	25
132572	132374	QPSK	1	0	1	99	2	0	23.4	25

CA_38C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	23.49	25
37802	38000	QPSK	1	0	0	0	1	0	23.56	25
38150	37952	QPSK	1	0	0	0	1	0	23.35	25

CA_41C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.49	25
40185	39987	QPSK	1	0	1	99	2	0	23.42	25
40620	40422	QPSK	1	0	1	99	2	0	23.59	25
41055	40857	QPSK	1	0	1	99	2	0	23.42	25
41490	41292	QPSK	1	0	1	99	2	0	23.19	25

CA_41C_HPUE_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	25.41	27
40185	39987	QPSK	1	0	1	99	2	0	25.4	27
40620	40422	QPSK	1	0	1	99	2	0	25.61	27
41055	40857	QPSK	1	0	1	99	2	0	25.4	27
41490	41292	QPSK	1	0	1	99	2	0	25.13	27

CA_42C_MIMO2										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
42190	42388	QPSK	1	0	0	0	1	0	20.8	22
42392	42590	QPSK	1	0	0	0	2	0	20.77	22
42792	42990	QPSK	1	0	0	0	2	0	20.73	22

CA_43C_MIMO2_FCC Part 270 (3700-3800MHz)										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
44690	44888	QPSK	1	0	0	0	1	0	20.69	22
45090	44892	QPSK	1	0	1	99	2	0	20.55	22
45490	45292	QPSK	1	0	1	99	2	0	20.5	22

CA_48C_MIMO2										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	0	0	0	1	0	20.68	22
55632	55830	QPSK	1	0	0	0	2	0	20.57	22
55952	56150	QPSK	1	0	0	0	2	0	20.61	22
56442	56640	QPSK	1	0	0	0	2	0	20.58	22

Sensor ON

CA_2C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	13.41	14
18900	18702	QPSK	1	0	0	0	1	0	13.45	14
19100	18902	QPSK	1	0	0	0	1	0	13.48	14

CA_5B_Main										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	17.46	18
20475	20574	QPSK	1	49	1	0	2	0	17.48	18
20600	20501	QPSK	1	0	1	49	2	0	17.45	18

CA_7C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	12.02	13
21100	20902	QPSK	1	0	1	99	2	0	11.97	13
21350	21152	QPSK	1	0	1	99	2	0	12.06	13

CA_66B_Main										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	14.06	15
132229	132322	QPSK	1	0	0	0	1	0	14.14	15
132504	132597	QPSK	1	0	0	0	1	0	13.97	15

CA_66C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	13.96	15
132322	132124	QPSK	1	0	1	99	2	0	14.16	15
132572	132374	QPSK	1	0	1	99	2	0	14.1	15

CA_38C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	12.43	14
37802	38000	QPSK	1	0	0	0	1	0	12.54	14
38150	37952	QPSK	1	0	0	0	1	0	12.67	14

CA_41C_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	12.27	14
40185	39987	QPSK	1	0	0	0	1	0	12.35	14
40620	40422	QPSK	1	0	0	0	1	0	12.51	14
41055	40857	QPSK	1	0	0	0	1	0	12.39	14
41490	41292	QPSK	1	0	0	0	1	0	12.09	14

CA_41C_HPUE_Main										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	14.31	16
40185	39987	QPSK	1	0	1	99	2	0	14.35	16
40620	40422	QPSK	1	0	1	99	2	0	14.55	16
41055	40857	QPSK	1	0	1	99	2	0	14.44	16
41490	41292	QPSK	1	0	1	99	2	0	14.11	16

CA_42C_MIMO2										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
42190	42388	QPSK	1	0	0	0	1	0	10.14	11
42392	42590	QPSK	1	0	0	0	1	0	10.09	11
42792	42990	QPSK	1	0	0	0	1	0	10.1	11

CA_43C_MIMO2_FCC Part 270 (3700-3800MHz)										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
44690	44888	QPSK	1	0	0	0	1	0	10.04	11
45090	44892	QPSK	1	0	1	99	2	0	9.86	11
45490	45292	QPSK	1	0	1	99	2	0	10	11

CA_48C_MIMO2										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	0	0	0	1	0	10.11	11
55632	55830	QPSK	1	0	0	0	1	0	9.92	11
55952	56150	QPSK	1	0	0	0	1	0	10.03	11
56442	56640	QPSK	1	0	0	0	1	0	10.08	11



<SAR test exclusion table>

General Note:

- The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
- Maximum power is the source-based time-average power and represents the maximum RF output power among production units
- Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
- Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison
- Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

<Main Ant>

	Wireless Interface	WCDMA Band V	WCDMA Band IV	WCDMA Band II	LTE Band 71/n71	LTE Band 12/17/n12/n17	LTE Band 13/n13	LTE Band 14/n14	LTE Band 26/n26	LTE Band 4/66/n66	LTE Band 2/25/n2/n25	LTE Band 30/n30	LTE Band 7/n7	LTE Band 38/41/n38/n41	LTE Band 42	LTE Band 48/n48	LTE Band n77	LTE Band n78
Exposure Position	Calculated Frequency (MHz)	846	1750	1907	695	715	784	795	848	1779	1914	2312	2567	2690	3600	3700	3980	3800
	Maximum power (dBm)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	23.0	25.0	27.5	22.0	22.0	27.5	27.5
	Maximum rated power(mW)	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	199.53	316.23	562.34	158.49	158.49	562.34	562.34
Back	Separation distance(mm)	5.0																
	exclusion threshold	58.2	83.7	87.3	52.7	53.5	56.0	56.4	58.2	84.4	87.5	60.7	101.3	184.5	60.1	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Top Edge	Separation distance(mm)	5.0																
	exclusion threshold	58.2	83.7	87.3	52.7	53.5	56.0	56.4	58.2	84.4	87.5	60.7	101.3	184.5	60.1	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Right Edge	Separation distance(mm)	5.0																
	exclusion threshold	58.2	83.7	87.3	52.7	53.5	56.0	56.4	58.2	84.4	87.5	60.7	101.3	184.5	60.1	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bottom Edge	Separation distance(mm)	206.9																
	exclusion threshold	1048.0	1682.0	1678.0	907.0	925.0	989.0	1000.0	1050.0	1681.0	1677.0	1668.0	1663.0	1660.0	1648.0	1647.0	1644.0	1646.0
	Testing required?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Left Edge	Separation distance(mm)	227.0																
	exclusion threshold	1161.0	1883.0	1879.0	1000.0	1021.0	1095.0	1106.0	1164.0	1882.0	1878.0	1869.0	1864.0	1861.0	1849.0	1848.0	1845.0	1847.0
	Testing required?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Bottom Side	Separation distance(mm)	7.3																
	exclusion threshold	39.8	57.3	59.8	36.1	36.6	38.4	38.6	39.9	57.8	59.9	41.6	69.4	126.3	41.2	41.8	153.7	150.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<MIMO 2 Ant>

Exposure Position	Wireless Interface	LTE Band 4/66/n4/n66	LTE Band 2/25/n2/n25	LTE Band 30/n30	LTE Band 7/n7	LTE Band 38/41/n38/n41	LTE Band 42	LTE Band 43	LTE Band 48/n48	LTE Band n77	LTE Band n78
	Calculated Frequency (MHz)	1779	1914	2312	2567	2690	3600	3800	3700	3980	3800
	Maximum power (dBm)	24.0	24.0	23.0	24.0	27.5	22.0	22.0	22.0	27.5	27.5
	Maximum rated power(mW)	251.19	251.19	199.53	251.19	562.34	158.49	158.49	158.49	562.34	562.34
Back	Separation distance(mm)	5.0									
	exclusion threshold	67.0	69.5	60.7	80.5	184.5	60.1	61.8	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Top Edge	Separation distance(mm)	29.0									
	exclusion threshold	11.6	12.0	10.5	13.9	31.8	10.4	10.7	10.5	38.7	37.8
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Right Edge	Separation distance(mm)	300.0									
	exclusion threshold	2612.0	2608.0	2599.0	2594.0	2591.0	2579.0	2577.0	2578.0	2575.0	2577.0
	Testing required?	No	No	No	No	No	No	No	No	No	No
Bottom Edge	Separation distance(mm)	151.0									
	exclusion threshold	1122.0	1118.0	1109.0	1104.0	1101.0	1089.0	1087.0	1088.0	1085.0	1087.0
	Testing required?	No	No	No	No	No	No	No	No	No	No
Left Edge	Separation distance(mm)	5.0									
	exclusion threshold	67.0	69.5	60.7	80.5	184.5	60.1	61.8	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bottom Side	Separation distance(mm)	6.5									
	exclusion threshold	51.5	53.5	46.7	61.9	141.9	46.3	47.5	46.9	172.6	168.7
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<MIMO 1 Ant>

Exposure Position	Wireless Interface	LTE Band n38/n41	LTE Band n48	LTE Band n77	LTE Band n78
	Calculated Frequency (MHz)	2690	3700	3980	3800
	Maximum power (dBm)	12.5	8.5	11.0	8.0
	Maximum rated power(mW)	17.78	7.08	12.59	6.31
Back	Separation distance(mm)	5.0			
	exclusion threshold	5.8	2.7	5.0	2.5
	Testing required?	Yes	No	Yes	No
Top Edge	Separation distance(mm)	29.0			
	exclusion threshold	1.0	0.5	0.9	0.4
	Testing required?	No	No	No	No
Right Edge	Separation distance(mm)	5.0			
	exclusion threshold	5.8	2.7	5.0	2.5
	Testing required?	Yes	No	Yes	No
Bottom Edge	Separation distance(mm)	151.0			
	exclusion threshold	1101.0	1088.0	1085.0	1087.0
	Testing required?	No	No	No	No
Left Edge	Separation distance(mm)	300.0			
	exclusion threshold	2591.0	2578.0	2575.0	2577.0
	Testing required?	No	No	No	No
Bottom Side	Separation distance(mm)	6.5			
	exclusion threshold	4.5	2.1	3.9	1.9
	Testing required?	Yes	No	Yes	No

<Aux Ant>

Exposure Position	Wireless Interface	LTE Band n38/n41	LTE Band n48	LTE Band n77	LTE Band n78
	Calculated Frequency (MHz)	2690	3700	3980	3800
	Maximum power (dBm)	27.5	22.0	27.5	27.5
	Maximum rated power(mW)	562.34	158.49	562.34	562.34
Back	Separation distance(mm)	5.0			
	exclusion threshold	184.5	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes
Top Edge	Separation distance(mm)	5.0			
	exclusion threshold	184.5	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes
Right Edge	Separation distance(mm)	267.5			
	exclusion threshold	2266.0	2253.0	2250.0	2252.0
	Testing required?	No	No	No	No
Bottom Edge	Separation distance(mm)	206.9			
	exclusion threshold	1660.0	1647.0	1644.0	1646.0
	Testing required?	No	No	No	No
Left Edge	Separation distance(mm)	5.0			
	exclusion threshold	184.5	61.0	224.4	219.2
	Testing required?	Yes	Yes	Yes	Yes
Bottom Side	Separation distance(mm)	7.3			
	exclusion threshold	126.3	41.8	153.7	150.2
	Testing required?	Yes	Yes	Yes	Yes

13. 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 WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - c. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.

UMTS 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 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 to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

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 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 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 band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is $\leq$ 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. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK 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. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test 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.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device 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, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission.
 - g. For NR FDD was establishing connections via a base station simulator to use for output power measurement and SAR testing
 - h. 5G FR1 n2/5/38/78 SAR test was covered by 5G FR1 n25/26/41; due to the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band, and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

13.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Configure	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
1	WCDMA II	RMC 12.2Kbps	Bottom Side	NB	0mm	Main	ON	9400	1880	Speed	13.59	14.50	1.233	0.08	0.312	0.385
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9400	1880	Speed	13.59	14.50	1.233	-0.02	0.907	1.118
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9262	1852.4	Speed	13.52	14.50	1.253	0.03	0.886	1.110
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9538	1907.6	Speed	13.58	14.50	1.236	-0.08	0.877	1.084
	WCDMA II	RMC 12.2Kbps	Top Edge	TB	0mm	Main	ON	9400	1880	Speed	13.59	14.50	1.233	-0.08	0.235	0.290
	WCDMA II	RMC 12.2Kbps	Right Edge	TB	0mm	Main	ON	9400	1880	Speed	13.59	14.50	1.233	0.1	0.349	0.430
	WCDMA II	RMC 12.2Kbps	Bottom Side	NB	33mm	Main	OFF	9400	1880	Speed	23.13	25.00	1.538	-0.18	0.138	0.212
	WCDMA II	RMC 12.2Kbps	Back	TB	44mm	Main	OFF	9400	1880	Speed	23.13	25.00	1.538	0.12	0.103	0.158
	WCDMA II	RMC 12.2Kbps	Top Edge	TB	29mm	Main	OFF	9400	1880	Speed	23.13	25.00	1.538	0.08	0.223	0.343
	WCDMA II	RMC 12.2Kbps	Right Edge	TB	18mm	Main	OFF	9400	1880	Speed	23.13	25.00	1.538	-0.17	0.046	0.071
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9400	1880	SAA	13.59	14.50	1.233	-0.03	0.874	1.078
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9262	1852.4	SAA	13.52	14.50	1.253	0.14	0.854	1.070
	WCDMA II	RMC 12.2Kbps	Back	TB	0mm	Main	ON	9538	1907.6	SAA	13.58	14.50	1.236	0.11	0.857	1.059
	WCDMA IV	RMC 12.2Kbps	Bottom Side	NB	0mm	Main	ON	1413	1732.6	Speed	14.18	15.00	1.208	-0.05	0.381	0.460
2	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1413	1732.6	Speed	14.18	15.00	1.208	0.14	0.847	1.023
	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1312	1712.4	Speed	14.17	15.00	1.211	0.01	0.906	1.097
	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1513	1752.6	Speed	14.12	15.00	1.225	-0.17	0.790	0.967
	WCDMA IV	RMC 12.2Kbps	Top Edge	TB	0mm	Main	ON	1413	1732.6	Speed	14.18	15.00	1.208	0.17	0.381	0.460
	WCDMA IV	RMC 12.2Kbps	Right Edge	TB	0mm	Main	ON	1413	1732.6	Speed	14.18	15.00	1.208	-0.05	0.505	0.610
	WCDMA IV	RMC 12.2Kbps	Bottom Side	NB	33mm	Main	OFF	1413	1732.6	Speed	23.16	25.00	1.528	0.01	0.233	0.356
	WCDMA IV	RMC 12.2Kbps	Back	TB	44mm	Main	OFF	1413	1732.6	Speed	23.16	25.00	1.528	-0.17	0.128	0.196
	WCDMA IV	RMC 12.2Kbps	Top Edge	TB	29mm	Main	OFF	1413	1732.6	Speed	23.16	25.00	1.528	0.04	0.138	0.211
	WCDMA IV	RMC 12.2Kbps	Right Edge	TB	18mm	Main	OFF	1413	1732.6	Speed	23.16	25.00	1.528	-0.01	0.054	0.082
	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1312	1712.4	SAA	14.17	15.00	1.211	-0.08	0.820	0.993
	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1513	1752.6	SAA	14.12	15.00	1.225	0.05	0.723	0.885
	WCDMA IV	RMC 12.2Kbps	Back	TB	0mm	Main	ON	1413	1732.6	SAA	14.18	15.00	1.208	0.06	0.820	0.990
	WCDMA V	RMC 12.2Kbps	Bottom Side	NB	0mm	Main	ON	4233	846.6	Speed	17.04	17.50	1.112	0.08	0.297	0.330
	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4233	846.6	Speed	17.04	17.50	1.112	0.01	0.968	1.076
3	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4182	836.4	Speed	16.99	17.50	1.125	0.03	0.881	0.991
	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4132	826.4	Speed	17.02	17.50	1.117	-0.08	0.820	0.916
	WCDMA V	RMC 12.2Kbps	Top Edge	TB	0mm	Main	ON	4233	846.6	Speed	17.04	17.50	1.112	-0.08	0.195	0.217
	WCDMA V	RMC 12.2Kbps	Right Edge	TB	0mm	Main	ON	4233	846.6	Speed	17.04	17.50	1.112	0	0.861	0.957
	WCDMA V	RMC 12.2Kbps	Right Edge	TB	0mm	Main	ON	4182	836.4	Speed	16.99	17.50	1.125	0.1	0.787	0.885
	WCDMA V	RMC 12.2Kbps	Right Edge	TB	0mm	Main	ON	4132	826.4	Speed	17.02	17.50	1.117	-0.18	0.727	0.812
	WCDMA V	RMC 12.2Kbps	Bottom Side	NB	33mm	Main	OFF	4233	846.6	Speed	23.41	25.00	1.442	0.1	0.094	0.136
	WCDMA V	RMC 12.2Kbps	Back	TB	44mm	Main	OFF	4233	846.6	Speed	23.41	25.00	1.442	0	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Top Edge	TB	29mm	Main	OFF	4233	846.6	Speed	23.41	25.00	1.442	0	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Right Edge	TB	18mm	Main	OFF	4233	846.6	Speed	23.41	25.00	1.442	-0.03	0.085	0.123
	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4233	846.6	SAA	17.04	17.50	1.112	0.14	0.932	1.036
	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4182	836.4	SAA	16.99	17.50	1.125	0.11	0.849	0.955
	WCDMA V	RMC 12.2Kbps	Back	TB	0mm	Main	ON	4132	826.4	SAA	17.02	17.50	1.117	-0.05	0.792	0.885



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Configure	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
4	LTE Band 7	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	21350	2560	Speed	12.25	13.00	1.189	0.07	0.360	0.428
	LTE Band 7	20M	QPSK	50	0	Bottom Side	NB	0mm	Main	ON	21350	2560	Speed	11.35	12.00	1.161	-0.18	0.271	0.315
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21350	2560	Speed	12.25	13.00	1.189	-0.05	0.988	1.174
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	20850	2510	Speed	12.21	13.00	1.199	-0.15	0.797	0.956
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21100	2535	Speed	12.22	13.00	1.197	0.11	0.891	1.066
	LTE Band 7	20M	QPSK	50	0	Back	TB	0mm	Main	ON	21350	2560	Speed	11.35	12.00	1.161	-0.08	0.741	0.861
	LTE Band 7	20M	QPSK	50	0	Back	TB	0mm	Main	ON	20850	2510	Speed	11.30	12.00	1.175	-0.17	0.602	0.707
	LTE Band 7	20M	QPSK	50	0	Back	TB	0mm	Main	ON	21100	2535	Speed	11.32	12.00	1.169	-0.08	0.677	0.792
	LTE Band 7	20M	QPSK	100	0	Back	TB	0mm	Main	ON	21350	2560	Speed	11.29	12.00	1.178	-0.04	0.779	0.917
	LTE Band 7	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	21350	2560	Speed	12.25	13.00	1.189	-0.08	0.278	0.330
	LTE Band 7	20M	QPSK	50	0	Top Edge	TB	0mm	Main	ON	21350	2560	Speed	11.35	12.00	1.161	0.17	0.209	0.243
	LTE Band 7	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	21350	2560	Speed	12.25	13.00	1.189	0.18	0.110	0.131
	LTE Band 7	20M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	21350	2560	Speed	11.35	12.00	1.161	-0.04	0.083	0.096
	LTE Band 7C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21350+21152	2560	Speed	12.06	13.00	1.242	0.08	0.879	1.091
	LTE Band 7C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	20850+21048	2510	Speed	12.02	13.00	1.253	0.01	0.727	0.911
	LTE Band 7C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21100+20902	2535	Speed	11.97	13.00	1.268	0.03	0.798	1.012
	LTE Band 7	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	21350	2560	Speed	23.67	25.00	1.358	0.17	0.090	0.122
	LTE Band 7	20M	QPSK	50	0	Bottom Side	NB	33mm	Main	OFF	21350	2560	Speed	22.65	24.00	1.365	-0.05	0.071	0.097
	LTE Band 7	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	21350	2560	Speed	23.67	25.00	1.358	-0.17	0.074	0.101
	LTE Band 7	20M	QPSK	50	0	Back	TB	44mm	Main	OFF	21350	2560	Speed	22.65	24.00	1.365	0.04	0.064	0.087
	LTE Band 7	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	21350	2560	Speed	23.67	25.00	1.358	-0.01	0.117	0.159
	LTE Band 7	20M	QPSK	50	0	Top Edge	TB	29mm	Main	OFF	21350	2560	Speed	22.65	24.00	1.365	-0.08	0.094	0.128
	LTE Band 7	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	21350	2560	Speed	23.67	25.00	1.358	0.05	0.084	0.114
	LTE Band 7	20M	QPSK	50	0	Right Edge	TB	18mm	Main	OFF	21350	2560	Speed	22.65	24.00	1.365	0.06	0.069	0.094
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21350	2560	SAA	12.25	13.00	1.189	-0.08	0.951	1.130
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	20850	2510	SAA	12.21	13.00	1.199	-0.13	0.808	0.969
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	Main	ON	21100	2535	SAA	12.22	13.00	1.197	-0.13	0.861	1.030
	LTE Band 7	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	21350	2560	Speed	8.37	9.50	1.297	-0.09	0.111	0.144
	LTE Band 7	20M	QPSK	50	50	Bottom Side	NB	0mm	MIMO2	ON	21350	2560	Speed	8.29	9.50	1.321	-0.08	0.099	0.131
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	21350	2560	Speed	8.37	9.50	1.297	0.03	0.868	1.126
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	20850	2510	Speed	8.27	9.50	1.327	0.18	0.772	1.025
	LTE Band 7	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	21100	2535	Speed	8.35	9.50	1.303	0.16	0.819	1.067
	LTE Band 7	20M	QPSK	50	50	Back	TB	0mm	MIMO2	ON	21350	2560	Speed	8.29	9.50	1.321	-0.1	0.854	1.128
	LTE Band 7	20M	QPSK	50	50	Back	TB	0mm	MIMO2	ON	20850	2510	Speed	8.16	9.50	1.361	0.07	0.760	1.035
	LTE Band 7	20M	QPSK	50	50	Back	TB	0mm	MIMO2	ON	21100	2535	Speed	8.28	9.50	1.324	0.18	0.806	1.067
	LTE Band 7	20M	QPSK	100	0	Back	TB	0mm	MIMO2	ON	21350	2560	Speed	8.20	9.50	1.349	-0.1	0.831	1.121
	LTE Band 7	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	21350	2560	Speed	8.37	9.50	1.297	0.01	0.010	0.013
	LTE Band 7	20M	QPSK	50	50	Top Edge	TB	0mm	MIMO2	ON	21350	2560	Speed	8.29	9.50	1.321	-0.15	0.009	0.012
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	21350	2560	Speed	8.37	9.50	1.297	-0.05	0.875	1.135
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	20850	2510	Speed	8.27	9.50	1.327	0.19	0.778	1.033
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	21100	2535	Speed	8.35	9.50	1.303	0.07	0.826	1.076
	LTE Band 7	20M	QPSK	50	50	Left Edge	TB	0mm	MIMO2	ON	21350	2560	Speed	8.29	9.50	1.321	-0.18	0.857	1.132
	LTE Band 7	20M	QPSK	50	50	Left Edge	TB	0mm	MIMO2	ON	20850	2510	Speed	8.16	9.50	1.361	0.03	0.766	1.043
	LTE Band 7	20M	QPSK	50	50	Left Edge	TB	0mm	MIMO2	ON	21100	2535	Speed	8.28	9.50	1.324	-0.15	0.813	1.077
	LTE Band 7	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	21350	2560	Speed	8.20	9.50	1.349	-0.15	0.840	1.133
	LTE Band 7	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	21350	2560	Speed	22.70	24.00	1.349	0.11	0.296	0.399
	LTE Band 7	20M	QPSK	50	50	Bottom Side	NB	20mm	MIMO2	OFF	21350	2560	Speed	21.84	23.00	1.306	-0.08	0.207	0.270
	LTE Band 7	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	21350	2560	Speed	22.70	24.00	1.349	-0.04	0.589	0.795
	LTE Band 7	20M	QPSK	50	50	Back	TB	19mm	MIMO2	OFF	21350	2560	Speed	21.84	23.00	1.306	-0.08	0.403	0.526
	LTE Band 7	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	21350	2560	Speed	22.70	24.00	1.349	0	0.001	0.001
	LTE Band 7	20M	QPSK	50	50	Top Edge	TB	29mm	MIMO2	OFF	21350	2560	Speed	21.84	23.00	1.306	0	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	21350	2560	Speed	22.70	24.00	1.349	-0.04	0.321	0.433
	LTE Band 7	20M	QPSK	50	50	Left Edge	TB	22mm	MIMO2	OFF	21350	2560	Speed	21.84	23.00	1.306	-0.08	0.239	0.312



