

FCC SAR TEST REPORT

FCC ID : UZ7MC945B
Equipment : Mobile Computer
Brand Name : ZEBRA
Model Name : MC945B
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Dec. 01, 2023 and testing was started from Dec. 01, 2023 and completed on Jan. 11, 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. EMC & Wireless Communications Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan



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History of this test report

Report No.	Version	Description	Issued Date
FA3N2803B	01	Initial issue of report	Feb. 06, 2024



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Zebra Technologies Corporation, Mobile Computer, MC945B, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary			Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Body-worn (Separation 0mm)	Hotspot (Separation 10mm)	Extremity (Separation 0mm)		
		1g SAR (W/kg)		10g SAR (W/kg)		
Licensed	WCDMA II	0.29	0.58	0.38	1.59	2.45
	WCDMA IV	0.40	0.60	0.69		
	WCDMA V	0.24	0.43	0.39		
	LTE Band 2	0.29	0.57	0.43		
	LTE Band 7	0.47	0.54	1.14		
	LTE Band 12/17	0.13	0.27	0.59		
	LTE Band 5/26	0.25	0.44	0.61		
	LTE Band 38/41	0.30	0.46	0.39		
	LTE Band 42	1.09	0.54	0.25		
	LTE Band 4/66	0.41	0.54	0.68		
	LTE Band 71	0.18	0.24	0.62		
	FR1 n2	0.35	0.58	0.42		
	FR1 n7	0.57	0.59	1.24		
	FR1 n12	0.09	0.26	0.60		
	FR1 n5/n26	0.23	0.39	0.57		
	FR1 n38/n41	0.39	0.59	1.29		
	FR1 n66	0.38	0.59	0.65		
	FR1 n71	0.11	0.22	0.61		
	FR1 n77/n78	1.37	0.59	0.86		
DTS	2.4GHz WLAN	0.24	0.44	0.40	1.59	2.45
NII	5GHz WLAN	1.28	1.36	0.77	1.59	2.45
6CD	6GHz WLAN	0.58		0.23	1.42	1.92
DSS	Bluetooth	< 0.01	< 0.01	< 0.01	1.59	2.44
DXX	NFC			< 0.01		2.45
Equipment Class	Frequency Band	Highest Reported APD			Reported PD (mW/cm^2)	
		Body-worn (Separation 0mm)	Hotspot (Separation 10mm)	Extremity (Separation 0mm)		
		(mW/cm^2)				
6CD	6GHz WLAN	0.39		0.53	0.79	
Date of Testing:		2023/12/1 ~ 2024/1/11				

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW1190 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, 4.0 W/kg for Extremity 10g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/cm²=10 W/m²) specified in FCC 47 CFR part 1.1310 and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Paula Chen



2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Computer
Brand Name	ZEBRA
Model Name	MC945B
FCC ID	UZ7MC945B
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 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3550 MHz ~ 3600 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 n26 : 814 MHz ~ 849 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 6E: 5925 MHz~6425 MHz, 6425 MHz~6525 MHz, 6525 MHz~6875 MHz, 6875 MHz~7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz
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 WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK
HW Version	DV2
SW Version	13-10-31.00-TN-U00-PRD-NEM-04
FW Version	FUSION_QA_6_1.1.0.004_T
MFD	10NOV23
EUT Stage	Identical Prototype
Remark:	
1. The device implements the power management detection for SAR compliance at different exposure conditions (body-worn, hotspot, extremity) and the smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision are provided in the operational description.	
2. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.	
3. There are two kinds of samples and several keypad and battery option. RF exposure is selected sample 1 with standard battery with 29 keypad to evaluate and the other sample, keypad and battery option spot check worst case found sample 1.	