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	21350	2560	SAA	8.37	9.50	1.297	0.01	0.901	1.169
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	20850	2510	SAA	8.27	9.50	1.327	-0.13	0.787	1.045
	LTE Band 7	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	21100	2535	SAA	8.35	9.50	1.303	0.06	0.764	0.996
	LTE Band 12	10M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045	0.08	0.173	0.181
	LTE Band 12	10M	QPSK	25	0	Bottom Side	NB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	0.01	0.138	0.143
	LTE Band 12	10M	QPSK	1	0	Back	TB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045	-0.04	0.812	0.848
	LTE Band 12	10M	QPSK	25	0	Back	TB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	-0.08	0.649	0.672
	LTE Band 12	10M	QPSK	50	0	Back	TB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	0.1	0.631	0.653
	LTE Band 12	10M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045	-0.18	0.085	0.089
	LTE Band 12	10M	QPSK	25	0	Top Edge	TB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	0.1	0.065	0.067
5	LTE Band 12	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045	-0.01	1.100	1.149
	LTE Band 12	10M	QPSK	25	0	Right Edge	TB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	0.08	0.879	0.910
	LTE Band 12	10M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	23095	707.5	Speed	13.85	14.00	1.035	0.08	0.855	0.885
	LTE Band 12	10M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	23095	707.5	Speed	23.97	25.00	1.268	-0.17	0.054	0.068
	LTE Band 12	10M	QPSK	25	0	Bottom Side	NB	33mm	Main	OFF	23095	707.5	Speed	23.06	24.00	1.242	-0.03	0.043	0.053
	LTE Band 12	10M	QPSK	1	0	Back	TB	44mm	Main	OFF	23095	707.5	Speed	23.97	25.00	1.268	0	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Back	TB	44mm	Main	OFF	23095	707.5	Speed	23.06	24.00	1.242	0	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	23095	707.5	Speed	23.97	25.00	1.268	0	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Top Edge	TB	29mm	Main	OFF	23095	707.5	Speed	23.06	24.00	1.242	0	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	23095	707.5	Speed	23.97	25.00	1.268	0.14	0.068	0.086
	LTE Band 12	10M	QPSK	25	0	Right Edge	TB	18mm	Main	OFF	23095	707.5	Speed	23.06	24.00	1.242	-0.17	0.054	0.067
	LTE Band 12	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23095	707.5	SAA	14.81	15.00	1.045	0.02	1.040	1.087
	LTE Band 13	10M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	23230	782	Speed	17.45	18.50	1.274	0.1	0.509	0.648
	LTE Band 13	10M	QPSK	25	0	Bottom Side	NB	0mm	Main	ON	23230	782	Speed	16.53	17.50	1.250	-0.17	0.405	0.506
6	LTE Band 13	10M	QPSK	1	0	Back	TB	0mm	Main	ON	23230	782	Speed	17.45	18.50	1.274	0.05	0.938	1.195
	LTE Band 13	10M	QPSK	25	0	Back	TB	0mm	Main	ON	23230	782	Speed	16.53	17.50	1.250	-0.08	0.714	0.893
	LTE Band 13	10M	QPSK	50	0	Back	TB	0mm	Main	ON	23230	782	Speed	16.47	17.50	1.268	0.05	0.783	0.993
	LTE Band 13	10M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	23230	782	Speed	17.45	18.50	1.274	0.06	0.305	0.388
	LTE Band 13	10M	QPSK	25	0	Top Edge	TB	0mm	Main	ON	23230	782	Speed	16.53	17.50	1.250	-0.09	0.232	0.290
	LTE Band 13	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23230	782	Speed	17.45	18.50	1.274	0.08	0.886	1.128
	LTE Band 13	10M	QPSK	25	0	Right Edge	TB	0mm	Main	ON	23230	782	Speed	16.53	17.50	1.250	0.13	0.722	0.903
	LTE Band 13	10M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	23230	782	Speed	16.47	17.50	1.268	0.13	0.727	0.922
	LTE Band 13	10M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	23230	782	Speed	23.71	25.00	1.346	0.12	0.109	0.147
	LTE Band 13	10M	QPSK	25	0	Bottom Side	NB	33mm	Main	OFF	23230	782	Speed	22.77	24.00	1.327	0.03	0.089	0.118
	LTE Band 13	10M	QPSK	1	0	Back	TB	44mm	Main	OFF	23230	782	Speed	23.71	25.00	1.346	0	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Back	TB	44mm	Main	OFF	23230	782	Speed	22.77	24.00	1.327	0	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	23230	782	Speed	23.71	25.00	1.346	0	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Top Edge	TB	29mm	Main	OFF	23230	782	Speed	22.77	24.00	1.327	0	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	23230	782	Speed	23.71	25.00	1.346	0.01	0.043	0.058
	LTE Band 13	10M	QPSK	25	0	Right Edge	TB	18mm	Main	OFF	23230	782	Speed	22.77	24.00	1.327	-0.03	0.035	0.046
	LTE Band 13	10M	QPSK	1	0	Back	TB	0mm	Main	ON	23230	782	SAA	17.45	18.50	1.274	-0.04	0.932	1.187
	LTE Band 14	10M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	23330	793	Speed	18.10	18.50	1.096	0.07	0.574	0.629
	LTE Band 14	10M	QPSK	25	0	Bottom Side	NB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	-0.18	0.439	0.484
	LTE Band 14	10M	QPSK	1	0	Back	TB	0mm	Main	ON	23330	793	Speed	18.10	18.50	1.096	-0.15	1.060	1.162
	LTE Band 14	10M	QPSK	25	0	Back	TB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	0.11	0.786	0.866
	LTE Band 14	10M	QPSK	50	0	Back	TB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	-0.08	0.878	0.967
	LTE Band 14	10M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	23330	793	Speed	18.10	18.50	1.096	-0.17	0.344	0.377
	LTE Band 14	10M	QPSK	25	0	Top Edge	TB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	-0.08	0.279	0.307
	LTE Band 14	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23330	793	Speed	18.10	18.50	1.096	0.07	0.909	0.997
	LTE Band 14	10M	QPSK	25	0	Right Edge	TB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	-0.08	0.731	0.805
	LTE Band 14	10M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	23330	793	Speed	17.08	17.50	1.102	-0.08	0.755	0.832
	LTE Band 14	10M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	23330	793	Speed	23.79	25.00	1.321	0.17	0.113	0.149
	LTE Band 14	10M	QPSK	25	0	Bottom Side	NB	33mm	Main	OFF	23330	793	Speed	22.85	24.00	1.303	0.18	0.092	0.120
	LTE Band 14	10M	QPSK	1	0	Back	TB	44mm	Main	OFF	23330	793	Speed	23.79	25.00	1.321	0	0.001	0.001
	LTE Band 14	10M	QPSK	25	0	Back	TB	44mm	Main	OFF	23330	793	Speed	22.85	24.00	1.303	0	0.001	0.001
	LTE Band 14	10M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	23330	793	Speed	23.79	25.00	1.321	0	0.001	0.001



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 14	10M	QPSK	25	0	Top Edge	TB	29mm	Main	OFF	23330	793	Speed	22.85	24.00	1.303	0	0.001	0.001
	LTE Band 14	10M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	23330	793	Speed	23.79	25.00	1.321	-0.03	0.046	0.061
	LTE Band 14	10M	QPSK	25	0	Right Edge	TB	18mm	Main	OFF	23330	793	Speed	22.85	24.00	1.303	0.08	0.037	0.048
7	LTE Band 14	10M	QPSK	1	0	Back	TB	0mm	Main	ON	23330	793	SAA	18.10	18.50	1.096	0.03	1.090	1.195
	LTE Band 25	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	26340	1880	Speed	13.68	14.00	1.076	0.18	0.387	0.417
	LTE Band 25	20M	QPSK	50	24	Bottom Side	NB	0mm	Main	ON	26340	1880	Speed	12.76	13.00	1.057	0.14	0.290	0.306
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26340	1880	Speed	13.68	14.00	1.076	-0.05	1.010	1.087
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26140	1860	Speed	13.61	14.00	1.094	0.01	0.994	1.087
8	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26590	1905	Speed	13.62	14.00	1.091	0.04	1.040	1.135
	LTE Band 25	20M	QPSK	50	24	Back	TB	0mm	Main	ON	26340	1880	Speed	12.76	13.00	1.057	0.1	0.761	0.804
	LTE Band 25	20M	QPSK	50	24	Back	TB	0mm	Main	ON	26140	1860	Speed	12.67	13.00	1.079	-0.17	0.748	0.807
	LTE Band 25	20M	QPSK	50	24	Back	TB	0mm	Main	ON	26590	1905	Speed	12.73	13.00	1.064	0.04	0.783	0.833
	LTE Band 25	20M	QPSK	100	0	Back	TB	0mm	Main	ON	26340	1880	Speed	12.74	13.00	1.062	-0.01	0.785	0.833
	LTE Band 25	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	26340	1880	Speed	13.68	14.00	1.076	-0.08	0.273	0.294
	LTE Band 25	20M	QPSK	50	24	Top Edge	TB	0mm	Main	ON	26340	1880	Speed	12.76	13.00	1.057	0.05	0.206	0.218
	LTE Band 25	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	26340	1880	Speed	13.68	14.00	1.076	0.06	0.365	0.393
	LTE Band 25	20M	QPSK	50	24	Right Edge	TB	0mm	Main	ON	26340	1880	Speed	12.76	13.00	1.057	-0.09	0.278	0.294
	LTE Band 2C	15M	QPSK	1	0	Back	TB	0mm	Main	ON	19100+18902	1900	Speed	13.48	14.00	1.127	0.08	0.807	0.910
	LTE Band 2C	15M	QPSK	1	0	Back	TB	0mm	Main	ON	18700+18898	1860	Speed	13.41	14.00	1.146	0.01	0.787	0.902
	LTE Band 2C	15M	QPSK	1	0	Back	TB	0mm	Main	ON	18900+18702	1880	Speed	13.45	14.00	1.135	0.03	0.778	0.883
	LTE Band 25	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	26340	1880	Speed	23.65	25.00	1.365	-0.08	0.151	0.206
	LTE Band 25	20M	QPSK	50	24	Bottom Side	NB	33mm	Main	OFF	26340	1880	Speed	22.72	24.00	1.343	0.13	0.121	0.162
	LTE Band 25	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	26340	1880	Speed	23.65	25.00	1.365	0.18	0.092	0.126
	LTE Band 25	20M	QPSK	50	24	Back	TB	44mm	Main	OFF	26340	1880	Speed	22.72	24.00	1.343	0.16	0.078	0.105
	LTE Band 25	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	26340	1880	Speed	23.65	25.00	1.365	-0.1	0.227	0.310
	LTE Band 25	20M	QPSK	50	24	Top Edge	TB	29mm	Main	OFF	26340	1880	Speed	22.72	24.00	1.343	0.07	0.164	0.220
	LTE Band 25	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	26340	1880	Speed	23.65	25.00	1.365	0.18	0.067	0.091
	LTE Band 25	20M	QPSK	50	24	Right Edge	TB	18mm	Main	OFF	26340	1880	Speed	22.72	24.00	1.343	-0.1	0.055	0.074
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26340	1880	SAA	13.68	14.00	1.076	0.01	0.902	0.971
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26140	1860	SAA	13.61	14.00	1.094	-0.15	0.891	0.975
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	Main	ON	26590	1905	SAA	13.62	14.00	1.091	0.19	0.881	0.962
	LTE Band 25	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	26140	1860	Speed	11.68	12.50	1.208	-0.17	0.309	0.373
	LTE Band 25	20M	QPSK	50	0	Bottom Side	NB	0mm	MIMO2	ON	26140	1860	Speed	11.50	12.50	1.259	-0.03	0.284	0.358
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	26140	1860	Speed	11.68	12.50	1.208	0	0.795	0.960
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	26340	1880	Speed	11.63	12.50	1.222	-0.05	0.698	0.853
	LTE Band 25	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	26590	1905	Speed	11.60	12.50	1.230	0.18	0.665	0.818
	LTE Band 25	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	26140	1860	Speed	11.50	12.50	1.259	0.14	0.647	0.815
	LTE Band 25	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	26340	1880	Speed	11.49	12.50	1.262	-0.17	0.640	0.808
	LTE Band 25	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	26590	1905	Speed	11.48	12.50	1.265	0.17	0.611	0.773
	LTE Band 25	20M	QPSK	100	0	Back	TB	0mm	MIMO2	ON	26140	1860	Speed	11.20	12.50	1.349	-0.05	0.689	0.929
	LTE Band 25	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	26140	1860	Speed	11.68	12.50	1.208	0.01	0.023	0.028
	LTE Band 25	20M	QPSK	50	0	Top Edge	TB	0mm	MIMO2	ON	26140	1860	Speed	11.50	12.50	1.259	0.1	0.021	0.026
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26140	1860	Speed	11.68	12.50	1.208	-0.05	0.905	1.093
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26340	1880	Speed	11.63	12.50	1.222	-0.17	0.876	1.070
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26590	1905	Speed	11.60	12.50	1.230	0.04	0.836	1.029
	LTE Band 25	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	26140	1860	Speed	11.50	12.50	1.259	-0.01	0.830	1.045
	LTE Band 25	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	26340	1880	Speed	11.49	12.50	1.262	-0.08	0.822	1.037
	LTE Band 25	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	26590	1905	Speed	11.48	12.50	1.265	0.05	0.783	0.990
	LTE Band 25	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	26140	1860	Speed	11.20	12.50	1.349	0.06	0.777	1.048
	LTE Band 25	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	26140	1860	Speed	22.70	24.00	1.349	-0.09	0.256	0.345
	LTE Band 25	20M	QPSK	50	0	Bottom Side	NB	20mm	MIMO2	OFF	26140	1860	Speed	21.85	23.00	1.303	-0.08	0.215	0.280
	LTE Band 25	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	26140	1860	Speed	22.70	24.00	1.349	0.03	0.359	0.484
	LTE Band 25	20M	QPSK	50	0	Back	TB	19mm	MIMO2	OFF	26140	1860	Speed	21.85	23.00	1.303	0.18	0.316	0.412
	LTE Band 25	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	26140	1860	Speed	22.70	24.00	1.349	0	0.001	0.001
	LTE Band 25	20M	QPSK	50	0	Top Edge	TB	29mm	MIMO2	OFF	26140	1860	Speed	21.85	23.00	1.303	0	0.001	0.001
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	26140	1860	Speed	22.70	24.00	1.349	0.07	0.242	0.326



FCC SAR TEST REPORT

Report No. : FA482037

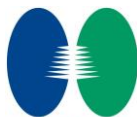
	LTE Band 25	20M	QPSK	50	0	Left Edge	TB	22mm	MIMO2	OFF	26140	1860	Speed	21.85	23.00	1.303	0.18	0.187	0.244
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26140	1860	SAA	11.68	12.50	1.208	-0.02	0.929	1.122
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26340	1880	SAA	11.63	12.50	1.222	-0.1	0.913	1.116
	LTE Band 25	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	26590	1905	SAA	11.60	12.50	1.230	0.01	0.877	1.079
9	LTE Band 26	15M	QPSK	1	37	Bottom Side	NB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140	0.05	0.323	0.368
	LTE Band 26	15M	QPSK	36	20	Bottom Side	NB	0mm	Main	ON	26865	831.5	Speed	16.47	17.00	1.130	-0.11	0.262	0.296
	LTE Band 26	15M	QPSK	1	37	Back	TB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140	-0.02	0.979	1.116
	LTE Band 26	15M	QPSK	36	20	Back	TB	0mm	Main	ON	26865	831.5	Speed	16.47	17.00	1.130	-0.12	0.794	0.897
	LTE Band 26	15M	QPSK	75	0	Back	TB	0mm	Main	ON	26865	831.5	Speed	16.57	17.00	1.104	0.03	0.785	0.867
	LTE Band 26	15M	QPSK	1	37	Top Edge	TB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140	-0.16	0.186	0.212
	LTE Band 26	15M	QPSK	36	20	Top Edge	TB	0mm	Main	ON	26865	831.5	Speed	16.47	17.00	1.130	-0.02	0.168	0.190
	LTE Band 26	15M	QPSK	1	37	Right Edge	TB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140	0.15	0.863	0.984
	LTE Band 26	15M	QPSK	36	20	Right Edge	TB	0mm	Main	ON	26865	831.5	Speed	16.47	17.00	1.130	-0.09	0.782	0.884
	LTE Band 26	15M	QPSK	75	0	Right Edge	TB	0mm	Main	ON	26865	831.5	Speed	16.57	17.00	1.104	-0.09	0.761	0.840
	LTE Band 5B	10M	QPSK	1	49	Back	TB	0mm	Main	ON	20475+20574	831.5	Speed	17.48	18	1.127	-0.08	0.813	0.916
	LTE Band 26	15M	QPSK	1	37	Bottom Side	NB	33mm	Main	OFF	26865	831.5	Speed	23.70	25.00	1.349	0.11	0.080	0.108
10	LTE Band 26	15M	QPSK	36	20	Bottom Side	NB	33mm	Main	OFF	26865	831.5	Speed	22.85	24.00	1.303	-0.05	0.059	0.077
	LTE Band 26	15M	QPSK	1	37	Back	TB	44mm	Main	OFF	26865	831.5	Speed	23.70	25.00	1.349	0	0.001	0.001
	LTE Band 26	15M	QPSK	36	20	Back	TB	44mm	Main	OFF	26865	831.5	Speed	22.85	24.00	1.303	0	0.001	0.001
	LTE Band 26	15M	QPSK	1	37	Top Edge	TB	29mm	Main	OFF	26865	831.5	Speed	23.70	25.00	1.349	0	0.001	0.001
	LTE Band 26	15M	QPSK	36	20	Top Edge	TB	29mm	Main	OFF	26865	831.5	Speed	22.85	24.00	1.303	0	0.001	0.001
	LTE Band 26	15M	QPSK	1	37	Right Edge	TB	18mm	Main	OFF	26865	831.5	Speed	23.70	25.00	1.349	-0.03	0.092	0.124
	LTE Band 26	15M	QPSK	36	20	Right Edge	TB	18mm	Main	OFF	26865	831.5	Speed	22.85	24.00	1.303	-0.15	0.075	0.098
	LTE Band 26	15M	QPSK	1	37	Back	TB	0mm	Main	ON	26865	831.5	SAA	17.43	18.00	1.140	0.06	0.965	1.100
	LTE Band 30	10M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	27710	2310	Speed	12.23	13.50	1.340	0.08	0.239	0.320
	LTE Band 30	10M	QPSK	25	0	Bottom Side	NB	0mm	Main	ON	27710	2310	Speed	11.23	12.50	1.340	0.01	0.188	0.252
	LTE Band 30	10M	QPSK	1	0	Back	TB	0mm	Main	ON	27710	2310	Speed	12.23	13.50	1.340	0	0.888	1.190
	LTE Band 30	10M	QPSK	25	0	Back	TB	0mm	Main	ON	27710	2310	Speed	11.23	12.50	1.340	-0.08	0.697	0.934
	LTE Band 30	10M	QPSK	50	0	Back	TB	0mm	Main	ON	27710	2310	Speed	11.18	12.50	1.355	0.1	0.712	0.965
	LTE Band 30	10M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	27710	2310	Speed	12.23	13.50	1.340	-0.18	0.026	0.035
	LTE Band 30	10M	QPSK	25	0	Top Edge	TB	0mm	Main	ON	27710	2310	Speed	11.23	12.50	1.340	0.1	0.021	0.028
	LTE Band 30	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	27710	2310	Speed	12.23	13.50	1.340	0.12	0.348	0.466
	LTE Band 30	10M	QPSK	25	0	Right Edge	TB	0mm	Main	ON	27710	2310	Speed	11.23	12.50	1.340	0.08	0.273	0.366
	LTE Band 30	10M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	27710	2310	Speed	21.62	23.00	1.374	0.14	0.054	0.074
	LTE Band 30	10M	QPSK	25	0	Bottom Side	NB	33mm	Main	OFF	27710	2310	Speed	20.59	22.00	1.384	-0.17	0.042	0.058
	LTE Band 30	10M	QPSK	1	0	Back	TB	44mm	Main	OFF	27710	2310	Speed	21.62	23.00	1.374	0.01	0.051	0.070
	LTE Band 30	10M	QPSK	25	0	Back	TB	44mm	Main	OFF	27710	2310	Speed	20.59	22.00	1.384	0.1	0.040	0.055
	LTE Band 30	10M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	27710	2310	Speed	21.62	23.00	1.374	-0.17	0.106	0.146
	LTE Band 30	10M	QPSK	25	0	Top Edge	TB	29mm	Main	OFF	27710	2310	Speed	20.59	22.00	1.384	0.04	0.080	0.111
	LTE Band 30	10M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	27710	2310	Speed	21.62	23.00	1.374	-0.01	0.159	0.218
	LTE Band 30	10M	QPSK	25	0	Right Edge	TB	18mm	Main	OFF	27710	2310	Speed	20.59	22.00	1.384	-0.08	0.125	0.173
	LTE Band 30	10M	QPSK	1	0	Back	TB	0mm	Main	ON	27710	2310	SAA	12.23	13.50	1.340	-0.17	0.872	1.168
	LTE Band 30	10M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	27710	2310	Speed	9.88	10.50	1.153	0.08	0.087	0.100
	LTE Band 30	10M	QPSK	25	0	Bottom Side	NB	0mm	MIMO2	ON	27710	2310	Speed	9.73	10.50	1.194	0.01	0.102	0.122
	LTE Band 30	10M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	27710	2310	Speed	9.88	10.50	1.153	-0.09	0.812	0.937
	LTE Band 30	10M	QPSK	25	0	Back	TB	0mm	MIMO2	ON	27710	2310	Speed	9.73	10.50	1.194	0.03	0.784	0.936
	LTE Band 30	10M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	27710	2310	Speed	9.72	10.50	1.197	-0.08	0.781	0.935
	LTE Band 30	10M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	27710	2310	Speed	9.88	10.50	1.153	0.14	0.018	0.021
	LTE Band 30	10M	QPSK	25	0	Top Edge	TB	0mm	MIMO2	ON	27710	2310	Speed	9.73	10.50	1.194	0.11	0.017	0.020
	LTE Band 30	10M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	Speed	9.88	10.50	1.153	-0.09	0.869	1.002
	LTE Band 30	10M	QPSK	25	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	Speed	9.73	10.50	1.194	-0.08	0.837	0.999
	LTE Band 30	10M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	Speed	9.72	10.50	1.197	0.1	0.833	0.997
	LTE Band 30	10M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	27710	2310	Speed	21.78	23.00	1.324	-0.18	0.183	0.242
	LTE Band 30	10M	QPSK	25	25	Bottom Side	NB	20mm	MIMO2	OFF	27710	2310	Speed	20.73	22.00	1.340	0.1	0.146	0.196
	LTE Band 30	10M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	27710	2310	Speed	21.78	23.00	1.324	-0.17	0.391	0.518
	LTE Band 30	10M	QPSK	25	25	Back	TB	19mm	MIMO2	OFF	27710	2310	Speed	20.73	22.00	1.340	-0.03	0.303	0.406