Sample List	
Sample 1	SE5800 +STD Premium config
Sample 2	SE4770 +STD Base config
Battery	Standard
	BLE
Keypad	29 Key
	53 Key
	43 Key
	58 Key
	34 Key

Accessories Information				
Adapter 1 USB Wall Charger	Brand Name	Zebra	Part Number	PWR-WUA5V12W0US
Battery 1 Standard Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000370
Battery 2 Standard Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000370B
Earphone USB-C Audio Headset	Brand Name	Zebra	Part Number	HDST-USBC-PTT1-01
USB Cable (Type C to Type A)	Brand Name	Zebra	Part Number	CBL-TC2X-USBC-01
Holster	Brand Name	Zebra	Part Number	SG-MC9X-SHLSTG-01
USB Cable (CUP)	Brand Name	Zebra	Part Number	CBL-MC93-USBCHG-01

2.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05												
FCC ID			UZ7MC945B									
Equipment Name			MOBILE Computer									
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 17: 704 MHz ~ 716 MHz									
			LTE Band 26: 814 MHz ~ 849 MHz									
			LTE Band 38: 2570 MHz ~ 2620 MHz									
			LTE Band 41: 2496 MHz ~ 2690 MHz									
			LTE Band 42: 3550 MHz ~ 3600 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 17: 5MHz, 10MHz									
			LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz									
			LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz									
			LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz									
			LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz									
			LTE Band 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 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			The device has several different power modes for each exposure conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios. Detail refer to operational description									
LTE Carrier Aggregation Combinations			Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to appendix D.									
LTE Carrier Aggregation Additional Information			This device supports maximum of 4 carriers in the downlink and 3 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		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7		20415		825.5		20425		826.5		829
M	20525	836.5		20525		836.5		20525		836.5		836.5



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H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 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 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	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)				
L	43315	3552.5	43140	3555	43165	3557.5	43190	3560				
M	43340	3575	43340	3575	43340	3575	43340	3575				
H	43565	3597.5	43540	3595	43515	3592.5	43490	3590				
LTE Band 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				

2.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information														
FCC ID	UZ7MC945B													
Equipment Name	Mobile Computer													
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 n26 : 814 MHz ~ 849 MHz													
	5G NR n38: 2570 MHz ~ 2620 MHz													
	5G NR n41: 2496 MHz ~ 2690 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 n26: 5MHz, 10MHz, 15MHz, 20MHz													
	5G NR n38: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz													
	5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz													
	5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz,30MHz, 40MHz													
	5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz													
	5G NR n77/78: 10MHz, 15MHz, 20MHz, 25 MHz, 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 MPR) disabled for SAR Testing?	Yes													
LTE Anchor Bands for n2	LTE B2/5/7/12/13/14/66/71													
LTE Anchor Bands for n5	LTE B2/5/7/30/48//66													
LTE Anchor Bands for n7	LTE B2/5/12/13/66/71													
LTE Anchor Bands for n12	LTE B2/66													
LTE Anchor Bands for n38	LTE B2/48/66													
LTE Anchor Bands for n41	LTE B2/4/5/12/66/71													
LTE Anchor Bands for n66	LTE B2/4/12/25/66													
LTE Anchor Bands for n71	LTE B5/7/12/13/14/66/71													
LTE Anchor Bands for n77	LTE B2/7/66/71													
LTE Anchor Bands for n78	LTE B2/5/7/12/13/14/30/41/66													
NR Band 2														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz							
	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	372000	1860				
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880				
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	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)	Ch. #	Freq. (MHz)				
L	165300	826.5	165800	829	166300	831.5	166800	834	166800	834				
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5	167300	836.5				
H	169300	846.5	168800	844	168300	841.5	167800	839	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		Bandwidth 20MHz		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	140300	701.5	140800	704	141300	706.5	141800	709	142300	711.5	142800	714	143300	717
M	141500	707.5	141500	707.5	141500	707.5	141500	707.5	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5	141200	706	140700	704	140200	702	139700	700
NR Band 26														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	163300	816.5	163800	819	164300	821.5	164800	824	165300	826.5	165800	829	166300	831.5
M	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5
H	169300	846.5	168800	844	168300	841.5	167800	839	167300	836.5	166800	834	166300	831.5
NR Band 38														
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)



	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)							
L	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		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth70MHz		Bandwidth 80MHz		Bandwidth 90MHz		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)		
L	500202	2501.01	500700	2503.5	501204	2506.02	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		
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640		
NR Band 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		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		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		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		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	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	650000	3750
NR Band 77/78_Part 27Q																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		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	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635532	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99	633332	3499.98

3. 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 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- IEC/IEEE 62209-1528:2020
- SPEAG DASY6 System Handbook
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

4. Smart Transmit feature for RF Exposure compliance

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target or PD_design_target, below the predefined time-averaged power limit (i.e., input.power.limit for 5G mmW NR), for each characterized technology and band (refer to RF exposure part0 report)

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

<Terminologies in this report>

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

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for f < 6 GHz.