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 30	10M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	27710	2310	Speed	21.78	23.00	1.324	0	0.001	0.001
	LTE Band 30	10M	QPSK	25	25	Top Edge	TB	29mm	MIMO2	OFF	27710	2310	Speed	20.73	22.00	1.340	0	0.001	0.001
	LTE Band 30	10M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	27710	2310	Speed	21.78	23.00	1.324	-0.05	0.296	0.392
	LTE Band 30	10M	QPSK	25	25	Left Edge	TB	22mm	MIMO2	OFF	27710	2310	Speed	20.73	22.00	1.340	0.18	0.246	0.330
	LTE Band 30	10M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	SAA	9.88	10.50	1.153	-0.08	1.020	1.177
	LTE Band 66	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	132322	1745	Speed	14.31	15.00	1.172	0.08	0.433	0.508
	LTE Band 66	20M	QPSK	50	0	Bottom Side	NB	0mm	Main	ON	132322	1745	Speed	13.29	14.00	1.178	0.01	0.332	0.391
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132322	1745	Speed	14.31	15.00	1.172	-0.08	0.890	1.043
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132072	1720	Speed	14.24	15.00	1.191	0.01	0.970	1.156
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132572	1770	Speed	14.20	15.00	1.202	0.1	0.843	1.014
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	Main	ON	132322	1745	Speed	13.29	14.00	1.178	-0.18	0.684	0.805
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	Main	ON	132072	1720	Speed	13.19	14.00	1.205	0.1	0.739	0.891
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	Main	ON	132572	1770	Speed	13.21	14.00	1.199	0.12	0.634	0.760
	LTE Band 66	20M	QPSK	100	0	Back	TB	0mm	Main	ON	132322	1745	Speed	13.21	14.00	1.199	0.08	0.672	0.806
	LTE Band 66	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	132322	1745	Speed	14.31	15.00	1.172	-0.17	0.418	0.490
	LTE Band 66	20M	QPSK	50	0	Top Edge	TB	0mm	Main	ON	132322	1745	Speed	13.29	14.00	1.178	-0.03	0.305	0.359
	LTE Band 66	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	132322	1745	Speed	14.31	15.00	1.172	0.14	0.475	0.557
	LTE Band 66	20M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	132322	1745	Speed	13.29	14.00	1.178	0.11	0.365	0.430
	LTE Band 66B	15M	QPSK	1	0	Back	TB	0mm	Main	ON	132229+132322	1735.7	Speed	14.14	15.00	1.219	-0.08	0.751	0.915
	LTE Band 66B	15M	QPSK	1	0	Back	TB	0mm	Main	ON	132047+132140	1717.5	Speed	14.06	15.00	1.242	-0.08	0.849	1.054
	LTE Band 66B	15M	QPSK	1	0	Back	TB	0mm	Main	ON	132504+132597	1763.2	Speed	13.97	15.00	1.268	0.1	0.784	0.994
	LTE Band 66C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132322+132124	1745	Speed	14.16	15.00	1.213	-0.18	0.878	1.065
	LTE Band 66C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132072+132270	1720	Speed	13.96	15.00	1.271	0.1	0.74	0.940
	LTE Band 66C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132572+132374	1770	Speed	14.1	15.00	1.230	0.12	0.846	1.041
	LTE Band 66	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	132322	1745	Speed	23.50	25.00	1.413	-0.15	0.173	0.244
	LTE Band 66	20M	QPSK	50	0	Bottom Side	NB	33mm	Main	OFF	132322	1745	Speed	22.57	24.00	1.390	0.19	0.135	0.188
	LTE Band 66	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	132072	1720	Speed	23.45	25.00	1.429	0.03	0.107	0.153
	LTE Band 66	20M	QPSK	50	0	Back	TB	44mm	Main	OFF	132572	1770	Speed	22.55	24.00	1.396	-0.15	0.086	0.120
	LTE Band 66	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	132322	1745	Speed	23.50	25.00	1.413	-0.15	0.239	0.338
	LTE Band 66	20M	QPSK	50	0	Top Edge	TB	29mm	Main	OFF	132322	1745	Speed	22.57	24.00	1.390	0.11	0.183	0.254
	LTE Band 66	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	132322	1745	Speed	23.50	25.00	1.413	-0.08	0.097	0.137
	LTE Band 66	20M	QPSK	50	0	Right Edge	TB	18mm	Main	OFF	132322	1745	Speed	22.57	24.00	1.390	-0.17	0.077	0.107
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132322	1745	SAA	14.31	15.00	1.172	-0.05	0.821	0.962
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132072	1720	SAA	14.24	15.00	1.191	0.18	0.928	1.105
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	Main	ON	132572	1770	SAA	14.20	15.00	1.202	0.14	0.856	1.029
	LTE Band 66	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	132072	1720	Speed	12.72	13.00	1.067	0.01	0.287	0.306
	LTE Band 66	20M	QPSK	50	0	Bottom Side	NB	0mm	MIMO2	ON	132072	1720	Speed	12.40	13.00	1.148	0.1	0.390	0.448
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	132072	1720	Speed	12.72	13.00	1.067	-0.01	0.750	0.800
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	132322	1745	Speed	12.70	13.00	1.072	-0.08	0.835	0.895
	LTE Band 66	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	132572	1770	Speed	12.55	13.00	1.109	0.05	0.987	1.095
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	132072	1720	Speed	12.40	13.00	1.148	0.06	0.818	0.939
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	132322	1745	Speed	12.39	13.00	1.151	-0.09	0.935	1.076
	LTE Band 66	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	132572	1770	Speed	12.35	13.00	1.161	0	1.020	1.185
	LTE Band 66	20M	QPSK	100	0	Back	TB	0mm	MIMO2	ON	132072	1720	Speed	12.37	13.00	1.156	-0.08	0.832	0.962
	LTE Band 66	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	132072	1720	Speed	12.72	13.00	1.067	0.13	0.011	0.012
	LTE Band 66	20M	QPSK	50	0	Top Edge	TB	0mm	MIMO2	ON	132072	1720	Speed	12.40	13.00	1.148	0.12	0.009	0.010
	LTE Band 66	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	132072	1720	Speed	12.72	13.00	1.067	0.03	0.759	0.810
	LTE Band 66	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	132322	1745	Speed	12.70	13.00	1.072	0.18	0.845	0.905
	LTE Band 66	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	132572	1770	Speed	12.55	13.00	1.109	0.16	0.997	1.106
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132072	1720	Speed	12.40	13.00	1.148	-0.1	0.819	0.940
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132322	1745	Speed	12.39	13.00	1.151	0.07	0.936	1.077
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132572	1770	Speed	12.35	13.00	1.161	-0.01	1.021	1.186
	LTE Band 66	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	132072	1720	Speed	12.37	13.00	1.156	0.18	0.842	0.973
	LTE Band 66	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	132072	1720	Speed	23.00	24.00	1.259	-0.1	0.270	0.340
	LTE Band 66	20M	QPSK	50	0	Bottom Side	NB	20mm	MIMO2	OFF	132072	1720	Speed	22.05	23.00	1.245	0.01	0.166	0.207
	LTE Band 66	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	132072	1720	Speed	23.00	24.00	1.259	0.07	0.343	0.432



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 66	20M	QPSK	50	0	Back	TB	19mm	MIMO2	OFF	132072	1720	Speed	22.05	23.00	1.245	-0.18	0.264	0.329
	LTE Band 66	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	132072	1720	Speed	23.00	24.00	1.259	0	0.001	0.001
	LTE Band 66	20M	QPSK	50	0	Top Edge	TB	29mm	MIMO2	OFF	132072	1720	Speed	22.05	23.00	1.245	0	0.001	0.001
	LTE Band 66	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	132072	1720	Speed	23.00	24.00	1.259	-0.15	0.198	0.249
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	22mm	MIMO2	OFF	132072	1720	Speed	22.05	23.00	1.245	0.11	0.175	0.218
11	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132572	1770	SAA	12.35	13.00	1.161	-0.03	1.030	1.196
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132072	1720	SAA	12.40	13.00	1.148	-0.08	0.826	0.948
	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132322	1745	SAA	12.39	13.00	1.151	-0.17	0.944	1.086
	LTE Band 71	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	133297	680.5	Speed	14.88	15.50	1.153	0.08	0.156	0.180
	LTE Band 71	20M	QPSK	50	0	Bottom Side	NB	0mm	Main	ON	133297	680.5	Speed	13.96	14.50	1.132	0.01	0.121	0.137
	LTE Band 71	20M	QPSK	1	0	Back	TB	0mm	Main	ON	133297	680.5	Speed	14.88	15.50	1.153	0	0.734	0.847
	LTE Band 71	20M	QPSK	50	0	Back	TB	0mm	Main	ON	133297	680.5	Speed	13.96	14.50	1.132	-0.08	0.566	0.641
	LTE Band 71	20M	QPSK	100	0	Back	TB	0mm	Main	ON	133297	680.5	Speed	13.93	14.50	1.140	0.1	0.558	0.636
	LTE Band 71	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	133297	680.5	Speed	14.88	15.50	1.153	-0.18	0.120	0.138
	LTE Band 71	20M	QPSK	50	0	Top Edge	TB	0mm	Main	ON	133297	680.5	Speed	13.96	14.50	1.132	0.1	0.093	0.105
12	LTE Band 71	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	133297	680.5	Speed	14.88	15.50	1.153	-0.04	1.030	1.188
	LTE Band 71	20M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	133297	680.5	Speed	13.96	14.50	1.132	0.08	0.906	1.026
	LTE Band 71	20M	QPSK	100	0	Right Edge	TB	0mm	Main	ON	133297	680.5	Speed	13.93	14.50	1.140	-0.17	0.884	1.008
	LTE Band 71	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	133297	680.5	Speed	24.17	25.00	1.211	-0.03	0.072	0.087
	LTE Band 71	20M	QPSK	50	0	Bottom Side	NB	33mm	Main	OFF	133297	680.5	Speed	23.12	24.00	1.225	0.14	0.058	0.071
	LTE Band 71	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	133297	680.5	Speed	24.17	25.00	1.211	0	0.001	0.001
	LTE Band 71	20M	QPSK	50	0	Back	TB	44mm	Main	OFF	133297	680.5	Speed	23.12	24.00	1.225	0	0.001	0.001
	LTE Band 71	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	133297	680.5	Speed	24.17	25.00	1.211	0	0.001	0.001
	LTE Band 71	20M	QPSK	50	0	Top Edge	TB	29mm	Main	OFF	133297	680.5	Speed	23.12	24.00	1.225	0	0.001	0.001
	LTE Band 71	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	133297	680.5	Speed	24.17	25.00	1.211	-0.05	0.110	0.133
	LTE Band 71	20M	QPSK	50	0	Right Edge	TB	18mm	Main	OFF	133297	680.5	Speed	23.12	24.00	1.225	0.01	0.092	0.113
	LTE Band 71	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	133297	680.5	SAA	14.88	15.50	1.153	-0.01	0.988	1.140



FCC SAR TEST REPORT

Report No. : FA482037

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Configure	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	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)
	LTE Band 41	20M	QPSK	1	49	Bottom Side	NB	0mm	Main	ON	40620	2593	Speed	12.95	14.00	1.274	62.9	1.006	0.08	0.294	0.377
	LTE Band 41	20M	QPSK	50	24	Bottom Side	NB	0mm	Main	ON	40620	2593	Speed	11.97	13.00	1.268	62.9	1.006	0.01	0.215	0.274
	LTE Band 41	20M	QPSK	1	49	Back	TB	0mm	Main	ON	40620	2593	Speed	12.95	14.00	1.274	62.9	1.006	0.01	0.808	1.035
	LTE Band 41	20M	QPSK	1	49	Back	TB	0mm	Main	ON	39750	2506	Speed	12.65	14.00	1.365	62.9	1.006	0.1	0.545	0.748
	LTE Band 41	20M	QPSK	1	49	Back	TB	0mm	Main	ON	40185	2549.5	Speed	12.71	14.00	1.346	62.9	1.006	-0.18	0.665	0.900
	LTE Band 41	20M	QPSK	1	49	Back	TB	0mm	Main	ON	41055	2636.5	Speed	12.77	14.00	1.327	62.9	1.006	0.1	0.638	0.852
	LTE Band 41	20M	QPSK	1	49	Back	TB	0mm	Main	ON	41490	2680	Speed	12.49	14.00	1.416	62.9	1.006	0.12	0.476	0.678
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	Main	ON	40620	2593	Speed	11.97	13.00	1.268	62.9	1.006	0.08	0.592	0.755
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	Main	ON	39750	2506	Speed	11.79	13.00	1.321	62.9	1.006	-0.03	0.402	0.534
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	Main	ON	40185	2549.5	Speed	11.82	13.00	1.312	62.9	1.006	0.14	0.490	0.647
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	Main	ON	41055	2636.5	Speed	11.80	13.00	1.318	62.9	1.006	0.11	0.473	0.627
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	Main	ON	41490	2680	Speed	11.53	13.00	1.403	62.9	1.006	-0.05	0.353	0.498
	LTE Band 41	20M	QPSK	100	0	Back	TB	0mm	Main	ON	40620	2593	Speed	11.94	13.00	1.276	62.9	1.006	0.18	0.604	0.776
	LTE Band 41	20M	QPSK	1	49	Top Edge	TB	0mm	Main	ON	40620	2593	Speed	12.95	14.00	1.274	62.9	1.006	0.14	0.218	0.279
	LTE Band 41	20M	QPSK	50	24	Top Edge	TB	0mm	Main	ON	40620	2593	Speed	11.97	13.00	1.268	62.9	1.006	-0.17	0.160	0.204
	LTE Band 41	20M	QPSK	1	49	Right Edge	TB	0mm	Main	ON	40620	2593	Speed	12.95	14.00	1.274	62.9	1.006	0.17	0.070	0.090
	LTE Band 41	20M	QPSK	50	24	Right Edge	TB	0mm	Main	ON	40620	2593	Speed	11.97	13.00	1.268	62.9	1.006	-0.05	0.052	0.066
	LTE Band 41C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	40620+40422	2593	Speed	12.51	14.00	1.409	62.9	1.006	0.14	0.627	0.889
	LTE Band 41C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	39750+39948	2506	Speed	12.27	14.00	1.489	62.9	1.006	0.11	0.427	0.640
	LTE Band 41C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	40185+39987	2549.5	Speed	12.35	14.00	1.462	62.9	1.006	0.18	0.516	0.759
	LTE Band 41C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	41055+40857	2636.5	Speed	12.39	14.00	1.449	62.9	1.006	0.14	0.495	0.721
	LTE Band 41C	20M	QPSK	1	0	Back	TB	0mm	Main	ON	41490+41292	2680	Speed	12.09	14.00	1.552	62.9	1.006	-0.17	0.369	0.576
	LTE Band 41C_HPUE	20M	QPSK	1	0	Back	TB	0mm	Main	ON	40620+40422	2593	Speed	14.55	16.00	1.396	42.9	1.009	0.17	0.657	0.926
	LTE Band 41C_HPUE	20M	QPSK	1	0	Back	TB	0mm	Main	ON	39750+39948	2506	Speed	14.31	16.00	1.476	42.9	1.009	-0.05	0.466	0.694
	LTE Band 41C_HPUE	20M	QPSK	1	0	Back	TB	0mm	Main	ON	40185+39987	2549.5	Speed	14.35	16.00	1.462	42.9	1.009	0.1	0.553	0.816
	LTE Band 41C_HPUE	20M	QPSK	1	0	Back	TB	0mm	Main	ON	41055+40857	2636.5	Speed	14.44	16.00	1.432	42.9	1.009	-0.17	0.532	0.769
	LTE Band 41C_HPUE	20M	QPSK	1	0	Back	TB	0mm	Main	ON	41490+41292	2680	Speed	14.11	16.00	1.545	42.9	1.009	0.04	0.407	0.635
	LTE Band 41	20M	QPSK	1	49	Bottom Side	NB	33mm	Main	OFF	40620	2593	Speed	23.73	25.00	1.340	62.9	1.006	-0.17	0.073	0.098
	LTE Band 41	20M	QPSK	50	24	Bottom Side	NB	33mm	Main	OFF	40620	2593	Speed	22.78	24.00	1.324	62.9	1.006	-0.03	0.057	0.076
	LTE Band 41	20M	QPSK	1	49	Back	TB	44mm	Main	OFF	40620	2593	Speed	23.73	25.00	1.340	62.9	1.006	-0.05	0.064	0.086
	LTE Band 41	20M	QPSK	50	24	Back	TB	44mm	Main	OFF	40620	2593	Speed	22.78	24.00	1.324	62.9	1.006	0.18	0.051	0.068
	LTE Band 41	20M	QPSK	1	49	Top Edge	TB	29mm	Main	OFF	40620	2593	Speed	23.73	25.00	1.340	62.9	1.006	0.14	0.097	0.131
	LTE Band 41	20M	QPSK	50	24	Top Edge	TB	29mm	Main	OFF	40620	2593	Speed	22.78	24.00	1.324	62.9	1.006	-0.17	0.081	0.108
	LTE Band 41	20M	QPSK	1	49	Right Edge	TB	18mm	Main	OFF	40620	2593	Speed	23.73	25.00	1.340	62.9	1.006	0.17	0.061	0.082
	LTE Band 41	20M	QPSK	50	24	Right Edge	TB	18mm	Main	OFF	40620	2593	Speed	22.78	24.00	1.324	62.9	1.006	-0.05	0.050	0.067
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	40620	2593	Speed	14.91	16.00	1.285	42.9	1.009	0	0.847	1.098
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	39750	2506	Speed	14.64	16.00	1.368	42.9	1.009	0.1	0.600	0.828
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	40185	2549.5	Speed	14.69	16.00	1.352	42.9	1.009	-0.17	0.713	0.973
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	41055	2636.5	Speed	14.77	16.00	1.327	42.9	1.009	0.04	0.685	0.917
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	41490	2680	Speed	14.46	16.00	1.426	42.9	1.009	-0.01	0.525	0.755
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	40620	2593	SAA	14.91	16.00	1.285	42.9	1.009	-0.08	0.779	1.010
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	39750	2506	SAA	14.64	16.00	1.368	42.9	1.009	0.06	0.621	0.857
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	40185	2549.5	SAA	14.69	16.00	1.352	42.9	1.009	-0.09	0.739	1.008
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	41055	2636.5	SAA	14.77	16.00	1.327	42.9	1.009	-0.08	0.614	0.822
	LTE Band 41_HPUE	20M	QPSK	1	49	Back	TB	0mm	Main	OFF	41490	2680	SAA	14.46	16.00	1.426	42.9	1.009	0.13	0.466	0.670
	LTE Band 41	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	-0.09	0.120	0.131
	LTE Band 41	20M	QPSK	50	24	Bottom Side	NB	0mm	MIMO2	ON	41055	2636.5	Speed	10.95	11.50	1.135	62.9	1.006	-0.08	0.102	0.116
	LTE Band 41	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	-0.09	1.010	1.106
	LTE Band 41	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	39750	2506	Speed	10.88	11.50	1.153	62.9	1.006	0.18	0.872	1.012
	LTE Band 41	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	40185	2549.5	Speed	10.96	11.50	1.132	62.9	1.006	0.16	0.872	0.993
	LTE Band 41	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	40620	2593	Speed	11.06	11.50	1.107	62.9	1.006	-0.1	0.937	1.043
	LTE Band 41	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	41490	2680	Speed	11.11	11.50	1.094	62.9	1.006	0.07	0.979	1.077
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	41055	2636.5	Speed	10.95	11.50	1.135	62.9	1.006	0.18	0.895	1.022
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	39750	2506	Speed	10.65	11.50	1.216	62.9	1.006	0.01	0.830	1.015
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	40185	2549.5	Speed	10.75	11.50	1.189	62.9	1.006	-0.15	0.889	1.063



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	40620	2593	Speed	10.84	11.50	1.164	62.9	1.006	0.19	0.895	1.048
	LTE Band 41	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	41490	2680	Speed	10.90	11.50	1.148	62.9	1.006	0.07	0.867	1.001
	LTE Band 41	20M	QPSK	100	0	Back	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.03	11.50	1.114	62.9	1.006	-0.18	0.906	1.016
	LTE Band 41	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	0.03	0.013	0.014
	LTE Band 41	20M	QPSK	50	24	Top Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	10.95	11.50	1.135	62.9	1.006	-0.15	0.011	0.013
13	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	0.01	1.090	1.194
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	39750	2506	Speed	10.88	11.50	1.153	62.9	1.006	0.11	0.918	1.065
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	40185	2549.5	Speed	10.96	11.50	1.132	62.9	1.006	-0.08	0.977	1.113
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	40620	2593	Speed	11.06	11.50	1.107	62.9	1.006	-0.17	1.000	1.113
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41490	2680	Speed	11.11	11.50	1.094	62.9	1.006	-0.08	1.050	1.156
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	10.95	11.50	1.135	62.9	1.006	-0.04	0.968	1.105
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	39750	2506	Speed	10.65	11.50	1.216	62.9	1.006	0.17	0.885	1.083
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	40185	2549.5	Speed	10.75	11.50	1.189	62.9	1.006	0.18	0.950	1.136
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	40620	2593	Speed	10.84	11.50	1.164	62.9	1.006	-0.04	0.953	1.116
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	41490	2680	Speed	10.90	11.50	1.148	62.9	1.006	-0.08	0.944	1.090
	LTE Band 41	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.03	11.50	1.114	62.9	1.006	-0.13	1.040	1.166
	LTE Band 41	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	41055	2636.5	Speed	22.84	24.00	1.306	62.9	1.006	-0.13	0.147	0.193
	LTE Band 41	20M	QPSK	50	24	Bottom Side	NB	20mm	MIMO2	OFF	41055	2636.5	Speed	21.69	23.00	1.352	62.9	1.006	0.06	0.112	0.152
	LTE Band 41	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	41055	2636.5	Speed	22.84	24.00	1.306	62.9	1.006	0.08	0.415	0.545
	LTE Band 41	20M	QPSK	50	24	Back	TB	19mm	MIMO2	OFF	41055	2636.5	Speed	21.69	23.00	1.352	62.9	1.006	-0.07	0.328	0.446
	LTE Band 41	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	41055	2636.5	Speed	22.84	24.00	1.306	62.9	1.006	0	0.001	0.001
	LTE Band 41	20M	QPSK	50	24	Top Edge	TB	29mm	MIMO2	OFF	41055	2636.5	Speed	21.69	23.00	1.352	62.9	1.006	0	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	41055	2636.5	Speed	22.84	24.00	1.306	62.9	1.006	-0.12	0.516	0.678
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	39750	2506	Speed	22.65	24.00	1.365	62.9	1.006	0.01	0.492	0.675
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	40185	2549.5	Speed	22.54	24.00	1.400	62.9	1.006	0.03	0.512	0.721
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	41490	2680	Speed	22.76	24.00	1.330	62.9	1.006	-0.08	0.468	0.626
	LTE Band 41	20M	QPSK	50	24	Left Edge	TB	22mm	MIMO2	OFF	41055	2636.5	Speed	21.69	23.00	1.352	62.9	1.006	0.03	0.429	0.584
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	SAA	11.13	11.50	1.089	62.9	1.006	-0.16	1.040	1.139
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	39750	2506	SAA	10.88	11.50	1.153	62.9	1.006	0.15	0.979	1.136
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	40185	2549.5	SAA	10.96	11.50	1.132	62.9	1.006	-0.09	1.030	1.173
	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41490	2680	SAA	11.11	11.50	1.094	62.9	1.006	0.11	0.950	1.045
	LTE Band 42	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	42190	3460	Speed	11.15	12.00	1.216	62.9	1.006	0.08	0.187	0.229
	LTE Band 42	20M	QPSK	50	0	Bottom Side	NB	0mm	Main	ON	42190	3460	Speed	11.09	12.00	1.233	62.9	1.006	0.01	0.167	0.207
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42190	3460	Speed	11.15	12.00	1.216	62.9	1.006	-0.08	0.652	0.798
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42590	3500	Speed	10.97	12.00	1.268	62.9	1.006	0.1	0.759	0.968
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42990	3540	Speed	11.06	12.00	1.242	62.9	1.006	0	0.806	1.007
	LTE Band 42	20M	QPSK	50	0	Back	TB	0mm	Main	ON	42190	3460	Speed	11.09	12.00	1.233	62.9	1.006	-0.18	0.526	0.653
	LTE Band 42	20M	QPSK	50	0	Back	TB	0mm	Main	ON	42590	3500	Speed	10.87	12.00	1.297	62.9	1.006	0.1	0.608	0.793
	LTE Band 42	20M	QPSK	50	0	Back	TB	0mm	Main	ON	42990	3540	Speed	11.03	12.00	1.250	62.9	1.006	0.12	0.739	0.929
	LTE Band 42	20M	QPSK	100	0	Back	TB	0mm	Main	ON	42190	3460	Speed	11.04	12.00	1.247	62.9	1.006	0.08	0.536	0.673
	LTE Band 42	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	42190	3460	Speed	11.15	12.00	1.216	62.9	1.006	-0.17	0.165	0.202
	LTE Band 42	20M	QPSK	50	0	Top Edge	TB	0mm	Main	ON	42190	3460	Speed	11.09	12.00	1.233	62.9	1.006	-0.03	0.148	0.184
	LTE Band 42	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	42190	3460	Speed	11.15	12.00	1.216	62.9	1.006	0.14	0.201	0.246
	LTE Band 42	20M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	42190	3460	Speed	11.09	12.00	1.233	62.9	1.006	0.11	0.173	0.215
	LTE Band 42	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	42190	3460	Speed	20.76	22.00	1.330	62.9	1.006	0.08	0.074	0.099
	LTE Band 42	20M	QPSK	50	0	Bottom Side	NB	33mm	Main	OFF	42190	3460	Speed	19.99	21.00	1.262	62.9	1.006	0.01	0.064	0.081
	LTE Band 42	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	42190	3460	Speed	20.76	22.00	1.330	62.9	1.006	-0.08	0.116	0.155
	LTE Band 42	20M	QPSK	50	0	Back	TB	44mm	Main	OFF	42190	3460	Speed	19.99	21.00	1.262	62.9	1.006	0.1	0.103	0.131
	LTE Band 42	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	42190	3460	Speed	20.76	22.00	1.330	62.9	1.006	-0.18	0.132	0.177
	LTE Band 42	20M	QPSK	50	0	Top Edge	TB	29mm	Main	OFF	42190	3460	Speed	19.99	21.00	1.262	62.9	1.006	0.1	0.109	0.138
	LTE Band 42	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	42190	3460	Speed	20.76	22.00	1.330	62.9	1.006	0.12	0.054	0.072
	LTE Band 42	20M	QPSK	50	0	Right Edge	TB	18mm	Main	OFF	42190	3460	Speed	19.99	21.00	1.262	62.9	1.006	0.08	0.047	0.060
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42190	3460	SAA	11.15	12.00	1.216	62.9	1.006	-0.05	0.709	0.867
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42590	3500	SAA	10.97	12.00	1.268	62.9	1.006	0.18	0.825	1.052
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	Main	ON	42990	3540	SAA	11.06	12.00	1.242	62.9	1.006	0.08	0.876	1.094
	LTE Band 42	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	0.07	0.087	0.100
	LTE Band 42	20M	QPSK	50	0	Bottom Side	NB	0mm	MIMO2	ON	42190	3460	Speed	9.37	10.00	1.156	62.9	1.006	-0.18	0.058	0.067



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	0.01	0.644	0.737
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	42590	3500	Speed	10.26	11.00	1.186	62.9	1.006	0.03	0.603	0.719
	LTE Band 42	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	42990	3540	Speed	10.30	11.00	1.175	62.9	1.006	-0.15	0.574	0.678
	LTE Band 42	20M	QPSK	50	0	Back	TB	0mm	MIMO2	ON	42190	3460	Speed	9.37	10.00	1.156	62.9	1.006	-0.15	0.425	0.494
	LTE Band 42	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	-0.08	0.020	0.023
	LTE Band 42	20M	QPSK	50	0	Top Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	9.37	10.00	1.156	62.9	1.006	-0.04	0.014	0.016
14	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	-0.01	0.969	1.109
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42590	3500	Speed	10.26	11.00	1.186	62.9	1.006	0.17	0.907	1.082
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42990	3540	Speed	10.30	11.00	1.175	62.9	1.006	0.18	0.861	1.018
	LTE Band 42	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	9.37	10.00	1.156	62.9	1.006	-0.04	0.641	0.746
	LTE Band 42	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	42590	3500	Speed	9.27	10.00	1.183	62.9	1.006	-0.08	0.599	0.713
	LTE Band 42	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	42990	3540	Speed	9.31	10.00	1.172	62.9	1.006	-0.13	0.572	0.675
	LTE Band 42	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	9.36	10.00	1.159	62.9	1.006	-0.13	0.652	0.760
	LTE Band 42C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190+42388	3460	Speed	10.14	11.00	1.219	62.9	1.006	0.14	0.860	1.055
	LTE Band 42C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42392+42590	3480.2	Speed	10.09	11.00	1.233	62.9	1.006	0.11	0.837	1.038
	LTE Band 42C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190+42388	3460	Speed	10.10	11.00	1.230	62.9	1.006	-0.05	0.820	1.015
	LTE Band 42	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	42190	3460	Speed	21.01	22.00	1.256	62.9	1.006	-0.04	0.095	0.120
	LTE Band 42	20M	QPSK	50	0	Bottom Side	NB	20mm	MIMO2	OFF	42190	3460	Speed	20.09	21.00	1.233	62.9	1.006	-0.05	0.082	0.102
	LTE Band 42	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	42190	3460	Speed	21.01	22.00	1.256	62.9	1.006	-0.01	0.194	0.245
	LTE Band 42	20M	QPSK	50	0	Back	TB	19mm	MIMO2	OFF	42190	3460	Speed	20.09	21.00	1.233	62.9	1.006	-0.09	0.157	0.195
	LTE Band 42	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	42190	3460	Speed	21.01	22.00	1.256	62.9	1.006	0	0.001	0.001
	LTE Band 42	20M	QPSK	50	0	Top Edge	TB	29mm	MIMO2	OFF	42190	3460	Speed	20.09	21.00	1.233	62.9	1.006	0	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	42190	3460	Speed	21.01	22.00	1.256	62.9	1.006	-0.13	0.164	0.207
	LTE Band 42	20M	QPSK	50	0	Left Edge	TB	22mm	MIMO2	OFF	42190	3460	Speed	20.09	21.00	1.233	62.9	1.006	0.17	0.138	0.171
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	SAA	10.44	11.00	1.138	62.9	1.006	0.03	0.954	1.092
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42590	3500	SAA	10.26	11.00	1.186	62.9	1.006	-0.16	0.892	1.064
	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42990	3540	SAA	10.30	11.00	1.175	62.9	1.006	-0.02	0.884	1.045
	LTE Band 43	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	44690	3710	Speed	10.34	11.00	1.164	62.9	1.006	0.11	0.076	0.089
	LTE Band 43	20M	QPSK	50	24	Bottom Side	NB	0mm	MIMO2	ON	44690	3710	Speed	9.43	10.00	1.140	62.9	1.006	-0.02	0.056	0.064
	LTE Band 43	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	44690	3710	Speed	10.34	11.00	1.164	62.9	1.006	0.1	0.567	0.664
	LTE Band 43	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	44690	3710	Speed	9.43	10.00	1.140	62.9	1.006	-0.18	0.421	0.483
	LTE Band 43	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	44690	3710	Speed	10.34	11.00	1.164	62.9	1.006	-0.06	0.019	0.022
	LTE Band 43	20M	QPSK	50	0	Top Edge	TB	0mm	MIMO2	ON	44690	3710	Speed	9.42	10.00	1.143	62.9	1.006	-0.14	0.014	0.016
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	44690	3710	Speed	10.34	11.00	1.164	62.9	1.006	-0.19	0.868	1.017
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45090	3750	Speed	10.25	11.00	1.189	62.9	1.006	0.01	0.842	1.007
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45490	3790	Speed	10.24	11.00	1.191	62.9	1.006	0.06	0.820	0.983
	LTE Band 43	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	44690	3710	Speed	9.43	10.00	1.140	62.9	1.006	0.02	0.645	0.740
	LTE Band 43C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	44690+44888	3710	Speed	10.14	11.00	1.219	62.9	1.006	0.17	0.753	0.923
	LTE Band 43C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45090+44892	3750	Speed	10.09	11.00	1.233	62.9	1.006	-0.05	0.730	0.906
	LTE Band 43C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45490+45292	3790	Speed	10.10	11.00	1.230	62.9	1.006	0.01	0.711	0.880
	LTE Band 43	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	44690	3710	Speed	9.35	10.00	1.161	62.9	1.006	-0.12	0.627	0.733
	LTE Band 43	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	44690	3710	Speed	20.81	22.00	1.315	62.9	1.006	0.07	0.106	0.140
	LTE Band 43	20M	QPSK	50	24	Bottom Side	NB	20mm	MIMO2	OFF	44690	3710	Speed	19.76	21.00	1.330	62.9	1.006	-0.02	0.095	0.127
	LTE Band 43	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	44690	3710	Speed	20.81	22.00	1.315	62.9	1.006	-0.05	0.272	0.360
	LTE Band 43	20M	QPSK	50	24	Back	TB	19mm	MIMO2	OFF	44690	3710	Speed	19.76	21.00	1.330	62.9	1.006	-0.13	0.219	0.293
	LTE Band 43	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	44690	3710	Speed	20.81	22.00	1.315	62.9	1.006	0	0.001	0.001
	LTE Band 43	20M	QPSK	50	24	Top Edge	TB	29mm	MIMO2	OFF	44690	3710	Speed	19.76	21.00	1.330	62.9	1.006	0	0.001	0.001
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	44690	3710	Speed	20.81	22.00	1.315	62.9	1.006	0.01	0.463	0.613
	LTE Band 43	20M	QPSK	50	24	Left Edge	TB	22mm	MIMO2	OFF	44690	3710	Speed	19.76	21.00	1.330	62.9	1.006	-0.16	0.339	0.454
15	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	44690	3710	SAA	10.34	11.00	1.164	62.9	1.006	0.03	0.971	1.137
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45090	3750	SAA	10.25	11.00	1.189	62.9	1.006	0.1	0.907	1.084
	LTE Band 43	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	45490	3790	SAA	10.24	11.00	1.191	62.9	1.006	-0.04	0.794	0.952
	LTE Band 48	20M	QPSK	1	0	Bottom Side	NB	0mm	Main	ON	56150	3641	Speed	10.97	12.00	1.268	62.9	1.006	-0.17	0.273	0.348
	LTE Band 48	20M	QPSK	50	0	Bottom Side	NB	0mm	Main	ON	56150	3641	Speed	10.71	12.00	1.346	62.9	1.006	-0.03	0.245	0.332
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	56150	3641	Speed	10.97	12.00	1.268	62.9	1.006	-0.05	0.641	0.817
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	55340	3560	Speed	10.82	12.00	1.312	62.9	1.006	0	0.805	1.063
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	55830	3609	Speed	10.89	12.00	1.291	62.9	1.006	0.14	0.677	0.879



FCC SAR TEST REPORT

Report No. : FA482037

	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	56640	3690	Speed	10.80	12.00	1.318	62.9	1.006	-0.17	0.732	0.971
	LTE Band 48	20M	QPSK	50	0	Back	TB	0mm	Main	ON	56150	3641	Speed	10.71	12.00	1.346	62.9	1.006	0.17	0.573	0.776
	LTE Band 48	20M	QPSK	50	0	Back	TB	0mm	Main	ON	55340	3560	Speed	10.66	12.00	1.361	62.9	1.006	-0.05	0.723	0.990
	LTE Band 48	20M	QPSK	50	0	Back	TB	0mm	Main	ON	55830	3609	Speed	10.70	12.00	1.349	62.9	1.006	0.01	0.607	0.824
	LTE Band 48	20M	QPSK	50	0	Back	TB	0mm	Main	ON	56640	3690	Speed	10.64	12.00	1.368	62.9	1.006	0.1	0.652	0.897
	LTE Band 48	20M	QPSK	100	0	Back	TB	0mm	Main	ON	56150	3641	Speed	10.64	12.00	1.368	62.9	1.006	-0.17	0.569	0.783
	LTE Band 48	20M	QPSK	1	0	Top Edge	TB	0mm	Main	ON	56150	3641	Speed	10.97	12.00	1.268	62.9	1.006	0.04	0.189	0.241
	LTE Band 48	20M	QPSK	50	0	Top Edge	TB	0mm	Main	ON	56150	3641	Speed	10.71	12.00	1.346	62.9	1.006	-0.01	0.169	0.229
	LTE Band 48	20M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	56150	3641	Speed	10.97	12.00	1.268	62.9	1.006	-0.08	0.259	0.330
	LTE Band 48	20M	QPSK	50	0	Right Edge	TB	0mm	Main	ON	56150	3641	Speed	10.71	12.00	1.346	62.9	1.006	0.05	0.232	0.314
	LTE Band 48	20M	QPSK	1	0	Bottom Side	NB	33mm	Main	OFF	56150	3641	Speed	20.94	22.00	1.276	62.9	1.006	0.06	0.103	0.132
	LTE Band 48	20M	QPSK	50	0	Bottom Side	NB	33mm	Main	OFF	56150	3641	Speed	20.19	21.00	1.205	62.9	1.006	-0.09	0.086	0.104
	LTE Band 48	20M	QPSK	1	0	Back	TB	44mm	Main	OFF	56150	3641	Speed	20.94	22.00	1.276	62.9	1.006	0.12	0.114	0.146
	LTE Band 48	20M	QPSK	50	0	Back	TB	44mm	Main	OFF	56150	3641	Speed	20.19	21.00	1.205	62.9	1.006	0.03	0.094	0.114
	LTE Band 48	20M	QPSK	1	0	Top Edge	TB	29mm	Main	OFF	56150	3641	Speed	20.94	22.00	1.276	62.9	1.006	0.18	0.135	0.173
	LTE Band 48	20M	QPSK	50	0	Top Edge	TB	29mm	Main	OFF	56150	3641	Speed	20.19	21.00	1.205	62.9	1.006	0.16	0.109	0.132
	LTE Band 48	20M	QPSK	1	0	Right Edge	TB	18mm	Main	OFF	56150	3641	Speed	20.94	22.00	1.276	62.9	1.006	-0.1	0.058	0.074
	LTE Band 48	20M	QPSK	50	0	Right Edge	TB	18mm	Main	OFF	56150	3641	Speed	20.19	21.00	1.205	62.9	1.006	0.07	0.036	0.044
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	56150	3641	SAA	10.97	12.00	1.268	62.9	1.006	0.18	0.677	0.863
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	55340	3560	SAA	10.82	12.00	1.312	62.9	1.006	0.05	0.874	1.154
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	55830	3609	SAA	10.89	12.00	1.291	62.9	1.006	-0.1	0.709	0.921
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	Main	ON	56640	3690	SAA	10.80	12.00	1.318	62.9	1.006	0.01	0.761	1.009
	LTE Band 48	20M	QPSK	1	0	Bottom Side	NB	0mm	MIMO2	ON	55340	3560	Speed	10.31	11.00	1.172	62.9	1.006	-0.18	0.093	0.110
	LTE Band 48	20M	QPSK	50	24	Bottom Side	NB	0mm	MIMO2	ON	55340	3560	Speed	9.30	10.00	1.175	62.9	1.006	0.1	0.070	0.083
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	55340	3560	Speed	10.31	11.00	1.172	62.9	1.006	0	0.657	0.775
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	55830	3609	Speed	10.30	11.00	1.175	62.9	1.006	-0.17	0.629	0.743
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	56150	3641	Speed	10.21	11.00	1.199	62.9	1.006	-0.03	0.635	0.766
	LTE Band 48	20M	QPSK	1	0	Back	TB	0mm	MIMO2	ON	56640	3690	Speed	10.24	11.00	1.191	62.9	1.006	0.01	0.660	0.791
	LTE Band 48	20M	QPSK	50	24	Back	TB	0mm	MIMO2	ON	55340	3560	Speed	9.30	10.00	1.175	62.9	1.006	0.14	0.494	0.584
	LTE Band 48	20M	QPSK	1	0	Top Edge	TB	0mm	MIMO2	ON	55340	3560	Speed	10.31	11.00	1.172	62.9	1.006	-0.17	0.017	0.020
	LTE Band 48	20M	QPSK	50	24	Top Edge	TB	0mm	MIMO2	ON	55340	3560	Speed	9.30	10.00	1.175	62.9	1.006	0.17	0.013	0.015
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55340	3560	Speed	10.31	11.00	1.172	62.9	1.006	-0.05	0.894	1.054
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55830	3609	Speed	10.30	11.00	1.175	62.9	1.006	0.01	0.916	1.083
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56150	3641	Speed	10.21	11.00	1.199	62.9	1.006	0.1	0.945	1.140
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56640	3690	Speed	10.24	11.00	1.191	62.9	1.006	0	0.968	1.160
	LTE Band 48	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	55340	3560	Speed	9.30	10.00	1.175	62.9	1.006	0.04	0.676	0.799
	LTE Band 48	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	55830	3609	Speed	9.29	10.00	1.178	62.9	1.006	-0.01	0.693	0.821
	LTE Band 48	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	56150	3641	Speed	9.19	10.00	1.205	62.9	1.006	-0.08	0.699	0.847
	LTE Band 48	20M	QPSK	50	24	Left Edge	TB	0mm	MIMO2	ON	56640	3690	Speed	9.21	10.00	1.199	62.9	1.006	0.05	0.725	0.875
	LTE Band 48	20M	QPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	55340	3560	Speed	9.31	10.00	1.172	62.9	1.006	0.06	0.759	0.895
	LTE Band 48C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55340+55538	3560	Speed	10.11	11.00	1.227	62.9	1.006	0.04	0.811	1.001
	LTE Band 48C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55632+55830	3589.2	Speed	9.92	11.00	1.282	62.9	1.006	-0.01	0.836	1.078
	LTE Band 48C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55952+56150	3621.2	Speed	10.03	11.00	1.250	62.9	1.006	-0.08	0.863	1.085
	LTE Band 48C	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56442+56640	3690.2	Speed	10.08	11.00	1.236	62.9	1.006	0.05	0.884	1.099
	LTE Band 48	20M	QPSK	1	0	Bottom Side	NB	20mm	MIMO2	OFF	55340	3560	Speed	20.90	22.00	1.288	62.9	1.006	-0.09	0.085	0.110
	LTE Band 48	20M	QPSK	50	24	Bottom Side	NB	20mm	MIMO2	OFF	55340	3560	Speed	19.95	21.00	1.274	62.9	1.006	-0.08	0.068	0.087
	LTE Band 48	20M	QPSK	1	0	Back	TB	19mm	MIMO2	OFF	55340	3560	Speed	20.90	22.00	1.288	62.9	1.006	0.03	0.187	0.242
	LTE Band 48	20M	QPSK	50	24	Back	TB	19mm	MIMO2	OFF	55340	3560	Speed	19.95	21.00	1.274	62.9	1.006	0.18	0.159	0.204
	LTE Band 48	20M	QPSK	1	0	Top Edge	TB	29mm	MIMO2	OFF	55340	3560	Speed	20.90	22.00	1.288	62.9	1.006	0	0.001	0.001
	LTE Band 48	20M	QPSK	50	24	Top Edge	TB	29mm	MIMO2	OFF	55340	3560	Speed	19.95	21.00	1.274	62.9	1.006	0	0.001	0.001
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	22mm	MIMO2	OFF	55340	3560	Speed	20.90	22.00	1.288	62.9	1.006	0.07	0.297	0.385
	LTE Band 48	20M	QPSK	50	24	Left Edge	TB	22mm	MIMO2	OFF	55340	3560	Speed	19.95	21.00	1.274	62.9	1.006	0.18	0.239	0.306
16	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56640	3690	SAA	10.24	11.00	1.191	62.9	1.006	0.08	1.000	1.198
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55340	3560	SAA	10.31	11.00	1.172	62.9	1.006	-0.1	0.856	1.009
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	55830	3609	SAA	10.30	11.00	1.175	62.9	1.006	0.01	0.884	1.045
	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56150	3641	SAA	10.21	11.00	1.199	62.9	1.006	-0.15	0.965	1.164