<SAR design target and uncertainty>

The detail SAR design target relate to each exposure conditions list as below

SAR Design Target			WLAN OFF / ON	Hotspot (1g SAR W/kg)
Band	Antenna	Device Uncertainty (dB)	Body Worn / Extremity (1g / 10g SAR W/kg)	
WCDMA II	1	1.00	1.11 / 2.86	0.48
WCDMA IV	1	1.00	1.11 / 2.86	0.48
WCDMA V	1	1.00	1.11 / 2.86	0.48
LTE B2	1	1.00	1.11 / 2.86	0.48
LTE B7	5	1.00	1.11 / 2.86	0.48
LTE B12/17	1	1.00	1.11 / 2.86	0.48
LTE B26/5	1	1.00	1.11 / 2.86	0.48
LTE B41/38 PC3	5	1.00	1.11 / 2.86	0.48
LTE B41 PC2	5	1.00	1.11 / 2.86	0.48
LTE B42 PC3	8	1.00	1.11 / 2.86	0.48
LTE B66	1	1.00	1.11 / 2.86	0.48
LTE B71	1	1.00	1.11 / 2.86	0.48
n2	1	1.00	1.11 / 2.86	0.48
n7	5	1.00	1.11 / 2.86	0.48
n12	1	1.00	1.11 / 2.86	0.48
n26/5	1	1.00	1.11 / 2.86	0.48
n41 PC2	5	1.00	1.11 / 2.86	0.48
n41/38 PC3	5	1.00	1.11 / 2.86	0.48
n41 PC3 SRS	2	1.00	1.11 / 2.86	0.48
n41 PC3 SRS	4	1.00	1.11 / 2.86	0.48
n41 PC3 SRS	3	1.00	1.11 / 2.86	0.48
n66	1	1.00	1.11 / 2.86	0.48
n71	1	1.00	1.11 / 2.86	0.48
n77/n78_PC2	8	1.00	1.11 / 2.86	0.48
n77/n78_PC3	8	1.00	1.11 / 2.86	0.48
n77/n78_PC2	9	1.00	1.11 / 2.86	0.48
n77/n78_PC3	9	1.00	1.11 / 2.86	0.48
n77/n78_PC3 SRS	4	1.00	1.11 / 2.86	0.48
n77/n78_PC3 SRS	3	1.00	1.11 / 2.86	0.48

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit, for each characterized technology and band (refer to RF exposure part0 report)