FCC SAR TEST REPORT

Report No. : FA482037

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Configure	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7	40M	BPSK	1	214	Bottom Side	NB	0mm	Main	ON	507000	2535	Speed	11.60	13.00	1.380	-0.15	0.317	0.438
	FR1 n7	40M	BPSK	108	108	Bottom Side	NB	0mm	Main	ON	507000	2535	Speed	11.57	13.00	1.390	0.11	0.284	0.395
	FR1 n7	40M	BPSK	1	214	Back	TB	0mm	Main	ON	507000	2535	Speed	11.60	13.00	1.380	0	0.828	1.143
	FR1 n7	40M	BPSK	108	108	Back	TB	0mm	Main	ON	507000	2535	Speed	11.57	13.00	1.390	-0.04	0.741	1.030
	FR1 n7	40M	BPSK	216	0	Back	TB	0mm	Main	ON	507000	2535	Speed	11.52	13.00	1.406	-0.08	0.706	0.993
	FR1 n7	40M	BPSK	1	214	Top Edge	TB	0mm	Main	ON	507000	2535	Speed	11.60	13.00	1.380	0.17	0.235	0.324
	FR1 n7	40M	BPSK	108	108	Top Edge	TB	0mm	Main	ON	507000	2535	Speed	11.57	13.00	1.390	0.18	0.209	0.291
	FR1 n7	40M	BPSK	1	214	Right Edge	TB	0mm	Main	ON	507000	2535	Speed	11.60	13.00	1.380	-0.04	0.111	0.153
	FR1 n7	40M	BPSK	108	108	Right Edge	TB	0mm	Main	ON	507000	2535	Speed	11.57	13.00	1.390	-0.08	0.101	0.140
	FR1 n7	40M	BPSK	1	214	Bottom Side	NB	33mm	Main	OFF	507000	2535	Speed	23.93	25.00	1.279	-0.13	0.117	0.150
	FR1 n7	40M	BPSK	108	54	Bottom Side	NB	33mm	Main	OFF	507000	2535	Speed	23.32	25.00	1.472	0.06	0.100	0.147
	FR1 n7	40M	BPSK	1	214	Back	TB	44mm	Main	OFF	507000	2535	Speed	23.93	25.00	1.279	0.08	0.106	0.136
	FR1 n7	40M	BPSK	108	54	Back	TB	44mm	Main	OFF	507000	2535	Speed	23.32	25.00	1.472	-0.07	0.091	0.134
	FR1 n7	40M	BPSK	1	214	Top Edge	TB	29mm	Main	OFF	507000	2535	Speed	23.93	25.00	1.279	0.05	0.164	0.210
	FR1 n7	40M	BPSK	108	54	Top Edge	TB	29mm	Main	OFF	507000	2535	Speed	23.32	25.00	1.472	-0.11	0.159	0.234
	FR1 n7	40M	BPSK	1	214	Right Edge	TB	18mm	Main	OFF	507000	2535	Speed	23.93	25.00	1.279	-0.12	0.116	0.148
	FR1 n7	40M	BPSK	108	54	Right Edge	TB	18mm	Main	OFF	507000	2535	Speed	23.32	25.00	1.472	0.03	0.081	0.119
17	FR1 n7	40M	BPSK	1	214	Back	TB	0mm	Main	ON	507000	2535	SAA	11.60	13.00	1.380	-0.07	0.852	1.176
	FR1 n7	40M	BPSK	1	214	Bottom Side	NB	0mm	MIMO2	ON	507000	2535	Speed	8.05	9.00	1.245	-0.01	0.121	0.151
	FR1 n7	40M	BPSK	108	54	Bottom Side	NB	0mm	MIMO2	ON	507000	2535	Speed	7.75	9.00	1.334	-0.08	0.112	0.149
	FR1 n7	40M	BPSK	1	214	Back	TB	0mm	MIMO2	ON	507000	2535	Speed	8.05	9.00	1.245	0.01	0.775	0.964
	FR1 n7	40M	BPSK	108	54	Back	TB	0mm	MIMO2	ON	507000	2535	Speed	7.75	9.00	1.334	-0.08	0.718	0.957
	FR1 n7	40M	BPSK	216	0	Back	TB	0mm	MIMO2	ON	507000	2535	Speed	7.83	9.00	1.309	0.13	0.751	0.983
	FR1 n7	40M	BPSK	1	214	Top Edge	TB	0mm	MIMO2	ON	507000	2535	Speed	8.05	9.00	1.245	0.12	0.010	0.012
	FR1 n7	40M	BPSK	108	54	Top Edge	TB	0mm	MIMO2	ON	507000	2535	Speed	7.75	9.00	1.334	0.03	0.009	0.012
	FR1 n7	40M	BPSK	1	214	Left Edge	TB	0mm	MIMO2	ON	507000	2535	Speed	8.05	9.00	1.245	0.18	0.889	1.106
	FR1 n7	40M	BPSK	108	54	Left Edge	TB	0mm	MIMO2	ON	507000	2535	Speed	7.75	9.00	1.334	0.16	0.836	1.115
	FR1 n7	40M	BPSK	216	0	Left Edge	TB	0mm	MIMO2	ON	507000	2535	Speed	7.83	9.00	1.309	-0.1	0.828	1.084
	FR1 n7	40M	BPSK	1	214	Bottom Side	NB	20mm	MIMO2	OFF	507000	2535	Speed	22.80	24.00	1.318	0.07	0.272	0.359
	FR1 n7	40M	BPSK	108	54	Bottom Side	NB	20mm	MIMO2	OFF	507000	2535	Speed	22.79	24.00	1.321	0.18	0.204	0.270
	FR1 n7	40M	BPSK	1	214	Back	TB	19mm	MIMO2	OFF	507000	2535	Speed	22.80	24.00	1.318	-0.15	0.596	0.786
	FR1 n7	40M	BPSK	108	54	Back	TB	19mm	MIMO2	OFF	507000	2535	Speed	22.79	24.00	1.321	0.19	0.571	0.754
	FR1 n7	40M	BPSK	1	214	Top Edge	TB	29mm	MIMO2	OFF	507000	2535	Speed	22.80	24.00	1.318	0	0.001	0.001
	FR1 n7	40M	BPSK	108	54	Top Edge	TB	29mm	MIMO2	OFF	507000	2535	Speed	22.79	24.00	1.321	0	0.001	0.001
	FR1 n7	40M	BPSK	1	214	Left Edge	TB	22mm	MIMO2	OFF	507000	2535	Speed	22.80	24.00	1.318	0.03	0.344	0.453
	FR1 n7	40M	BPSK	108	54	Left Edge	TB	22mm	MIMO2	OFF	507000	2535	Speed	22.79	24.00	1.321	-0.15	0.329	0.435
	FR1 n7	40M	BPSK	1	214	Left Edge	TB	0mm	MIMO2	ON	507000	2535	SAA	8.05	9.00	1.245	-0.01	0.899	1.119
	FR1 n12	15M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	141500	707.5	Speed	14.62	15.50	1.225	0.08	0.090	0.110
	FR1 n12	15M	BPSK	36	22	Bottom Side	NB	0mm	Main	ON	141500	707.5	Speed	14.56	15.50	1.242	0.01	0.086	0.107
	FR1 n12	15M	BPSK	1	1	Back	TB	0mm	Main	ON	141500	707.5	Speed	14.62	15.50	1.225	-0.05	0.716	0.877
	FR1 n12	15M	BPSK	36	22	Back	TB	0mm	Main	ON	141500	707.5	Speed	14.56	15.50	1.242	-0.18	0.642	0.797
	FR1 n12	15M	BPSK	75	0	Back	TB	0mm	Main	ON	141500	707.5	Speed	14.48	15.50	1.265	-0.04	0.708	0.895
	FR1 n12	15M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	141500	707.5	Speed	14.62	15.50	1.225	-0.18	0.052	0.064
	FR1 n12	15M	BPSK	36	22	Top Edge	TB	0mm	Main	ON	141500	707.5	Speed	14.56	15.50	1.242	0.1	0.050	0.062
	FR1 n12	15M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	141500	707.5	Speed	14.62	15.50	1.225	0.12	0.927	1.135
	FR1 n12	15M	BPSK	36	22	Right Edge	TB	0mm	Main	ON	141500	707.5	Speed	14.56	15.50	1.242	-0.17	0.831	1.032
	FR1 n12	15M	BPSK	75	0	Right Edge	TB	0mm	Main	ON	141500	707.5	Speed	14.48	15.50	1.265	-0.04	0.892	1.128
	FR1 n12	15M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	141500	707.5	Speed	24.30	25.00	1.175	-0.17	0.064	0.075
	FR1 n12	15M	BPSK	36	22	Bottom Side	NB	33mm	Main	OFF	141500	707.5	Speed	24.16	25.00	1.213	-0.03	0.059	0.072
	FR1 n12	15M	BPSK	1	1	Back	TB	44mm	Main	OFF	141500	707.5	Speed	24.30	25.00	1.175	0	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Back	TB	44mm	Main	OFF	141500	707.5	Speed	24.16	25.00	1.213	0	0.001	0.001
	FR1 n12	15M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	141500	707.5	Speed	24.30	25.00	1.175	0	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Top Edge	TB	29mm	Main	OFF	141500	707.5	Speed	24.16	25.00	1.213	0	0.001	0.001



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n12	15M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	141500	707.5	Speed	24.30	25.00	1.175	0.17	0.108	0.127
	FR1 n12	15M	BPSK	36	22	Right Edge	TB	18mm	Main	OFF	141500	707.5	Speed	24.16	25.00	1.213	-0.05	0.094	0.114
18	FR1 n12	15M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	141500	707.5	SAA	14.62	15.50	1.225	0.13	0.966	1.183
	FR1 n13	10M	BPSK	1	26	Bottom Side	NB	0mm	Main	ON	156400	782	Speed	18.20	18.50	1.072	0.01	0.478	0.512
	FR1 n13	10M	BPSK	25	14	Bottom Side	NB	0mm	Main	ON	156400	782	Speed	18.14	18.50	1.086	0.1	0.425	0.462
	FR1 n13	10M	BPSK	1	26	Back	TB	0mm	Main	ON	156400	782	Speed	18.20	18.50	1.072	-0.1	0.995	1.066
	FR1 n13	10M	BPSK	25	14	Back	TB	0mm	Main	ON	156400	782	Speed	18.14	18.50	1.086	-0.08	0.884	0.960
	FR1 n13	10M	BPSK	50	0	Back	TB	0mm	Main	ON	156400	782	Speed	18.05	18.50	1.109	0	0.981	1.088
	FR1 n13	10M	BPSK	1	26	Top Edge	TB	0mm	Main	ON	156400	782	Speed	18.20	18.50	1.072	0.05	0.254	0.272
	FR1 n13	10M	BPSK	25	14	Top Edge	TB	0mm	Main	ON	156400	782	Speed	18.14	18.50	1.086	0.06	0.244	0.265
19	FR1 n13	10M	BPSK	1	26	Right Edge	TB	0mm	Main	ON	156400	782	Speed	18.20	18.50	1.072	-0.03	1.050	1.125
	FR1 n13	10M	BPSK	25	14	Right Edge	TB	0mm	Main	ON	156400	782	Speed	18.14	18.50	1.086	-0.05	0.933	1.014
	FR1 n13	10M	BPSK	50	0	Right Edge	TB	0mm	Main	ON	156400	782	Speed	18.05	18.50	1.109	0	0.999	1.108
	FR1 n13	10M	BPSK	1	26	Bottom Side	NB	33mm	Main	OFF	156400	782	Speed	24.00	25.00	1.259	-0.08	0.115	0.145
	FR1 n13	10M	BPSK	25	14	Bottom Side	NB	33mm	Main	OFF	156400	782	Speed	23.87	25.00	1.297	0.13	0.112	0.145
	FR1 n13	10M	BPSK	1	26	Back	TB	44mm	Main	OFF	156400	782	Speed	24.00	25.00	1.259	0	0.001	0.001
	FR1 n13	10M	BPSK	25	14	Back	TB	44mm	Main	OFF	156400	782	Speed	23.87	25.00	1.297	0	0.001	0.001
	FR1 n13	10M	BPSK	1	26	Top Edge	TB	29mm	Main	OFF	156400	782	Speed	24.00	25.00	1.259	0	0.001	0.001
	FR1 n13	10M	BPSK	25	14	Top Edge	TB	29mm	Main	OFF	156400	782	Speed	23.87	25.00	1.297	0	0.001	0.001
	FR1 n13	10M	BPSK	1	26	Right Edge	TB	18mm	Main	OFF	156400	782	Speed	24.00	25.00	1.259	0.18	0.127	0.160
	FR1 n13	10M	BPSK	25	14	Right Edge	TB	18mm	Main	OFF	156400	782	Speed	23.87	25.00	1.297	-0.1	0.092	0.119
	FR1 n13	10M	BPSK	1	26	Right Edge	TB	0mm	Main	ON	156400	782	SAA	18.20	18.50	1.072	0.01	0.989	1.060
	FR1 n14	10M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	158600	793	Speed	18.19	18.50	1.074	-0.15	0.419	0.450
	FR1 n14	10M	BPSK	25	14	Bottom Side	NB	0mm	Main	ON	158600	793	Speed	18.18	18.50	1.076	0.19	0.396	0.426
20	FR1 n14	10M	BPSK	1	1	Back	TB	0mm	Main	ON	158600	793	Speed	18.19	18.50	1.074	0.02	1.030	1.106
	FR1 n14	10M	BPSK	25	14	Back	TB	0mm	Main	ON	158600	793	Speed	18.18	18.50	1.076	-0.15	0.958	1.031
	FR1 n14	10M	BPSK	50	0	Back	TB	0mm	Main	ON	158600	793	Speed	18.10	18.50	1.096	-0.01	0.905	0.992
	FR1 n14	10M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	158600	793	Speed	18.19	18.50	1.074	-0.15	0.424	0.455
	FR1 n14	10M	BPSK	25	14	Top Edge	TB	0mm	Main	ON	158600	793	Speed	18.18	18.50	1.076	0.11	0.389	0.419
	FR1 n14	10M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	158600	793	Speed	18.19	18.50	1.074	-0.06	0.951	1.021
	FR1 n14	10M	BPSK	25	14	Right Edge	TB	0mm	Main	ON	158600	793	Speed	18.18	18.50	1.076	-0.13	0.872	0.939
	FR1 n14	10M	BPSK	50	0	Right Edge	TB	0mm	Main	ON	158600	793	Speed	18.10	18.50	1.096	-0.01	0.857	0.940
	FR1 n14	10M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	158600	793	Speed	24.00	25.00	1.259	-0.17	0.085	0.107
	FR1 n14	10M	BPSK	25	14	Bottom Side	NB	33mm	Main	OFF	158600	793	Speed	23.90	25.00	1.288	0	0.076	0.098
	FR1 n14	10M	BPSK	1	1	Back	TB	44mm	Main	OFF	158600	793	Speed	24.00	25.00	1.259	0	0.001	0.001
	FR1 n14	10M	BPSK	25	14	Back	TB	44mm	Main	OFF	158600	793	Speed	23.90	25.00	1.288	0	0.001	0.001
	FR1 n14	10M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	158600	793	Speed	24.00	25.00	1.259	0	0.001	0.001
	FR1 n14	10M	BPSK	25	14	Top Edge	TB	29mm	Main	OFF	158600	793	Speed	23.90	25.00	1.288	0	0.001	0.001
	FR1 n14	10M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	158600	793	Speed	24.00	25.00	1.259	-0.13	0.195	0.245
	FR1 n14	10M	BPSK	25	14	Right Edge	TB	18mm	Main	OFF	158600	793	Speed	23.90	25.00	1.288	-0.13	0.145	0.187
	FR1 n14	10M	BPSK	1	1	Back	TB	0mm	Main	ON	158600	793	SAA	18.19	18.50	1.074	0.06	1.000	1.074
	FR1 n25	40M	BPSK	1	108	Bottom Side	NB	0mm	Main	ON	376500	1882.5	Speed	14.65	15.00	1.084	0.08	0.363	0.393
	FR1 n25	40M	BPSK	108	0	Bottom Side	NB	0mm	Main	ON	376500	1882.5	Speed	14.63	15.00	1.089	0.01	0.325	0.354
	FR1 n25	40M	BPSK	1	108	Back	TB	0mm	Main	ON	376500	1882.5	Speed	14.65	15.00	1.084	-0.08	0.952	1.032
	FR1 n25	40M	BPSK	108	0	Back	TB	0mm	Main	ON	376500	1882.5	Speed	14.63	15.00	1.089	0.1	0.866	0.943
	FR1 n25	40M	BPSK	216	0	Back	TB	0mm	Main	ON	376500	1882.5	Speed	14.58	15.00	1.102	-0.18	0.824	0.908
	FR1 n25	40M	BPSK	1	108	Top Edge	TB	0mm	Main	ON	376500	1882.5	Speed	14.65	15.00	1.084	0.1	0.317	0.344
	FR1 n25	40M	BPSK	108	0	Top Edge	TB	0mm	Main	ON	376500	1882.5	Speed	14.63	15.00	1.089	0.12	0.294	0.320
	FR1 n25	40M	BPSK	1	108	Right Edge	TB	0mm	Main	ON	376500	1882.5	Speed	14.65	15.00	1.084	0.08	0.358	0.388
	FR1 n25	40M	BPSK	108	0	Right Edge	TB	0mm	Main	ON	376500	1882.5	Speed	14.63	15.00	1.089	-0.17	0.340	0.370
	FR1 n25	40M	BPSK	1	108	Bottom Side	NB	33mm	Main	OFF	376500	1882.5	Speed	24.03	25.00	1.250	-0.08	0.129	0.161
	FR1 n25	40M	BPSK	108	54	Bottom Side	NB	33mm	Main	OFF	376500	1882.5	Speed	23.93	25.00	1.279	-0.04	0.111	0.142
	FR1 n25	40M	BPSK	1	108	Back	TB	44mm	Main	OFF	376500	1882.5	Speed	24.03	25.00	1.250	0.18	0.100	0.125
	FR1 n25	40M	BPSK	108	54	Back	TB	44mm	Main	OFF	376500	1882.5	Speed	23.93	25.00	1.279	-0.04	0.082	0.105
	FR1 n25	40M	BPSK	1	108	Top Edge	TB	29mm	Main	OFF	376500	1882.5	Speed	24.03	25.00	1.250	-0.08	0.227	0.284
	FR1 n25	40M	BPSK	108	54	Top Edge	TB	29mm	Main	OFF	376500	1882.5	Speed	23.93	25.00	1.279	-0.13	0.183	0.234



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n25	40M	BPSK	1	108	Right Edge	TB	18mm	Main	OFF	376500	1882.5	Speed	24.03	25.00	1.250	-0.13	0.068	0.085
	FR1 n25	40M	BPSK	108	54	Right Edge	TB	18mm	Main	OFF	376500	1882.5	Speed	23.93	25.00	1.279	0.06	0.047	0.060
	FR1 n25	40M	BPSK	1	108	Back	TB	0mm	Main	ON	376500	1882.5	SAA	14.65	15.00	1.084	0.03	1.050	1.138
	FR1 n25	40M	BPSK	1	108	Bottom Side	NB	0mm	MIMO2	ON	376500	1882.5	Speed	11.55	12.50	1.245	0.08	0.205	0.255
	FR1 n25	40M	BPSK	108	54	Bottom Side	NB	0mm	MIMO2	ON	376500	1882.5	Speed	11.48	12.50	1.265	0.01	0.191	0.242
	FR1 n25	40M	BPSK	1	108	Back	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.55	12.50	1.245	0	0.741	0.922
	FR1 n25	40M	BPSK	108	54	Back	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.48	12.50	1.265	0.1	0.665	0.841
	FR1 n25	40M	BPSK	216	0	Back	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.49	12.50	1.262	-0.18	0.697	0.879
	FR1 n25	40M	BPSK	1	108	Top Edge	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.55	12.50	1.245	0.1	0.017	0.021
	FR1 n25	40M	BPSK	108	54	Top Edge	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.48	12.50	1.265	0.12	0.015	0.019
	FR1 n25	40M	BPSK	1	108	Left Edge	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.55	12.50	1.245	-0.02	0.759	0.945
	FR1 n25	40M	BPSK	108	54	Left Edge	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.48	12.50	1.265	-0.17	0.681	0.861
	FR1 n25	40M	BPSK	216	0	Left Edge	TB	0mm	MIMO2	ON	376500	1882.5	Speed	11.49	12.50	1.262	-0.03	0.714	0.901
	FR1 n25	40M	BPSK	1	108	Bottom Side	NB	20mm	MIMO2	OFF	376500	1882.5	Speed	22.95	24.00	1.274	0.14	0.208	0.265
	FR1 n25	40M	BPSK	108	54	Bottom Side	NB	20mm	MIMO2	OFF	376500	1882.5	Speed	22.92	24.00	1.282	0.11	0.175	0.224
	FR1 n25	40M	BPSK	1	108	Back	TB	19mm	MIMO2	OFF	376500	1882.5	Speed	22.95	24.00	1.274	0.14	0.292	0.372
	FR1 n25	40M	BPSK	108	54	Back	TB	19mm	MIMO2	OFF	376500	1882.5	Speed	22.92	24.00	1.282	-0.17	0.257	0.330
	FR1 n25	40M	BPSK	1	108	Top Edge	TB	29mm	MIMO2	OFF	376500	1882.5	Speed	22.95	24.00	1.274	0	0.001	0.001
	FR1 n25	40M	BPSK	108	54	Top Edge	TB	29mm	MIMO2	OFF	376500	1882.5	Speed	22.92	24.00	1.282	0	0.001	0.001
	FR1 n25	40M	BPSK	1	108	Left Edge	TB	22mm	MIMO2	OFF	376500	1882.5	Speed	22.95	24.00	1.274	0.01	0.197	0.251
	FR1 n25	40M	BPSK	108	54	Left Edge	TB	22mm	MIMO2	OFF	376500	1882.5	Speed	22.92	24.00	1.282	0.1	0.152	0.195
21	FR1 n25	40M	BPSK	1	108	Left Edge	TB	0mm	MIMO2	ON	376500	1882.5	SAA	11.55	12.50	1.245	0.01	0.930	1.157
	FR1 n26	20M	BPSK	1	104	Bottom Side	NB	0mm	Main	ON	166300	831.5	Speed	16.99	18.00	1.262	-0.03	0.262	0.331
	FR1 n26	20M	BPSK	50	28	Bottom Side	NB	0mm	Main	ON	166300	831.5	Speed	16.92	18.00	1.282	-0.03	0.243	0.312
22	FR1 n26	20M	BPSK	1	104	Back	TB	0mm	Main	ON	166300	831.5	Speed	16.99	18.00	1.262	0.01	0.943	1.190
	FR1 n26	20M	BPSK	50	28	Back	TB	0mm	Main	ON	166300	831.5	Speed	16.92	18.00	1.282	0.08	0.873	1.119
	FR1 n26	20M	BPSK	100	0	Back	TB	0mm	Main	ON	166300	831.5	Speed	16.88	18.00	1.294	-0.07	0.853	1.104
	FR1 n26	20M	BPSK	1	104	Top Edge	TB	0mm	Main	ON	166300	831.5	Speed	16.99	18.00	1.262	0.05	0.153	0.193
	FR1 n26	20M	BPSK	50	28	Top Edge	TB	0mm	Main	ON	166300	831.5	Speed	16.92	18.00	1.282	-0.11	0.142	0.182
	FR1 n26	20M	BPSK	1	104	Right Edge	TB	0mm	Main	ON	166300	831.5	Speed	16.99	18.00	1.262	-0.12	0.831	1.049
	FR1 n26	20M	BPSK	50	28	Right Edge	TB	0mm	Main	ON	166300	831.5	Speed	16.92	18.00	1.282	0.03	0.769	0.986
	FR1 n26	20M	BPSK	100	0	Right Edge	TB	0mm	Main	ON	166300	831.5	Speed	16.88	18.00	1.294	-0.07	0.752	0.973
	FR1 n26	20M	BPSK	1	104	Bottom Side	NB	33mm	Main	OFF	166300	831.5	Speed	24.27	25.00	1.183	-0.16	0.079	0.093
	FR1 n26	20M	BPSK	50	28	Bottom Side	NB	33mm	Main	OFF	166300	831.5	Speed	23.57	25.00	1.390	-0.02	0.058	0.081
	FR1 n26	20M	BPSK	1	104	Back	TB	44mm	Main	OFF	166300	831.5	Speed	24.27	25.00	1.183	0	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Back	TB	44mm	Main	OFF	166300	831.5	Speed	23.57	25.00	1.390	0	0.001	0.001
	FR1 n26	20M	BPSK	1	104	Top Edge	TB	29mm	Main	OFF	166300	831.5	Speed	24.27	25.00	1.183	0	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Top Edge	TB	29mm	Main	OFF	166300	831.5	Speed	23.57	25.00	1.390	0	0.001	0.001
	FR1 n26	20M	BPSK	1	104	Right Edge	TB	18mm	Main	OFF	166300	831.5	Speed	24.27	25.00	1.183	-0.08	0.091	0.108
	FR1 n26	20M	BPSK	50	28	Right Edge	TB	18mm	Main	OFF	166300	831.5	Speed	23.57	25.00	1.390	0.16	0.074	0.103
	FR1 n26	20M	BPSK	1	104	Back	TB	0mm	Main	ON	166300	831.5	SAA	16.99	18.00	1.262	0.05	0.929	1.172
	FR1 n30	10M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	462000	2310	Speed	12.14	13.00	1.219	0.08	0.218	0.266
	FR1 n30	10M	BPSK	25	14	Bottom Side	NB	0mm	Main	ON	462000	2310	Speed	12.13	13.00	1.222	0.01	0.209	0.255
	FR1 n30	10M	BPSK	1	1	Back	TB	0mm	Main	ON	462000	2310	Speed	12.14	13.00	1.219	-0.01	0.890	1.085
	FR1 n30	10M	BPSK	25	14	Back	TB	0mm	Main	ON	462000	2310	Speed	12.13	13.00	1.222	-0.08	0.853	1.042
23	FR1 n30	10M	BPSK	50	0	Back	TB	0mm	Main	ON	462000	2310	Speed	12.04	13.00	1.247	0.04	0.873	1.089
	FR1 n30	10M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	462000	2310	Speed	12.14	13.00	1.219	0.1	0.202	0.246
	FR1 n30	10M	BPSK	25	14	Top Edge	TB	0mm	Main	ON	462000	2310	Speed	12.13	13.00	1.222	-0.18	0.194	0.237
	FR1 n30	10M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	462000	2310	Speed	12.14	13.00	1.219	0.1	0.379	0.462
	FR1 n30	10M	BPSK	25	14	Right Edge	TB	0mm	Main	ON	462000	2310	Speed	12.13	13.00	1.222	0.12	0.363	0.444
	FR1 n30	10M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	462000	2310	Speed	21.71	23.00	1.346	0.08	0.072	0.097
	FR1 n30	10M	BPSK	25	14	Bottom Side	NB	33mm	Main	OFF	462000	2310	Speed	21.60	23.00	1.380	-0.17	0.056	0.077
	FR1 n30	10M	BPSK	1	1	Back	TB	44mm	Main	OFF	462000	2310	Speed	21.71	23.00	1.346	0.11	0.068	0.092
	FR1 n30	10M	BPSK	25	14	Back	TB	44mm	Main	OFF	462000	2310	Speed	21.60	23.00	1.380	-0.05	0.051	0.070
	FR1 n30	10M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	462000	2310	Speed	21.71	23.00	1.346	0.18	0.141	0.190
	FR1 n30	10M	BPSK	25	14	Top Edge	TB	29mm	Main	OFF	462000	2310	Speed	21.60	23.00	1.380	0.14	0.106	0.146



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n30	10M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	462000	2310	Speed	21.71	23.00	1.346	-0.17	0.211	0.284
	FR1 n30	10M	BPSK	25	14	Right Edge	TB	18mm	Main	OFF	462000	2310	Speed	21.60	23.00	1.380	0.17	0.166	0.229
	FR1 n30	10M	BPSK	50	0	Back	TB	0mm	Main	ON	462000	2310	SAA	12.04	13.00	1.247	-0.05	0.821	1.024
	FR1 n30	10M	BPSK	1	1	Bottom Side	NB	0mm	MIMO2	ON	462000	2310	Speed	9.73	10.00	1.064	0.1	0.109	0.116
	FR1 n30	10M	BPSK	25	14	Bottom Side	NB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	0.12	0.128	0.139
	FR1 n30	10M	BPSK	1	1	Back	TB	0mm	MIMO2	ON	462000	2310	Speed	9.73	10.00	1.064	0.08	1.020	1.085
	FR1 n30	10M	BPSK	25	14	Back	TB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	-0.02	0.976	1.063
	FR1 n30	10M	BPSK	50	0	Back	TB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	-0.03	0.861	0.938
	FR1 n30	10M	BPSK	1	1	Top Edge	TB	0mm	MIMO2	ON	462000	2310	Speed	9.73	10.00	1.064	-0.05	0.016	0.017
	FR1 n30	10M	BPSK	25	14	Top Edge	TB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	0.01	0.014	0.015
	FR1 n30	10M	BPSK	1	1	Left Edge	TB	0mm	MIMO2	ON	462000	2310	Speed	9.73	10.00	1.064	-0.08	0.702	0.747
	FR1 n30	10M	BPSK	25	14	Left Edge	TB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	-0.03	0.833	0.907
	FR1 n30	10M	BPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	462000	2310	Speed	9.63	10.00	1.089	0.14	0.681	0.742
	FR1 n30	10M	BPSK	1	1	Bottom Side	NB	20mm	MIMO2	OFF	462000	2310	Speed	21.66	23.00	1.361	0.11	0.179	0.244
	FR1 n30	10M	BPSK	25	14	Bottom Side	NB	20mm	MIMO2	OFF	462000	2310	Speed	21.49	23.00	1.416	-0.05	0.143	0.202
	FR1 n30	10M	BPSK	1	1	Back	TB	19mm	MIMO2	OFF	462000	2310	Speed	21.66	23.00	1.361	-0.17	0.383	0.521
	FR1 n30	10M	BPSK	25	14	Back	TB	19mm	MIMO2	OFF	462000	2310	Speed	21.49	23.00	1.416	0.17	0.297	0.420
	FR1 n30	10M	BPSK	1	1	Top Edge	TB	29mm	MIMO2	OFF	462000	2310	Speed	21.66	23.00	1.361	-0.05	0.001	0.001
	FR1 n30	10M	BPSK	25	14	Top Edge	TB	29mm	MIMO2	OFF	462000	2310	Speed	21.49	23.00	1.416	0.01	0.001	0.001
	FR1 n30	10M	BPSK	1	1	Left Edge	TB	22mm	MIMO2	OFF	462000	2310	Speed	21.66	23.00	1.361	0.1	0.290	0.395
	FR1 n30	10M	BPSK	25	14	Left Edge	TB	22mm	MIMO2	OFF	462000	2310	Speed	21.49	23.00	1.416	-0.17	0.241	0.341
	FR1 n30	10M	BPSK	1	1	Back	TB	0mm	MIMO2	ON	462000	2310	SAA	9.73	10.00	1.064	0.04	1.000	1.064
	FR1 n66	40M	BPSK	1	214	Bottom Side	NB	0mm	Main	ON	349000	1745	Speed	13.45	14.50	1.274	0.08	0.316	0.402
	FR1 n66	40M	BPSK	108	54	Bottom Side	NB	0mm	Main	ON	349000	1745	Speed	13.43	14.50	1.279	0.01	0.300	0.384
24	FR1 n66	40M	BPSK	1	214	Back	TB	0mm	Main	ON	349000	1745	Speed	13.45	14.50	1.274	0.06	0.927	1.181
	FR1 n66	40M	BPSK	108	54	Back	TB	0mm	Main	ON	349000	1745	Speed	13.43	14.50	1.279	-0.08	0.854	1.093
	FR1 n66	40M	BPSK	216	0	Back	TB	0mm	Main	ON	349000	1745	Speed	13.40	14.50	1.288	0.1	0.879	1.132
	FR1 n66	40M	BPSK	1	214	Top Edge	TB	0mm	Main	ON	349000	1745	Speed	13.45	14.50	1.274	-0.18	0.345	0.439
	FR1 n66	40M	BPSK	108	54	Top Edge	TB	0mm	Main	ON	349000	1745	Speed	13.43	14.50	1.279	0.1	0.328	0.420
	FR1 n66	40M	BPSK	1	214	Right Edge	TB	0mm	Main	ON	349000	1745	Speed	13.45	14.50	1.274	0.12	0.429	0.546
	FR1 n66	40M	BPSK	108	54	Right Edge	TB	0mm	Main	ON	349000	1745	Speed	13.43	14.50	1.279	0.08	0.397	0.508
	FR1 n66	40M	BPSK	1	214	Bottom Side	NB	33mm	Main	OFF	349000	1745	Speed	24.10	25.00	1.230	-0.17	0.188	0.231
	FR1 n66	40M	BPSK	108	54	Bottom Side	NB	33mm	Main	OFF	349000	1745	Speed	24.06	25.00	1.242	-0.03	0.147	0.183
	FR1 n66	40M	BPSK	1	214	Back	TB	44mm	Main	OFF	349000	1745	Speed	24.10	25.00	1.230	-0.05	0.116	0.143
	FR1 n66	40M	BPSK	108	54	Back	TB	44mm	Main	OFF	349000	1745	Speed	24.06	25.00	1.242	0.18	0.094	0.117
	FR1 n66	40M	BPSK	1	214	Top Edge	TB	29mm	Main	OFF	349000	1745	Speed	24.10	25.00	1.230	0.14	0.260	0.320
	FR1 n66	40M	BPSK	108	54	Top Edge	TB	29mm	Main	OFF	349000	1745	Speed	24.06	25.00	1.242	-0.17	0.199	0.247
	FR1 n66	40M	BPSK	1	214	Right Edge	TB	18mm	Main	OFF	349000	1745	Speed	24.10	25.00	1.230	0.17	0.106	0.130
	FR1 n66	40M	BPSK	108	54	Right Edge	TB	18mm	Main	OFF	349000	1745	Speed	24.06	25.00	1.242	-0.05	0.084	0.104
	FR1 n66	40M	BPSK	1	214	Back	TB	0mm	Main	ON	349000	1745	SAA	13.45	14.50	1.274	0.01	0.836	1.065
	FR1 n66	40M	BPSK	1	1	Bottom Side	NB	0mm	MIMO2	ON	349000	1745	Speed	13.04	13.50	1.112	0.1	0.325	0.361
	FR1 n66	40M	BPSK	108	54	Bottom Side	NB	0mm	MIMO2	ON	349000	1745	Speed	13.03	13.50	1.114	-0.17	0.292	0.325
	FR1 n66	40M	BPSK	1	1	Back	TB	0mm	MIMO2	ON	349000	1745	Speed	13.04	13.50	1.112	0.01	0.920	1.023
	FR1 n66	40M	BPSK	108	54	Back	TB	0mm	MIMO2	ON	349000	1745	Speed	13.03	13.50	1.114	-0.08	0.833	0.928
	FR1 n66	40M	BPSK	216	0	Back	TB	0mm	MIMO2	ON	349000	1745	Speed	12.97	13.50	1.130	0.05	0.866	0.978
	FR1 n66	40M	BPSK	1	1	Top Edge	TB	0mm	MIMO2	ON	349000	1745	Speed	13.04	13.50	1.112	0.06	0.016	0.018
	FR1 n66	40M	BPSK	108	54	Top Edge	TB	0mm	MIMO2	ON	349000	1745	Speed	13.03	13.50	1.114	-0.09	0.014	0.016
	FR1 n66	40M	BPSK	1	1	Left Edge	TB	0mm	MIMO2	ON	349000	1745	Speed	13.04	13.50	1.112	0.1	0.979	1.088
	FR1 n66	40M	BPSK	108	54	Left Edge	TB	0mm	MIMO2	ON	349000	1745	Speed	13.03	13.50	1.114	-0.08	0.886	0.987
	FR1 n66	40M	BPSK	216	0	Left Edge	TB	0mm	MIMO2	ON	349000	1745	Speed	12.97	13.50	1.130	0.13	0.921	1.041
	FR1 n66	40M	BPSK	1	1	Bottom Side	NB	20mm	MIMO2	OFF	349000	1745	Speed	23.00	24.00	1.259	0.12	0.242	0.305
	FR1 n66	40M	BPSK	108	54	Bottom Side	NB	20mm	MIMO2	OFF	349000	1745	Speed	22.93	24.00	1.279	0.03	0.221	0.283
	FR1 n66	40M	BPSK	1	1	Back	TB	19mm	MIMO2	OFF	349000	1745	Speed	23.00	24.00	1.259	-0.1	0.351	0.442
	FR1 n66	40M	BPSK	108	54	Back	TB	19mm	MIMO2	OFF	349000	1745	Speed	22.93	24.00	1.279	0.07	0.330	0.422
	FR1 n66	40M	BPSK	1	1	Top Edge	TB	29mm	MIMO2	OFF	349000	1745	Speed	23.00	24.00	1.259	0	0.001	0.001
	FR1 n66	40M	BPSK	108	54	Top Edge	TB	29mm	MIMO2	OFF	349000	1745	Speed	22.93	24.00	1.279	0	0.001	0.001



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n66	40M	BPSK	1	1	Left Edge	TB	22mm	MIMO2	OFF	349000	1745	Speed	23.00	24.00	1.259	0.01	0.197	0.248
	FR1 n66	40M	BPSK	108	54	Left Edge	TB	22mm	MIMO2	OFF	349000	1745	Speed	22.93	24.00	1.279	-0.15	0.188	0.241
	FR1 n66	40M	BPSK	1	1	Left Edge	TB	0mm	MIMO2	ON	349000	1745	SAA	13.04	13.50	1.112	-0.06	0.920	1.023
	FR1 n71	20M	BPSK	1	53	Bottom Side	NB	0mm	Main	ON	136100	680.5	Speed	15.03	15.50	1.114	0.08	0.149	0.166
	FR1 n71	20M	BPSK	50	28	Bottom Side	NB	0mm	Main	ON	136100	680.5	Speed	15.02	15.50	1.117	0.01	0.145	0.162
	FR1 n71	20M	BPSK	1	53	Back	TB	0mm	Main	ON	136100	680.5	Speed	15.03	15.50	1.114	-0.08	0.665	0.741
	FR1 n71	20M	BPSK	50	28	Back	TB	0mm	Main	ON	136100	680.5	Speed	15.02	15.50	1.117	0.1	0.657	0.734
	FR1 n71	20M	BPSK	1	53	Top Edge	TB	0mm	Main	ON	136100	680.5	Speed	15.03	15.50	1.114	0.1	0.083	0.092
	FR1 n71	20M	BPSK	50	28	Top Edge	TB	0mm	Main	ON	136100	680.5	Speed	15.02	15.50	1.117	0.12	0.082	0.092
25	FR1 n71	20M	BPSK	1	53	Right Edge	TB	0mm	Main	ON	136100	680.5	Speed	15.03	15.50	1.114	0.02	0.986	1.099
	FR1 n71	20M	BPSK	50	28	Right Edge	TB	0mm	Main	ON	136100	680.5	Speed	15.02	15.50	1.117	0.08	0.975	1.089
	FR1 n71	20M	BPSK	100	0	Right Edge	TB	0mm	Main	ON	136100	680.5	Speed	14.90	15.50	1.148	-0.1	0.913	1.048
	FR1 n71	20M	BPSK	1	53	Bottom Side	NB	33mm	Main	OFF	136100	680.5	Speed	24.67	25.00	1.079	0.08	0.074	0.080
	FR1 n71	20M	BPSK	50	28	Bottom Side	NB	33mm	Main	OFF	136100	680.5	Speed	24.60	25.00	1.096	0.01	0.060	0.066
	FR1 n71	20M	BPSK	1	53	Back	TB	44mm	Main	OFF	136100	680.5	Speed	24.67	25.00	1.079	0	0.001	0.001
	FR1 n71	20M	BPSK	50	28	Back	TB	44mm	Main	OFF	136100	680.5	Speed	24.60	25.00	1.096	0	0.001	0.001
	FR1 n71	20M	BPSK	1	53	Top Edge	TB	29mm	Main	OFF	136100	680.5	Speed	24.67	25.00	1.079	0	0.001	0.001
	FR1 n71	20M	BPSK	50	28	Top Edge	TB	29mm	Main	OFF	136100	680.5	Speed	24.60	25.00	1.096	0	0.001	0.001
	FR1 n71	20M	BPSK	1	53	Right Edge	TB	18mm	Main	OFF	136100	680.5	Speed	24.67	25.00	1.079	0.03	0.114	0.123
	FR1 n71	20M	BPSK	50	28	Right Edge	TB	18mm	Main	OFF	136100	680.5	Speed	24.60	25.00	1.096	-0.08	0.095	0.104
	FR1 n71	20M	BPSK	1	53	Right Edge	TB	0mm	Main	ON	136100	680.5	SAA	15.03	15.50	1.114	-0.03	0.964	1.074
	FR1 n41	100M	BPSK	1	271	Bottom Side	NB	0mm	Main	ON	518598	2592.99	Speed	12.50	13.00	1.122	0.08	0.290	0.325
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	0mm	Main	ON	518598	2592.99	Speed	12.40	13.00	1.148	0.01	0.354	0.406
	FR1 n41	100M	BPSK	1	271	Back	TB	0mm	Main	ON	518598	2592.99	Speed	12.50	13.00	1.122	0.02	0.963	1.081
	FR1 n41	100M	BPSK	135	69	Back	TB	0mm	Main	ON	518598	2592.99	Speed	12.40	13.00	1.148	0.12	0.879	1.009
	FR1 n41	100M	BPSK	270	0	Back	TB	0mm	Main	ON	518598	2592.99	Speed	12.41	13.00	1.146	-0.08	0.879	1.007
	FR1 n41	100M	BPSK	1	271	Top Edge	TB	0mm	Main	ON	518598	2592.99	Speed	12.50	13.00	1.122	0.1	0.207	0.232
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	0mm	Main	ON	518598	2592.99	Speed	12.40	13.00	1.148	-0.18	0.252	0.289
	FR1 n41	100M	BPSK	1	271	Right Edge	TB	0mm	Main	ON	518598	2592.99	Speed	12.50	13.00	1.122	0.1	0.046	0.052
	FR1 n41	100M	BPSK	135	69	Right Edge	TB	0mm	Main	ON	518598	2592.99	Speed	12.40	13.00	1.148	0.12	0.056	0.064
	FR1 n41	100M	BPSK	1	271	Bottom Side	NB	33mm	Main	OFF	518598	2592.99	Speed	23.48	25.00	1.419	0.08	0.061	0.087
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	33mm	Main	OFF	518598	2592.99	Speed	23.16	25.00	1.528	0.01	0.048	0.073
	FR1 n41	100M	BPSK	1	271	Back	TB	44mm	Main	OFF	518598	2592.99	Speed	23.48	25.00	1.419	-0.08	0.050	0.071
	FR1 n41	100M	BPSK	135	69	Back	TB	44mm	Main	OFF	518598	2592.99	Speed	23.16	25.00	1.528	0.1	0.043	0.066
	FR1 n41	100M	BPSK	1	271	Top Edge	TB	29mm	Main	OFF	518598	2592.99	Speed	23.48	25.00	1.419	-0.18	0.079	0.112
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	29mm	Main	OFF	518598	2592.99	Speed	23.16	25.00	1.528	0.1	0.063	0.096
	FR1 n41	100M	BPSK	1	271	Right Edge	TB	18mm	Main	OFF	518598	2592.99	Speed	23.48	25.00	1.419	0.12	0.057	0.081
	FR1 n41	100M	BPSK	135	69	Right Edge	TB	18mm	Main	OFF	518598	2592.99	Speed	23.16	25.00	1.528	0.08	0.047	0.072
	FR1 n41_HPUE	100M	BPSK	1	271	Back	TB	0mm	Main	ON	518598	2592.99	Speed	15.50	16.00	1.122	0.06	0.953	1.069
	FR1 n41	100M	BPSK	1	271	Back	TB	0mm	Main	ON	518598	2592.99	SAA	12.50	13.00	1.122	0.08	0.693	0.778
	FR1 n41	100M	BPSK	1	1	Bottom Side	NB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.45	9.50	1.274	0.08	0.109	0.139
	FR1 n41	100M	BPSK	135	0	Bottom Side	NB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.40	9.50	1.288	0.01	0.107	0.138
	FR1 n41	100M	BPSK	1	1	Back	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.45	9.50	1.274	-0.08	0.702	0.894
	FR1 n41	100M	BPSK	135	0	Back	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.40	9.50	1.288	0.1	0.682	0.879
	FR1 n41	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.45	9.50	1.274	-0.07	0.857	1.091
	FR1 n41	100M	BPSK	135	0	Right Edge	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.40	9.50	1.288	0.12	0.844	1.087
	FR1 n41	100M	BPSK	270	0	Right Edge	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	8.34	9.50	1.306	0.08	0.806	1.053
	FR1 n41_HPUE	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	518598	2592.99	Speed	11.45	12.50	1.274	-0.09	0.838	1.067
	FR1 n41	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	518598	2592.99	SAA	8.45	9.50	1.274	0.1	0.801	1.020
	FR1 n41	100M	BPSK	1	271	Bottom Side	NB	0mm	MIMO2	ON	518598	2592.99	Speed	8.83	10.00	1.309	-0.17	0.115	0.151
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	-0.03	0.120	0.162
26	FR1 n41	100M	BPSK	1	271	Back	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.83	10.00	1.309	0.05	0.906	1.186
	FR1 n41	100M	BPSK	135	69	Back	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	0.01	0.798	1.079
	FR1 n41	100M	BPSK	270	0	Back	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	-0.05	0.859	1.161
	FR1 n41	100M	BPSK	1	271	Top Edge	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.83	10.00	1.309	0.18	0.012	0.016
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	0.14	0.012	0.016



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n41	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.83	10.00	1.309	-0.17	0.763	0.999
	FR1 n41	100M	BPSK	135	69	Left Edge	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	0.17	0.795	1.075
	FR1 n41	100M	BPSK	270	0	Left Edge	TB	0mm	MIMO2	ON	518598	2592.99	Speed	8.69	10.00	1.352	-0.05	0.743	1.005
	FR1 n41_HPUE	100M	BPSK	1	271	Back	TB	0mm	MIMO2	ON	518598	2592.99	Speed	11.81	12.50	1.172	-0.04	0.896	1.050
	FR1 n41	100M	BPSK	1	271	Bottom Side	NB	20mm	MIMO2	OFF	518598	2592.99	Speed	23.86	24.00	1.033	-0.08	0.107	0.111
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	20mm	MIMO2	OFF	518598	2592.99	Speed	23.71	24.00	1.069	-0.04	0.081	0.087
	FR1 n41	100M	BPSK	1	271	Back	TB	19mm	MIMO2	OFF	518598	2592.99	Speed	23.86	24.00	1.033	0.18	0.301	0.311
	FR1 n41	100M	BPSK	135	69	Back	TB	19mm	MIMO2	OFF	518598	2592.99	Speed	23.71	24.00	1.069	-0.04	0.238	0.254
	FR1 n41	100M	BPSK	1	271	Top Edge	TB	29mm	MIMO2	OFF	518598	2592.99	Speed	23.86	24.00	1.033	0	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	29mm	MIMO2	OFF	518598	2592.99	Speed	23.71	24.00	1.069	0	0.001	0.001
	FR1 n41	100M	BPSK	1	271	Left Edge	TB	22mm	MIMO2	OFF	518598	2592.99	Speed	23.86	24.00	1.033	-0.13	0.374	0.386
	FR1 n41	100M	BPSK	135	69	Left Edge	TB	22mm	MIMO2	OFF	518598	2592.99	Speed	23.71	24.00	1.069	0.06	0.311	0.332
	FR1 n41	100M	BPSK	1	271	Back	TB	0mm	MIMO2	ON	518598	2592.99	SAA	8.83	10.00	1.309	0.01	0.627	0.821
	FR1 n41	100M	BPSK	1	1	Bottom Side	NB	0mm	Aux	ON	518598	2592.99	Speed	10.44	12.00	1.432	-0.17	0.241	0.345
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	0mm	Aux	ON	518598	2592.99	Speed	10.42	12.00	1.439	0.04	0.214	0.308
	FR1 n41	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	518598	2592.99	Speed	10.44	12.00	1.432	-0.03	0.816	1.169
	FR1 n41	100M	BPSK	135	69	Back	TB	0mm	Aux	ON	518598	2592.99	Speed	10.42	12.00	1.439	-0.02	0.674	0.970
	FR1 n41	100M	BPSK	270	0	Back	TB	0mm	Aux	ON	518598	2592.99	Speed	10.35	12.00	1.462	-0.05	0.686	1.003
	FR1 n41	100M	BPSK	1	1	Top Edge	TB	0mm	Aux	ON	518598	2592.99	Speed	10.44	12.00	1.432	0.05	0.138	0.198
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	0mm	Aux	ON	518598	2592.99	Speed	10.42	12.00	1.439	0.06	0.123	0.177
	FR1 n41	100M	BPSK	1	1	Left Edge	TB	0mm	Aux	ON	518598	2592.99	Speed	10.44	12.00	1.432	-0.09	0.048	0.069
	FR1 n41	100M	BPSK	135	69	Left Edge	TB	0mm	Aux	ON	518598	2592.99	Speed	10.42	12.00	1.439	-0.08	0.042	0.060
	FR1 n41	100M	BPSK	1	1	Bottom Side	NB	43mm	Aux	OFF	518598	2592.99	Speed	23.41	25.00	1.442	0.13	0.147	0.212
	FR1 n41	100M	BPSK	135	69	Bottom Side	NB	43mm	Aux	OFF	518598	2592.99	Speed	23.33	25.00	1.469	0.12	0.133	0.195
	FR1 n41	100M	BPSK	1	1	Back	TB	47mm	Aux	OFF	518598	2592.99	Speed	23.41	25.00	1.442	0.16	0.150	0.216
	FR1 n41	100M	BPSK	135	69	Back	TB	47mm	Aux	OFF	518598	2592.99	Speed	23.33	25.00	1.469	-0.1	0.136	0.200
	FR1 n41	100M	BPSK	1	1	Top Edge	TB	29mm	Aux	OFF	518598	2592.99	Speed	23.41	25.00	1.442	0.07	0.207	0.299
	FR1 n41	100M	BPSK	135	69	Top Edge	TB	29mm	Aux	OFF	518598	2592.99	Speed	23.33	25.00	1.469	0.18	0.136	0.200
	FR1 n41	100M	BPSK	1	1	Left Edge	TB	17mm	Aux	OFF	518598	2592.99	Speed	23.41	25.00	1.442	-0.1	0.133	0.192
	FR1 n41	100M	BPSK	1	1	Left Edge	TB	17mm	Aux	OFF	518598	2592.99	Speed	23.41	25.00	1.442	0.01	0.126	0.182
	FR1 n41_HPUE	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	518598	2592.99	Speed	13.53	15.00	1.403	-0.13	0.812	1.139
	FR1 n41	100M	BPSK	1	1	Back	TB	0mm	Aux	OFF	518598	2592.99	SAA	10.44	12.00	1.432	0.19	0.745	1.067
	FR1 n48	40M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	641666	3624.99	Speed	10.17	10.50	1.079	0.14	0.189	0.204
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	0mm	Main	ON	641666	3624.99	Speed	10.16	10.50	1.081	-0.17	0.198	0.214
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	641666	3624.99	Speed	10.17	10.50	1.079	0.01	0.659	0.711
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	638000	3570.00	Speed	9.93	10.50	1.140	0.01	0.946	1.079
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	645332	3679.98	Speed	10.08	10.50	1.102	0.1	0.614	0.676
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Main	ON	641666	3624.99	Speed	10.16	10.50	1.081	-0.17	0.594	0.642
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Main	ON	638000	3570	Speed	9.88	10.50	1.153	0.04	0.678	0.782
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Main	ON	645332	3679.98	Speed	10.06	10.50	1.107	-0.01	0.625	0.692
	FR1 n48	40M	BPSK	100	0	Back	TB	0mm	Main	ON	641666	3624.99	Speed	10.13	10.50	1.089	-0.08	0.602	0.656
	FR1 n48	40M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	641666	3624.99	Speed	10.17	10.50	1.079	0.05	0.178	0.192
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	0mm	Main	ON	641666	3624.99	Speed	10.16	10.50	1.081	0.06	0.130	0.141
	FR1 n48	40M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	641666	3624.99	Speed	10.17	10.50	1.079	-0.09	0.155	0.167
	FR1 n48	40M	BPSK	50	28	Right Edge	TB	0mm	Main	ON	641666	3624.99	Speed	10.16	10.50	1.081	-0.08	0.287	0.310
	FR1 n48	40M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	641666	3624.99	Speed	20.68	22.00	1.355	0.08	0.093	0.126
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	33mm	Main	OFF	641666	3624.99	Speed	20.63	22.00	1.371	0.01	0.086	0.118
	FR1 n48	40M	BPSK	1	1	Back	TB	44mm	Main	OFF	641666	3624.99	Speed	20.68	22.00	1.355	-0.08	0.106	0.144
	FR1 n48	40M	BPSK	50	28	Back	TB	44mm	Main	OFF	641666	3624.99	Speed	20.63	22.00	1.371	0.1	0.091	0.125
	FR1 n48	40M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	641666	3624.99	Speed	20.68	22.00	1.355	-0.18	0.299	0.405
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	29mm	Main	OFF	641666	3624.99	Speed	20.63	22.00	1.371	0.1	0.256	0.351
	FR1 n48	40M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	641666	3624.99	Speed	20.68	22.00	1.355	0.12	0.063	0.085
	FR1 n48	40M	BPSK	50	28	Right Edge	TB	18mm	Main	OFF	641666	3624.99	Speed	20.63	22.00	1.371	0.08	0.056	0.077
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	638000	3570	SAA	9.93	10.50	1.140	-0.06	0.923	1.052
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	641666	3624.99	SAA	10.17	10.50	1.079	0.13	0.716	0.773
	FR1 n48	40M	BPSK	1	1	Back	TB	0mm	Main	ON	645332	3679.98	SAA	10.08	10.50	1.102	0.12	0.660	0.727