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

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

P _{limit}				WLAN OFF	WLAN ON (P _{limit})	Power Back off for WLAN ON
Band	Antenna	Duty Cycle	P _{max} *	Body Worn / Extremity	Hotspot	Body Worn / Extremity
				DSI1	DSI3	DSI1
WCDMA II	1	100.00%	24	30.8	23	30.8
WCDMA IV	1	100.00%	24	29.4	23	29.4
WCDMA V	1	100.00%	24	31.7	25.4	31.7
LTE B2	1	100.00%	24	30.8	23	30.8
LTE B7	5	100.00%	24	28.6	22	28.6
LTE B12/17	1	100.00%	24	31.8	27.4	31.8
LTE B26/5	1	100.00%	23.5	30.9	24.9	30.9
LTE B41/38 PC3**	5	63.30%	22	28.6	23.2	28.6
LTE B41 PC2**	5	43.30%	22.4			
LTE B42 PC3**	8	63.30%	22	23.1	19.5	19.5
LTE B66	1	100.00%	24	29.2	22.5	29.2
LTE B71	1	100.00%	24	31.6	28	31.6
n2	1	100.00%	24	30	22.5	30
n7	5	100.00%	24	27.8	23	27.8
n12	1	100.00%	24	31.7	27.7	31.7
n26/5	1	100.00%	23.5	31.2	25.4	31.2
n41 PC2**	5	50.00%	23	30.2	24.5	30.2
n41/38 PC3	5	100.00%	24			
n41 PC3 SRS	2	100.00%	21	32	26.4	32
n41 PC3 SRS	4	100.00%	21	35.7	27.2	35.7
n41 PC3 SRS	3	100.00%	21	33.2	25.7	33.2
n66	1	100.00%	24	29.6	24.1	29.6
n71	1	100.00%	24	31.7	28.3	31.7
n77/n78_Part 27O/27Q PC2**	8	50.00%	23	22	18.5	18.5
n77/n78_Part 27O/27Q PC3	8	100.00%	24			
n77/n78_Part 27O/27Q PC2**	9	50.00%	23	26.1	18.5	20.1
n77/n78_Part 27O/27Q PC3	9	100.00%	24			
n77/n78_PC3 SRS	4	100.00%	21	27.8	21.2	27.8
n77/n78_PC3 SRS	3	100.00%	21	26.3	21.7	26.3

*P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to P_{max} + 1dB uncertainty.

**All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).

The max allowed output power is the P_{limit} + 1dB device uncertainty, and if P_{limit} is higher than P_{max}, the device output power will be P_{max} instead.

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:

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

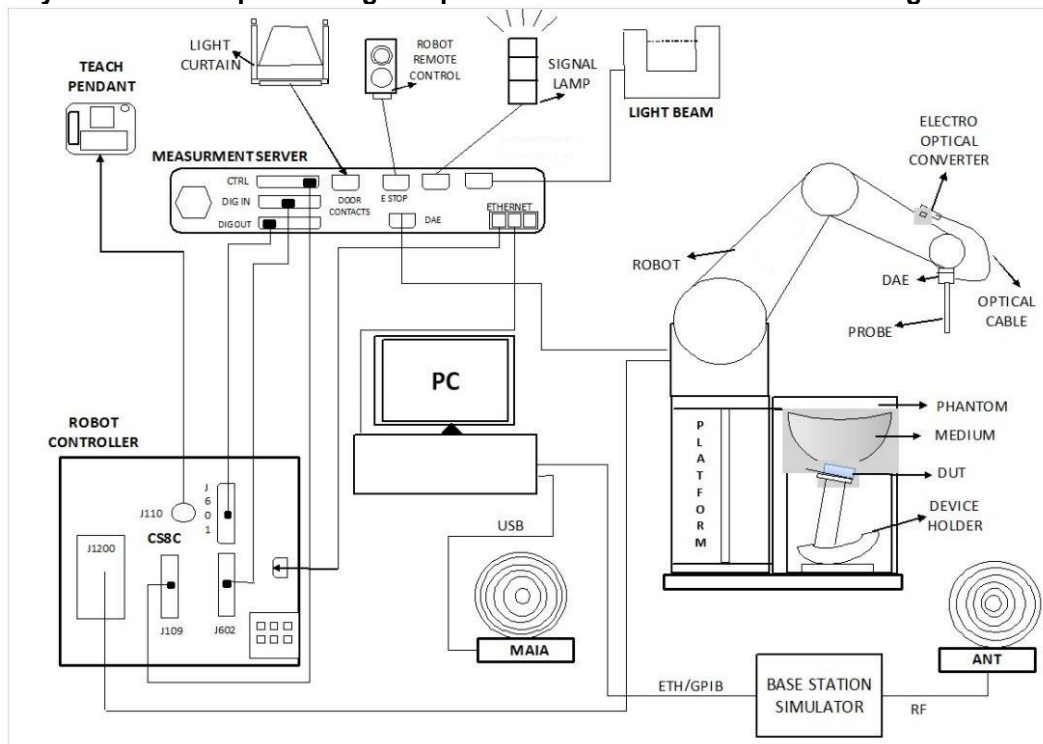
SAR is expressed in units of Watts per kilogram (W/kg)

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

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, Taiwan			TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan				
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	

7.3 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.