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n48	40M	BPSK	1	104	Bottom Side	NB	0mm	MIMO2	ON	641666	3624.99	Speed	9.31	10.00	1.172	0.03	0.091	0.107
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	0mm	MIMO2	ON	641666	3624.99	Speed	9.19	10.00	1.205	0.18	0.080	0.096
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.31	10.00	1.172	0.07	0.422	0.495
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.19	10.00	1.205	0.18	0.371	0.447
	FR1 n48	40M	BPSK	1	104	Top Edge	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.31	10.00	1.172	-0.1	0.001	0.001
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.19	10.00	1.205	0.01	0.001	0.001
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.31	10.00	1.172	-0.15	0.936	1.097
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	638000	3570	Speed	9.08	10.00	1.236	0.19	0.908	1.122
27	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	645332	3679.98	Speed	9.17	10.00	1.211	0.01	0.950	1.150
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.19	10.00	1.205	0.07	0.851	1.025
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	0mm	MIMO2	ON	638000	3570	Speed	9.01	10.00	1.256	-0.18	0.825	1.036
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	0mm	MIMO2	ON	645332	3679.98	Speed	9.12	10.00	1.225	0.03	0.873	1.069
	FR1 n48	40M	BPSK	100	0	Left Edge	TB	0mm	MIMO2	ON	641666	3624.99	Speed	9.10	10.00	1.230	-0.15	0.876	1.078
	FR1 n48	40M	BPSK	1	104	Bottom Side	NB	20mm	MIMO2	OFF	641666	3624.99	Speed	21.46	22.00	1.132	-0.15	0.192	0.217
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	20mm	MIMO2	OFF	641666	3624.99	Speed	21.19	22.00	1.205	0.11	0.164	0.198
	FR1 n48	40M	BPSK	1	104	Back	TB	19mm	MIMO2	OFF	641666	3624.99	Speed	21.46	22.00	1.132	-0.08	0.396	0.448
	FR1 n48	40M	BPSK	50	28	Back	TB	19mm	MIMO2	OFF	641666	3624.99	Speed	21.19	22.00	1.205	-0.04	0.338	0.407
	FR1 n48	40M	BPSK	1	104	Top Edge	TB	29mm	MIMO2	OFF	641666	3624.99	Speed	21.46	22.00	1.132	-0.08	0.058	0.066
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	29mm	MIMO2	OFF	641666	3624.99	Speed	21.19	22.00	1.205	0.17	0.048	0.058
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	22mm	MIMO2	OFF	641666	3624.99	Speed	21.46	22.00	1.132	0.18	0.533	0.604
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	22mm	MIMO2	OFF	638000	3570	Speed	21.14	22.00	1.219	-0.08	0.517	0.630
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	22mm	MIMO2	OFF	645332	3679.98	Speed	21.12	22.00	1.225	0.1	0.547	0.670
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	22mm	MIMO2	OFF	641666	3624.99	Speed	21.19	22.00	1.205	-0.13	0.515	0.621
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	22mm	MIMO2	OFF	638000	3570	Speed	20.84	22.00	1.306	-0.18	0.500	0.653
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	22mm	MIMO2	OFF	645332	3679.98	Speed	21.09	22.00	1.233	0.1	0.523	0.645
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	641666	3624.99	SAA	9.31	10.00	1.172	-0.03	0.932	1.092
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	638000	3570	SAA	9.08	10.00	1.236	-0.03	0.919	1.136
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	MIMO2	ON	645332	3679.98	SAA	9.17	10.00	1.211	-0.09	0.948	1.148
	FR1 n48	40M	BPSK	1	104	Bottom Side	NB	0mm	Aux	ON	645332	3679.98	Speed	8.56	9.00	1.107	0.08	0.192	0.212
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	0mm	Aux	ON	645332	3679.98	Speed	8.37	9.00	1.156	0.01	0.174	0.201
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	645332	3679.98	Speed	8.56	9.00	1.107	-0.08	0.860	0.952
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	638000	3570	Speed	8.31	9.00	1.172	0.01	0.905	1.061
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	641666	3624.99	Speed	8.65	9.00	1.084	0.1	0.860	0.932
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Aux	ON	645332	3679.98	Speed	8.37	9.00	1.156	-0.18	0.858	0.992
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Aux	ON	638000	3570	Speed	8.16	9.00	1.213	0.1	0.849	1.030
	FR1 n48	40M	BPSK	50	28	Back	TB	0mm	Aux	ON	641666	3624.99	Speed	8.49	9.00	1.125	0.12	0.890	1.001
	FR1 n48	40M	BPSK	100	0	Back	TB	0mm	Aux	ON	645332	3679.98	Speed	8.34	9.00	1.164	0.08	0.897	1.044
	FR1 n48	40M	BPSK	1	104	Top Edge	TB	0mm	Aux	ON	645332	3679.98	Speed	8.56	9.00	1.107	-0.17	0.153	0.169
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	0mm	Aux	ON	645332	3679.98	Speed	8.37	9.00	1.156	-0.03	0.137	0.158
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	0mm	Aux	ON	645332	3679.98	Speed	8.56	9.00	1.107	0.14	0.235	0.260
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	0mm	Aux	ON	645332	3679.98	Speed	8.37	9.00	1.156	0.11	0.213	0.246
	FR1 n48	40M	BPSK	1	104	Bottom Side	NB	43mm	Aux	OFF	645332	3679.98	Speed	21.48	22.00	1.127	-0.01	0.185	0.209
	FR1 n48	40M	BPSK	50	28	Bottom Side	NB	43mm	Aux	OFF	645332	3679.98	Speed	21.31	22.00	1.172	-0.08	0.168	0.197
	FR1 n48	40M	BPSK	1	104	Back	TB	47mm	Aux	OFF	645332	3679.98	Speed	21.48	22.00	1.127	-0.09	0.189	0.213
	FR1 n48	40M	BPSK	50	28	Back	TB	47mm	Aux	OFF	645332	3679.98	Speed	21.31	22.00	1.172	-0.08	0.172	0.202
	FR1 n48	40M	BPSK	1	104	Top Edge	TB	29mm	Aux	OFF	645332	3679.98	Speed	21.48	22.00	1.127	0.13	0.261	0.294
	FR1 n48	40M	BPSK	50	28	Top Edge	TB	29mm	Aux	OFF	645332	3679.98	Speed	21.31	22.00	1.172	0.12	0.172	0.202
	FR1 n48	40M	BPSK	1	104	Left Edge	TB	17mm	Aux	OFF	645332	3679.98	Speed	21.48	22.00	1.127	0.03	0.168	0.189
	FR1 n48	40M	BPSK	50	28	Left Edge	TB	17mm	Aux	OFF	645332	3679.98	Speed	21.31	22.00	1.172	0.18	0.159	0.186
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	638000	3570	SAA	8.31	9.00	1.172	-0.01	0.940	1.102
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	641666	3624.99	SAA	8.65	9.00	1.084	-0.05	0.837	0.907
	FR1 n48	40M	BPSK	1	104	Back	TB	0mm	Aux	ON	645332	3679.98	SAA	8.56	9.00	1.107	0.18	0.846	0.936
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	656000	3840	Speed	9.54	10.50	1.247	0.08	0.164	0.205
	FR1 n77	100M	BPSK	135	0	Bottom Side	NB	0mm	Main	ON	656000	3840	Speed	9.48	10.50	1.265	0.01	0.179	0.226
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Main	ON	656000	3840	Speed	9.54	10.50	1.247	-0.02	0.796	0.993
	FR1 n77	100M	BPSK	135	0	Back	TB	0mm	Main	ON	656000	3840	Speed	9.48	10.50	1.265	-0.08	0.726	0.918



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n77	100M	BPSK	270	0	Back	TB	0mm	Main	ON	656000	3840	Speed	9.36	10.50	1.300	-0.08	0.503	0.654
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	656000	3840	Speed	9.54	10.50	1.247	0.1	0.138	0.172
	FR1 n77	100M	BPSK	135	0	Top Edge	TB	0mm	Main	ON	656000	3840	Speed	9.48	10.50	1.265	-0.18	0.115	0.145
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	656000	3840	Speed	9.54	10.50	1.247	0.1	0.297	0.370
	FR1 n77	100M	BPSK	135	0	Right Edge	TB	0mm	Main	ON	656000	3840	Speed	9.48	10.50	1.265	0.12	0.426	0.539
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	656000	3840	Speed	24.16	25.00	1.213	0.14	0.222	0.269
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	33mm	Main	OFF	656000	3840	Speed	23.38	25.00	1.452	-0.17	0.205	0.298
	FR1 n77	100M	BPSK	1	1	Back	TB	44mm	Main	OFF	656000	3840	Speed	24.16	25.00	1.213	0.17	0.229	0.278
	FR1 n77	100M	BPSK	135	69	Back	TB	44mm	Main	OFF	656000	3840	Speed	23.38	25.00	1.452	-0.05	0.153	0.222
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	656000	3840	Speed	24.16	25.00	1.213	0.01	0.354	0.430
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	Main	OFF	656000	3840	Speed	23.38	25.00	1.452	0.1	0.341	0.495
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	656000	3840	Speed	24.16	25.00	1.213	-0.17	0.216	0.262
	FR1 n77	100M	BPSK	135	69	Right Edge	TB	18mm	Main	OFF	656000	3840	Speed	23.38	25.00	1.452	0.04	0.162	0.235
	FR1 n77_HPUE	100M	BPSK	1	1	Back	TB	0mm	Main	ON	656000	3840	Speed	12.20	13.50	1.349	-0.06	0.800	1.079
	FR1 n77_HPUE	100M	BPSK	1	1	Back	TB	0mm	Main	ON	656000	3840	SAA	12.20	13.50	1.349	-0.17	0.757	1.021
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	Main	ON	633332	3499.98	Speed	9.60	10.50	1.230	-0.17	0.158	0.194
	FR1 n77	100M	BPSK	135	0	Bottom Side	NB	0mm	Main	ON	633332	3499.98	Speed	9.54	10.50	1.247	0.04	0.164	0.205
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Main	ON	633332	3499.98	Speed	9.60	10.50	1.230	0.05	0.630	0.775
	FR1 n77	100M	BPSK	135	0	Back	TB	0mm	Main	ON	633332	3499.98	Speed	9.54	10.50	1.247	-0.08	0.509	0.635
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	0mm	Main	ON	633332	3499.98	Speed	9.60	10.50	1.230	-0.09	0.143	0.176
	FR1 n77	100M	BPSK	135	0	Top Edge	TB	0mm	Main	ON	633332	3499.98	Speed	9.54	10.50	1.247	-0.08	0.128	0.160
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	Main	ON	633332	3499.98	Speed	9.60	10.50	1.230	0.13	0.146	0.180
	FR1 n77	100M	BPSK	135	0	Right Edge	TB	0mm	Main	ON	633332	3499.98	Speed	9.54	10.50	1.247	0.12	0.196	0.244
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	33mm	Main	OFF	633332	3499.98	Speed	24.12	25.00	1.225	0.12	0.164	0.201
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	33mm	Main	OFF	633332	3499.98	Speed	23.83	25.00	1.309	0.08	0.146	0.191
	FR1 n77	100M	BPSK	1	1	Back	TB	44mm	Main	OFF	633332	3499.98	Speed	24.12	25.00	1.225	-0.17	0.265	0.325
	FR1 n77	100M	BPSK	135	69	Back	TB	44mm	Main	OFF	633332	3499.98	Speed	23.83	25.00	1.309	-0.03	0.225	0.295
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	29mm	Main	OFF	633332	3499.98	Speed	24.12	25.00	1.225	0.14	0.189	0.231
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	Main	OFF	633332	3499.98	Speed	23.83	25.00	1.309	0.11	0.197	0.258
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	18mm	Main	OFF	633332	3499.98	Speed	24.12	25.00	1.225	-0.05	0.087	0.107
	FR1 n77	100M	BPSK	135	69	Right Edge	TB	18mm	Main	OFF	633332	3499.98	Speed	23.83	25.00	1.309	0.18	0.074	0.097
	FR1 n77_HPUE	100M	BPSK	1	1	Back	TB	0mm	Main	ON	633332	3499.98	Speed	12.38	13.50	1.294	0.06	0.583	0.755
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Main	ON	633332	3499.98	SAA	9.60	10.50	1.230	-0.01	0.519	0.639
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	MIMO1	OFF	656000	3840	Speed	8.46	8.50	1.009	-0.03	0.051	0.051
	FR1 n77	100M	BPSK	135	0	Bottom Side	NB	0mm	MIMO1	OFF	656000	3840	Speed	8.29	8.50	1.050	-0.03	0.047	0.049
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	MIMO1	OFF	656000	3840	Speed	8.46	8.50	1.009	0.08	0.412	0.416
	FR1 n77	100M	BPSK	135	0	Back	TB	0mm	MIMO1	OFF	656000	3840	Speed	8.29	8.50	1.050	-0.07	0.415	0.436
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	656000	3840	Speed	8.46	8.50	1.009	0.03	0.835	0.843
	FR1 n77	100M	BPSK	135	0	Right Edge	TB	0mm	MIMO1	OFF	656000	3840	Speed	8.29	8.50	1.050	-0.12	0.727	0.763
	FR1 n77	100M	BPSK	270	0	Right Edge	TB	0mm	MIMO1	OFF	656000	3840	Speed	8.25	8.50	1.059	0.03	0.609	0.645
	FR1 n77_HPUE	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	656000	3840	Speed	11.16	11.50	1.081	-0.01	0.747	0.808
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	656000	3840	SAA	8.46	8.50	1.009	0.05	0.660	0.666
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.85	8.50	1.161	0.01	0.051	0.059
	FR1 n77	100M	BPSK	135	0	Bottom Side	NB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.71	8.50	1.199	0.1	0.052	0.062
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.85	8.50	1.161	-0.17	0.635	0.738
	FR1 n77	100M	BPSK	135	0	Back	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.71	8.50	1.199	0.04	0.479	0.575
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.85	8.50	1.161	-0.08	0.961	1.116
	FR1 n77	100M	BPSK	135	0	Right Edge	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.71	8.50	1.199	0.05	0.850	1.020
	FR1 n77	100M	BPSK	270	0	Right Edge	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	7.60	8.50	1.230	0.06	0.866	1.065
	FR1 n77_HPUE	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	633332	3499.98	Speed	10.51	11.50	1.256	-0.02	0.811	1.019
	FR1 n77	100M	BPSK	1	1	Right Edge	TB	0mm	MIMO1	OFF	633332	3499.98	SAA	7.85	8.50	1.161	0.01	0.926	1.076
	FR1 n77	100M	BPSK	1	271	Bottom Side	NB	0mm	MIMO2	ON	656000	3840	Speed	8.51	9.00	1.119	-0.09	0.074	0.083
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	0mm	MIMO2	ON	656000	3840	Speed	8.41	9.00	1.146	-0.08	0.085	0.097
	FR1 n77	100M	BPSK	1	271	Back	TB	0mm	MIMO2	ON	656000	3840	Speed	8.51	9.00	1.119	0.13	0.459	0.514
	FR1 n77	100M	BPSK	135	69	Back	TB	0mm	MIMO2	ON	656000	3840	Speed	8.41	9.00	1.146	0.12	0.497	0.569
	FR1 n77	100M	BPSK	1	271	Top Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	8.51	9.00	1.119	0	0.001	0.001



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n77	100M	BPSK	135	69	Top Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	8.41	9.00	1.146	0	0.001	0.001
	FR1 n77	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	8.51	9.00	1.119	0.08	0.755	0.845
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	8.41	9.00	1.146	0.16	0.715	0.819
	FR1 n77	100M	BPSK	270	0	Left Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	8.35	9.00	1.161	-0.1	0.714	0.829
	FR1 n77	100M	BPSK	1	271	Bottom Side	NB	20mm	MIMO2	OFF	656000	3840	Speed	23.59	25.00	1.384	0.16	0.477	0.660
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	20mm	MIMO2	OFF	656000	3840	Speed	23.53	25.00	1.403	-0.1	0.505	0.708
	FR1 n77	100M	BPSK	1	271	Back	TB	19mm	MIMO2	OFF	656000	3840	Speed	23.59	25.00	1.384	0.07	0.462	0.639
	FR1 n77	100M	BPSK	135	69	Back	TB	19mm	MIMO2	OFF	656000	3840	Speed	23.53	25.00	1.403	0.18	0.504	0.707
	FR1 n77	100M	BPSK	1	271	Top Edge	TB	29mm	MIMO2	OFF	656000	3840	Speed	23.59	25.00	1.384	0	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	MIMO2	OFF	656000	3840	Speed	23.53	25.00	1.403	0	0.001	0.001
	FR1 n77	100M	BPSK	1	271	Left Edge	TB	22mm	MIMO2	OFF	656000	3840	Speed	23.59	25.00	1.384	-0.15	0.544	0.753
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	22mm	MIMO2	OFF	656000	3840	Speed	23.53	25.00	1.403	0.19	0.608	0.853
	FR1 n77_HPUE	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	656000	3840	Speed	10.87	12.00	1.297	0.03	0.658	0.854
	FR1 n77_HPUE	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	656000	3840	SAA	10.87	12.00	1.297	-0.02	0.647	0.839
	FR1 n77	100M	BPSK	1	271	Bottom Side	NB	0mm	MIMO2	ON	633332	3499.98	Speed	8.20	9.00	1.202	0.08	0.072	0.087
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	0mm	MIMO2	ON	633332	3499.98	Speed	8.09	9.00	1.233	0.01	0.067	0.083
	FR1 n77	100M	BPSK	1	271	Back	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.20	9.00	1.202	0.03	0.453	0.545
	FR1 n77	100M	BPSK	135	69	Back	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.09	9.00	1.233	-0.08	0.413	0.509
	FR1 n77	100M	BPSK	1	271	Top Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.20	9.00	1.202	0	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.09	9.00	1.233	0	0.001	0.001
	FR1 n77	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.20	9.00	1.202	-0.01	0.896	1.077
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.09	9.00	1.233	-0.01	0.866	1.068
	FR1 n77	100M	BPSK	270	0	Left Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	8.11	9.00	1.227	0.1	0.799	0.981
	FR1 n77	100M	BPSK	1	271	Bottom Side	NB	20mm	MIMO2	OFF	633332	3499.98	Speed	23.41	25.00	1.442	0.12	0.226	0.326
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	20mm	MIMO2	OFF	633332	3499.98	Speed	23.36	25.00	1.459	0.08	0.317	0.462
	FR1 n77	100M	BPSK	1	271	Back	TB	19mm	MIMO2	OFF	633332	3499.98	Speed	23.41	25.00	1.442	-0.17	0.470	0.678
	FR1 n77	100M	BPSK	135	69	Back	TB	19mm	MIMO2	OFF	633332	3499.98	Speed	23.36	25.00	1.459	-0.03	0.563	0.821
	FR1 n77	100M	BPSK	1	271	Top Edge	TB	29mm	MIMO2	OFF	633332	3499.98	Speed	23.41	25.00	1.442	0	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	MIMO2	OFF	633332	3499.98	Speed	23.36	25.00	1.459	0	0.001	0.001
	FR1 n77	100M	BPSK	1	271	Left Edge	TB	22mm	MIMO2	OFF	633332	3499.98	Speed	23.41	25.00	1.442	-0.05	0.579	0.835
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	22mm	MIMO2	OFF	633332	3499.98	Speed	23.36	25.00	1.459	0.18	0.684	0.998
	FR1 n77_HPUE	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	633332	3499.98	Speed	10.93	12.00	1.279	0.01	0.827	1.058
	FR1 n77	100M	BPSK	1	271	Left Edge	TB	0mm	MIMO2	ON	633332	3499.98	SAA	8.20	9.00	1.202	-0.18	0.836	1.005
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330	0.08	0.071	0.094
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	0mm	Aux	ON	656000	3840	Speed	7.52	9.00	1.406	0.01	0.067	0.094
28	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330	-0.02	0.861	1.146
	FR1 n77	100M	BPSK	135	69	Back	TB	0mm	Aux	ON	656000	3840	Speed	7.52	9.00	1.406	0.03	0.808	1.136
	FR1 n77	100M	BPSK	270	0	Back	TB	0mm	Aux	ON	656000	3840	Speed	7.53	9.00	1.403	-0.08	0.758	1.063
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330	-0.08	0.067	0.089
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	0mm	Aux	ON	656000	3840	Speed	7.52	9.00	1.406	0.1	0.074	0.104
	FR1 n77	100M	BPSK	1	1	Left Edge	TB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330	-0.18	0.193	0.257
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	0mm	Aux	ON	656000	3840	Speed	7.52	9.00	1.406	0.1	0.142	0.200
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	43mm	Aux	OFF	656000	3840	Speed	23.74	25.00	1.337	0.01	0.151	0.202
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	43mm	Aux	OFF	656000	3840	Speed	23.38	25.00	1.452	0.03	0.137	0.199
	FR1 n77	100M	BPSK	1	1	Back	TB	47mm	Aux	OFF	656000	3840	Speed	23.74	25.00	1.337	-0.08	0.155	0.207
	FR1 n77	100M	BPSK	135	69	Back	TB	47mm	Aux	OFF	656000	3840	Speed	23.38	25.00	1.452	-0.08	0.141	0.205
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	29mm	Aux	OFF	656000	3840	Speed	23.74	25.00	1.337	0.1	0.214	0.286
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	Aux	OFF	656000	3840	Speed	23.38	25.00	1.452	-0.18	0.141	0.205
	FR1 n77	100M	BPSK	1	1	Left Edge	TB	17mm	Aux	OFF	656000	3840	Speed	23.74	25.00	1.337	0.1	0.137	0.183
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	17mm	Aux	OFF	656000	3840	Speed	23.38	25.00	1.452	0.12	0.130	0.189
	FR1 n77_HPUE	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	656000	3840	Speed	10.65	12.00	1.365	0.08	0.806	1.100
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	656000	3840	SAA	7.76	9.00	1.330	0.12	0.769	1.023
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	0mm	Aux	ON	633332	3499.98	Speed	7.98	9.00	1.265	-0.17	0.124	0.157
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	0mm	Aux	ON	633332	3499.98	Speed	7.72	9.00	1.343	-0.03	0.114	0.153
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	633332	3499.98	Speed	7.98	9.00	1.265	0.04	0.855	1.081
	FR1 n77	100M	BPSK	135	69	Back	TB	0mm	Aux	ON	633332	3499.98	Speed	7.72	9.00	1.343	0.14	0.726	0.975



FCC SAR TEST REPORT

Report No. : FA482037

	FR1 n77	100M	BPSK	270	0	Back	TB	0mm	Aux	ON	633332	3499.98	Speed	7.69	9.00	1.352	0.08	0.681	0.921
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	0mm	Aux	ON	633332	3499.98	Speed	7.98	9.00	1.265	0.11	0.073	0.092
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	0mm	Aux	ON	633332	3499.98	Speed	7.72	9.00	1.343	-0.05	0.080	0.107
	FR1 n77	100M	BPSK	1	1	Left Edge	TB	0mm	Aux	ON	633332	3499.98	Speed	7.98	9.00	1.265	0.18	0.070	0.089
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	0mm	Aux	ON	633332	3499.98	Speed	7.72	9.00	1.343	0.14	0.110	0.148
	FR1 n77	100M	BPSK	1	1	Bottom Side	NB	43mm	Aux	OFF	633332	3499.98	Speed	24.03	25.00	1.250	0.08	0.124	0.155
	FR1 n77	100M	BPSK	135	69	Bottom Side	NB	43mm	Aux	OFF	633332	3499.98	Speed	23.38	25.00	1.452	-0.17	0.112	0.163
	FR1 n77	100M	BPSK	1	1	Back	TB	47mm	Aux	OFF	633332	3499.98	Speed	24.03	25.00	1.250	-0.03	0.127	0.159
	FR1 n77	100M	BPSK	135	69	Back	TB	47mm	Aux	OFF	633332	3499.98	Speed	23.38	25.00	1.452	0.14	0.121	0.176
	FR1 n77	100M	BPSK	1	1	Top Edge	TB	29mm	Aux	OFF	633332	3499.98	Speed	24.03	25.00	1.250	0.11	0.179	0.224
	FR1 n77	100M	BPSK	135	69	Top Edge	TB	29mm	Aux	OFF	633332	3499.98	Speed	23.38	25.00	1.452	-0.05	0.121	0.176
	FR1 n77	100M	BPSK	1	1	Left Edge	TB	17mm	Aux	OFF	633332	3499.98	Speed	24.03	25.00	1.250	0.18	0.115	0.144
	FR1 n77	100M	BPSK	135	69	Left Edge	TB	17mm	Aux	OFF	633332	3499.98	Speed	23.38	25.00	1.452	0.14	0.112	0.163
	FR1 n77_HPUE	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	633332	3499.98	Speed	10.96	12.00	1.271	-0.04	0.809	1.028
	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	633332	3499.98	SAA	7.98	9.00	1.265	-0.17	0.713	0.902

13.2 Repeated SAR Measurement

No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Configure	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 12	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045			-0.01	1.100	-	1.149
2nd	LTE Band 12	10M	QPSK	1	0	Right Edge	TB	0mm	Main	ON	23095	707.5	Speed	14.81	15.00	1.045			-0.01	1.045	1.053	1.092
1st	LTE Band 26	15M	QPSK	1	37	Back	TB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140			-0.02	0.979	-	1.116
2nd	LTE Band 26	15M	QPSK	1	37	Back	TB	0mm	Main	ON	26865	831.5	Speed	17.43	18.00	1.140			-0.02	0.965	1.015	1.100
1st	LTE Band 30	10M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	SAA	9.88	10.50	1.153			-0.08	1.020	-	1.177
2nd	LTE Band 30	10M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	27710	2310	SAA	9.88	10.50	1.153			-0.08	0.971	1.050	1.120
1st	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132572	1770	SAA	12.35	13.00	1.161			-0.03	1.030	-	1.196
2nd	LTE Band 66	20M	QPSK	50	0	Left Edge	TB	0mm	MIMO2	ON	132572	1770	SAA	12.35	13.00	1.161			-0.03	0.979	1.052	1.137
1st	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	0.01	1.090	-	1.194
2nd	LTE Band 41	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	41055	2636.5	Speed	11.13	11.50	1.089	62.9	1.006	0.01	1.035	1.053	1.134
1st	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	-0.01	0.969	-	1.109
2nd	LTE Band 42	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	42190	3460	Speed	10.44	11.00	1.138	62.9	1.006	0.07	0.925	1.048	1.059
1st	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56640	3690	SAA	10.24	11.00	1.191	62.9	1.006	0.08	1.000	-	1.198
2nd	LTE Band 48	20M	QPSK	1	0	Left Edge	TB	0mm	MIMO2	ON	56640	3690	SAA	10.24	11.00	1.191	62.9	1.006	0.09	0.989	1.011	1.185
1st	FR1 n25	40M	BPSK	1	108	Back	TB	0mm	Main	ON	376500	1882.5	SAA	14.65	15.00	1.084			0.03	1.050	-	1.138
2nd	FR1 n25	40M	BPSK	1	108	Back	TB	0mm	Main	ON	376500	1882.5	SAA	14.65	15.00	1.084			0.05	1.020	1.029	1.106
1st	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330			-0.02	0.861	-	1.146
2nd	FR1 n77	100M	BPSK	1	1	Back	TB	0mm	Aux	ON	656000	3840	Speed	7.76	9.00	1.330			-0.02	0.857	1.005	1.140

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.

13.3 Power Class 2 and Power Class 3 Linearity

General Note:

This device support Power Class 2 and Power Class 3 operations. 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 and FR1 configuration and exposure condition combination, according to the highest time averaged power for 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, Separate SAR testing for Power Class 2 is not required. Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

	LTE Band 41_Ant Main	LTE Band 41_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	14	16
Reported 1g SAR (W/kg)	1.035	1.098
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	15.90	17.24
Linearity SAR(W/kg)	1.12	
% deviation from expected linearity		-2.15%

	FR1 n41_Ant Main	FR1 n41_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	13	16
Reported 1g SAR (W/kg)	1.081	1.069
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	19.95	19.91
Linearity SAR(W/kg)	1.08	
% deviation from expected linearity		-0.88%

	FR1 n41_Ant MIMO1	FR1 n41_Ant MIMO1
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	9.5	12.5
Reported 1g SAR (W/kg)	1.091	1.067
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	8.91	8.89
Linearity SAR(W/kg)	1.09	
% deviation from expected linearity		-1.97%

	FR1 n41_Ant MIMO2	FR1 n41_Ant MIMO2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	10	12.5
Reported 1g SAR (W/kg)	1.186	1.05
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	10.00	8.89
Linearity SAR(W/kg)	1.05	
% deviation from expected linearity		-0.43%

	FR1 n41_Ant Aux	FR1 n41_Ant Aux
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	12	15
Reported 1g SAR (W/kg)	1.169	1.139
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	15.85	15.81
Linearity SAR(W/kg)	1.17	
% deviation from expected linearity		-2.33%

	FR1 n77_Ant Main	FR1 n77_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	10.5	13.5
Reported 1g SAR (W/kg)	0.993	1.079
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	11.22	11.19
Linearity SAR(W/kg)	0.99	
% deviation from expected linearity		8.92%

	FR1 n77_Ant MIMO1	FR1 n77_Ant MIMO1
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	8.5	11.5
Reported 1g SAR (W/kg)	1.116	1.019
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	7.08	7.06
Linearity SAR(W/kg)	1.11	
% deviation from expected linearity		-8.47%

	FR1 n77_Ant MIMO2	FR1 n77_Ant MIMO2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	9	12
Reported 1g SAR (W/kg)	1.077	1.058
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	7.94	7.92
Linearity SAR(W/kg)	1.07	
% deviation from expected linearity		-1.53%

	FR1 n77_Ant Aux	FR1 n77_Ant Aux
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	9	12
Reported 1g SAR (W/kg)	1.146	1.1
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	7.94	7.92
Linearity SAR(W/kg)	1.14	
% deviation from expected linearity		-3.79%

14. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Main + WWAN MIMO 2 + WLAN 2.4GHz Main + WLAN 2.4GHz Aux	Yes
2.	WWAN Main + WWAN MIMO 2 + WLAN 2.4GHz Main + Bluetooth Aux	Yes
3.	WWAN Main + WWAN MIMO 2 + WLAN5/6GHz Main + WLAN5/6GHz Aux + Bluetooth Aux	Yes
4.	WWAN MIMO 1 + WLAN 2.4GHz Main + WLAN 2.4GHz Aux	Yes
5.	WWAN MIMO 1 + WLAN 2.4GHz Main + Bluetooth Aux	Yes
6.	WWAN MIMO 1 + WLAN5/6GHz Main + WLAN5/6GHz Aux + Bluetooth Aux	Yes
7.	WWAN Aux + WLAN 2.4GHz Main + WLAN 2.4GHz Aux	Yes
8.	WWAN Aux + WLAN 2.4GHz Main + Bluetooth Aux	Yes
9.	WWAN Aux + WLAN5/6GHz Main + WLAN5/6GHz Aux + Bluetooth Aux	Yes

General Note:

1. The FCC ID: PD9BE201D2, Intel BE201D2W WLAN/BT module is integrated into this host and the WiFi/BT SAR result refers to report no.: 240607-01.TR01 is used for Sim-Tx compliance.
2. The Scaled SAR summation is calculated based on the same configuration and test position.
3. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
 - v) The SPLSR calculated results please refer to section 13.2.

14.1 Body Exposure Conditions

Exposure Position	0	1	2	3	4	5	6	0+1+2+3 Summed 1g SAR (W/kg)	0+1+2+6 Summed 1g SAR (W/kg)	0+1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main 1g SAR (W/kg)	Maximum WWAN MIMO 2 1g SAR (W/kg)	WLAN2.4GHz Main 1g SAR (W/kg)	WLAN2.4GHz Aux 1g SAR (W/kg)	WLAN5/6GHz Main 1g SAR (W/kg)	WLAN5/6GHz Aux 1g SAR (W/kg)	Bluetooth Aux 1g SAR (W/kg)					
Bottom Side at 0mm	0.648	0.448	0.790	0.970	0.670	0.700	0.640	2.856	2.526	3.106	0.020	Case 2
Back at 0mm	1.195	1.186	0.900	0.560	0.100	0.630	0.290	3.841	3.571	3.401	0.020	Case 3
Top Edge at 0mm	0.490	0.028						0.518	0.518	0.518		
Right Edge at 0mm	1.188							1.188	1.188	1.188		
Bottom Edge at 0mm		0.001	1.190	0.740	1.190	1.190	0.710	1.931	1.901	3.091	0.040	Case 1
Left Edge at 0mm		1.198						1.198	1.198	1.198		

Exposure Position	1	2	3	4	5	6	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO 1 1g SAR (W/kg)	WLAN2.4GHz Main 1g SAR (W/kg)	WLAN2.4GHz Aux 1g SAR (W/kg)	WLAN5/6GHz Main 1g SAR (W/kg)	WLAN5/6GHz Aux 1g SAR (W/kg)	Bluetooth Aux 1g SAR (W/kg)					
Bottom Side at 0mm	0.139	0.790	0.970	0.670	0.700	0.640	1.899	1.569	2.149	0.020	Case 4
Back at 0mm	0.894	0.900	0.560	0.100	0.630	0.290	2.354	2.084	1.914	0.020	Case 5
Right Edge at 0mm	1.116						1.116	1.116	1.116		
Bottom Edge at 0mm		1.190	0.740	1.190	1.190	0.710	1.930	1.900	3.090	0.040	Case 8
Left Edge at 0mm							0.000	0.000	0.000		

Exposure Position	1	2	3	4	5	6	1+2+3 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	1+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux 1g SAR (W/kg)	WLAN2.4GHz Main 1g SAR (W/kg)	WLAN2.4GHz Aux 1g SAR (W/kg)	WLAN5/6GHz Main 1g SAR (W/kg)	WLAN5/6GHz Aux 1g SAR (W/kg)	Bluetooth Aux 1g SAR (W/kg)					
Bottom Side at 0mm	0.345	0.790	0.970	0.670	0.700	0.640	2.105	1.775	2.355	0.020	Case 6
Back at 0mm	1.169	0.900	0.560	0.100	0.630	0.290	2.629	2.359	2.189	0.010	Case 7
Top Edge at 0mm	0.198						0.198	0.198	0.198		
Right Edge at 0mm							0.000	0.000	0.000		
Bottom Edge at 0mm		1.190	0.740	1.190	1.190	0.710	1.930	1.900	3.090	0.040	Case 8
Left Edge at 0mm	0.260						0.260	0.260	0.260		

14.2 SPLSR Evaluation and Analysis

General Note:

- According to antenna location of Appendix E, the minimum distance between each transmit antenna is using for SPLSR analysis.
- $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	Maximum WWAN MIMO2 Ant	Bottom Edge	0.001	0mm	235.3	1.19	0.01	Not required
	WLAN2.4GHz Main		1.19	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Edge	0.001	0mm	62.1	0.74	0.01	Not required
	WLAN2.4GHz AUX		0.74	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Edge	0.001	0mm	235.3	1.19	0.01	Not required
	WLAN5/6GHz Main		1.19	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Edge	0.001	0mm	62.1	1.19	0.02	Not required
	WLAN5/6GHz Aux		1.19	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Edge	0.001	0mm	62.1	0.71	0.01	Not required
	Bluetooth Aux		0.71	0mm				
	WLAN2.4GHz Main	Bottom Edge	1.19	0mm	153.1	1.93	0.02	Not required
	WLAN2.4GHz AUX		0.74	0mm				
	WLAN2.4GHz Main	Bottom Edge	1.19	0mm	153.1	1.90	0.02	Not required
	Bluetooth Aux		0.71	0mm				
Case 2	WLAN5/6GHz Main	Bottom Edge	1.19	0mm	153.1	3.09	0.04	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		1.9	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	218.9	1.10	0.01	Not required
	Maximum WWAN MIMO2 Ant		0.448	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	198.9	1.44	0.01	Not required
	WLAN2.4GHz Main		0.79	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	249.4	1.62	0.01	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	198.9	1.27	0.01	Not required
	WLAN5/6GHz Main		0.62	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	249.4	1.35	0.01	Not required
	WLAN5/6GHz Aux		0.7	0mm				
	Maximum WWAN Main Ant	Bottom Side	0.648	0mm	249.4	1.29	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Side	0.448	0mm	264.6	1.24	0.01	Not required
	WLAN2.4GHz Main		0.79	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Side	0.448	0mm	155.6	1.42	0.01	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Side	0.448	0mm	264.6	1.07	0.00	Not required
	WLAN5/6GHz Main		0.62	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Side	0.448	0mm	155.6	1.15	0.01	Not required
	WLAN5/6GHz Aux		0.7	0mm				
	Maximum WWAN MIMO2 Ant	Bottom Side	0.448	0mm	155.6	1.09	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN2.4GHz Main	Bottom Side	0.79	0mm	153.1	1.76	0.02	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	WLAN2.4GHz Main	Bottom Side	0.79	0mm	153.1	1.43	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Bottom Side	0.67	0mm	153.1	2.01	0.02	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		1.34	0mm				

	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 3	Maximum WWAN Main Ant	Back	1.195	0mm	218.9	2.38	0.02	Not required
	Maximum WWAN MIMO2 Ant		1.186	0mm				
	Maximum WWAN Main Ant	Back	1.195	0mm	198.9	2.10	0.02	Not required
	WLAN2.4GHz Main		0.9	0mm				
	Maximum WWAN Main Ant	Back	1.195	0mm	249.4	1.76	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	Maximum WWAN Main Ant	Back	1.195	0mm	198.9	1.30	0.01	Not required
	WLAN5/6GHz Main		0.1	0mm				
	Maximum WWAN Main Ant	Back	1.195	0mm	249.4	1.29	0.01	Not required
	WLAN5/6GHz Aux		0.09	0mm				
	Maximum WWAN Main Ant	Back	1.195	0mm	249.4	1.49	0.01	Not required
	Bluetooth Aux		0.29	0mm				
	Maximum WWAN MIMO2 Ant	Back	1.186	0mm	264.6	2.09	0.01	Not required
	WLAN2.4GHz Main		0.9	0mm				
	Maximum WWAN MIMO2 Ant	Back	1.186	0mm	155.6	1.75	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	Maximum WWAN MIMO2 Ant	Back	1.186	0mm	264.6	1.29	0.01	Not required
	WLAN5/6GHz Main		0.1	0mm				
	Maximum WWAN MIMO2 Ant	Back	1.186	0mm	155.6	1.28	0.01	Not required
	WLAN5/6GHz Aux		0.09	0mm				
	Maximum WWAN MIMO2 Ant	Back	1.186	0mm	155.6	1.48	0.01	Not required
	Bluetooth Aux		0.29	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.46	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.54	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Back	0.1	0mm	153.1	0.48	0.00	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.38	0mm				
Case 4	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN MIMO1 Ant	Bottom Side	0.139	0mm	155.6	0.93	0.01	Not required
	WLAN2.4GHz Main		0.79	0mm				
	Maximum WWAN MIMO1 Ant	Bottom Side	0.139	0mm	264.6	1.11	0.00	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	Maximum WWAN MIMO1 Ant	Bottom Side	0.139	0mm	155.6	0.81	0.00	Not required
	WLAN5/6GHz Main		0.67	0mm				
	Maximum WWAN MIMO1 Ant	Bottom Side	0.139	0mm	264.6	0.84	0.00	Not required
	WLAN5/6GHz Aux		0.7	0mm				
	Maximum WWAN MIMO1 Ant	Bottom Side	0.139	0mm	264.6	0.78	0.00	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN2.4GHz Main	Bottom Side	0.79	0mm	153.1	1.76	0.02	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	WLAN2.4GHz Main	Bottom Side	0.9	0mm	153.1	1.54	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Bottom Side	0.67	0mm	153.1	2.01	0.02	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		1.34	0mm				

Case 5	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 5	Maximum WWAN MIMO1 Ant	Back	0.894	0mm	155.6	1.79	0.02	Not required
	WLAN2.4GHz Main		0.9	0mm				
	Maximum WWAN MIMO1 Ant	Back	0.894	0mm	264.6	1.45	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	Maximum WWAN MIMO1 Ant	Back	0.894	0mm	155.6	0.99	0.01	Not required
	WLAN5/6GHz Main		0.1	0mm				
	Maximum WWAN MIMO1 Ant	Back	0.894	0mm	264.6	0.98	0.00	Not required
	WLAN5/6GHz Aux		0.09	0mm				
	Maximum WWAN MIMO1 Ant	Back	0.894	0mm	264.6	1.18	0.00	Not required
	Bluetooth Aux		0.29	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.46	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.54	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Back	0.1	0mm	153.1	1.02	0.01	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.92	0mm				
Case 6	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN Aux Ant	Bottom Side	0.345	0mm	155.6	1.14	0.01	Not required
	WLAN2.4GHz Main		0.79	0mm				
	Maximum WWAN Aux Ant	Bottom Side	0.345	0mm	264.6	1.32	0.01	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	Maximum WWAN Aux Ant	Bottom Side	0.345	0mm	155.6	1.02	0.01	Not required
	WLAN5/6GHz Main		0.67	0mm				
	Maximum WWAN Aux Ant	Bottom Side	0.345	0mm	264.6	1.05	0.00	Not required
	WLAN5/6GHz Aux		0.7	0mm				
	Maximum WWAN Aux Ant	Bottom Side	0.345	0mm	264.6	0.99	0.00	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN2.4GHz Main	Bottom Side	0.79	0mm	153.1	1.76	0.02	Not required
	WLAN2.4GHz AUX		0.97	0mm				
	WLAN2.4GHz Main	Bottom Side	0.9	0mm	153.1	1.54	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Bottom Side	0.67	0mm	153.1	2.01	0.02	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		1.34	0mm				

Case 7	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN Aux Ant	Back	1.169	0mm	254.4	2.07	0.01	Not required
	WLAN2.4GHz Main		0.9	0mm				
	Maximum WWAN Aux Ant	Back	1.169	0mm	198.3	1.73	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	Maximum WWAN Aux Ant	Back	1.169	0mm	254.4	1.27	0.01	Not required
	WLAN5/6GHz Main		0.1	0mm				
	Maximum WWAN Aux Ant	Back	1.169	0mm	198.3	1.26	0.01	Not required
	WLAN5/6GHz Aux		0.09	0mm				
	Maximum WWAN Aux Ant	Back	1.169	0mm	198.3	1.46	0.01	Not required
	Bluetooth Aux		0.29	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.46	0.01	Not required
	WLAN2.4GHz AUX		0.56	0mm				
	WLAN2.4GHz Main	Back	0.9	0mm	153.1	1.54	0.01	Not required
	Bluetooth Aux		0.64	0mm				
	WLAN5/6GHz Main	Back	0.1	0mm	153.1	1.02	0.01	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.92	0mm				
Case 8	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Main	Bottom Edge	1.19	0mm	153.1	1.93	0.02	Not required
	WLAN2.4GHz AUX		0.74	0mm				
	WLAN2.4GHz Main	Bottom Edge	1.19	0mm	153.1	1.90	0.02	Not required
	Bluetooth Aux		0.71	0mm				
	WLAN5/6GHz Main	Bottom Edge	1.19	0mm	153.1	3.09	0.04	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		1.9	0mm				

Test Engineer : Sing Lim, Teddy Chang and Albert Chen

15. 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. 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.

16. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [6] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [7] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [8] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.