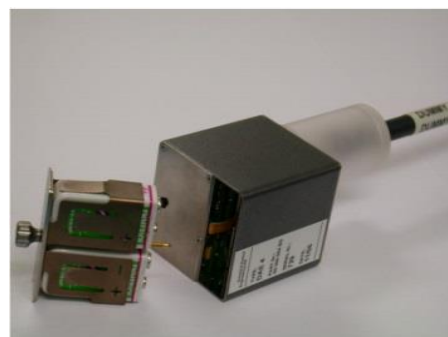


Fig 5.1 Photo of DAE

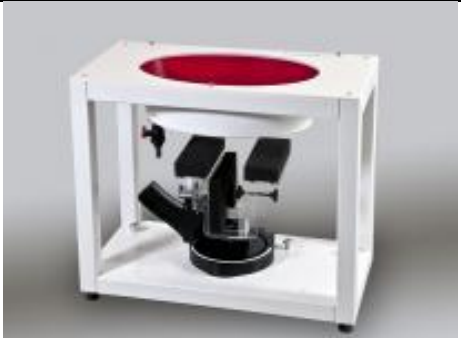
7.4 Phantom

<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.

7.5 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 remains in the same test position for all measurements and all volume scans use the same spatial resolution and grid spacing. When all volume scans 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	1117	Mar. 24, 2022	Mar. 22, 2024
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	4d060	Mar. 24, 2022	Mar. 22, 2024
SPEAG	1750MHz System Validation Kit ⁽²⁾	D1750V2	1120	Mar. 25, 2022	Mar. 23, 2024
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d093	Mar. 25, 2022	Mar. 23, 2024
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	736	Aug. 17, 2021	Aug. 14, 2024
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1008	Aug. 17, 2021	Aug. 14, 2024
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 17, 2022	Jan. 15, 2024
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1022	Jul. 14, 2021	Jul. 11, 2024
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1017	Apr. 22, 2022	Apr. 20, 2024
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1006	May. 25, 2023	May. 23, 2025
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1003	Mar. 15, 2023	Mar. 14, 2024
SPEAG	13MHz System Validation Kit	CLA13	1011	Jul. 10, 2023	Jul. 09, 2024
SPEAG	5G Verification Source	10GHz	1020	Jan. 20, 2023	Jan. 19, 2024
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 12, 2023	Oct. 11, 2024
SPEAG	Data Acquisition Electronics	DAE4	703	May. 16, 2023	May. 15, 2024
SPEAG	Data Acquisition Electronics	DAE4	853	Jul. 14, 2023	Jul. 13, 2024
SPEAG	Data Acquisition Electronics	DAE4	854	Aug. 17, 2023	Aug. 16, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Apr. 25, 2023	Apr. 24, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7306	Jul. 18, 2023	Jul. 17, 2024
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	MY59321826	Apr. 26, 2023	Apr. 25, 2024
R&S	BT Base Station	CBT	101136	Oct. 22, 2023	Oct. 21, 2024
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Sep. 27, 2023	Sep. 26, 2024
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 30, 2023	Oct. 29, 2024
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 19, 2023	Sep. 18, 2024
SPEAG	Dielectric Probe Kit	DAK-12	1156	Jul. 17, 2023	Jul. 16, 2024
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3690	Aug. 09, 2023	Aug. 08, 2024
Anritsu	Power Meter	ML2495A	1419002	Aug. 17, 2023	Aug. 16, 2024
Anritsu	Power Sensor	MA2411B	1911176	Aug. 18, 2023	Aug. 17, 2024
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 10, 2023	Jul. 09, 2024
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
13	22.4	0.729	54.600	0.75	55.00	-2.80	-0.73	± 5	2024/1/11
750	22.3	0.908	42.300	0.89	41.90	2.02	0.95	± 5	2023/12/1
750	22.4	0.898	42.900	0.89	41.90	0.90	2.39	± 5	2023/12/2
835	22.3	0.929	41.800	0.90	41.50	3.22	0.72	± 5	2023/12/3
835	22.6	0.921	41.600	0.90	41.50	2.33	0.24	± 5	2023/12/4
1750	22.5	1.350	40.600	1.37	40.10	-1.46	1.25	± 5	2023/12/5
1750	22.6	1.360	40.700	1.37	40.10	-0.73	1.50	± 5	2023/12/6
1750	22.7	1.380	40.800	1.37	40.10	0.73	1.75	± 5	2023/12/7
1900	22.5	1.430	39.100	1.40	40.00	2.14	-2.25	± 5	2023/12/8
1900	22.6	1.440	39.200	1.40	40.00	2.86	-2.00	± 5	2023/12/9
1900	22.7	1.450	39.300	1.40	40.00	3.57	-1.75	± 5	2023/12/10
2450	22.5	1.830	38.900	1.80	39.20	1.67	-0.77	± 5	2023/12/24
2600	22.5	2.000	38.400	1.96	39.00	2.04	-1.54	± 5	2023/12/13
2600	22.6	2.030	38.100	1.96	39.00	3.57	-2.31	± 5	2023/12/14
2600	22.5	2.020	38.500	1.96	39.00	3.06	-1.28	± 5	2023/12/15
2600	22.6	1.980	39.000	1.96	39.00	1.02	0.00	± 5	2023/12/16
2600	22.7	2.010	38.300	1.96	39.00	2.55	-1.79	± 5	2023/12/17
3500	22.3	2.950	38.200	2.91	37.90	1.37	0.79	± 5	2023/12/18
3500	22.2	3.000	38.800	2.91	37.90	3.09	2.37	± 5	2023/12/19
3700	22.3	3.160	38.000	3.12	37.70	1.28	0.80	± 5	2023/12/20
3700	22.2	3.200	38.600	3.12	37.70	2.56	2.39	± 5	2023/12/21
3900	22.3	3.360	37.800	3.33	37.51	0.90	0.77	± 5	2023/12/22
3900	22.2	3.410	38.700	3.33	37.51	2.40	3.17	± 5	2023/12/23
5250	22.5	4.650	35.500	4.71	35.95	-1.27	-1.25	± 5	2023/12/25
5250	22.5	4.580	35.300	4.71	35.95	-2.76	-1.81	± 5	2024/1/8
5600	22.5	5.050	34.900	5.07	35.50	-0.39	-1.69	± 5	2023/12/25
5600	22.5	4.980	34.700	5.07	35.50	-1.78	-2.25	± 5	2024/1/8
5750	22.5	5.230	34.600	5.22	35.35	0.19	-2.12	± 5	2023/12/25
5750	22.5	5.160	34.400	5.22	35.35	-1.15	-2.69	± 5	2024/1/8
6500	22.6	6.150	34.800	6.07	34.50	1.32	0.87	± 5	2023/12/26

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 (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR-03	2024/1/11	13	250	CLA13-1011	EX3DV4 - SN7306	DAE4 Sn853	0.148	0.544	0.592	9.63	0.092	0.340	0.368	8.24
SAR-10	2023/12/1	750	50	D750V3-1117	EX3DV4 - SN3925	DAE4 Sn703	0.415	8.520	8.3	-2.58	0.274	5.600	5.48	-2.14
SAR-10	2023/12/2	750	50	D750V3-1117	EX3DV4 - SN3925	DAE4 Sn703	0.412	8.520	8.24	-3.29	0.273	5.600	5.46	-2.50
SAR-10	2023/12/3	835	50	D835V2-4d060	EX3DV4 - SN3925	DAE4 Sn703	0.473	9.730	9.46	-2.77	0.309	6.390	6.18	-3.29
SAR-10	2023/12/4	835	50	D835V2-4d060	EX3DV4 - SN3925	DAE4 Sn703	0.472	9.730	9.44	-2.98	0.308	6.390	6.16	-3.60
SAR-10	2023/12/5	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn703	1.690	36.400	33.8	-7.14	0.893	19.100	17.86	-6.49
SAR-10	2023/12/6	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn703	1.710	36.400	34.2	-6.04	0.901	19.100	18.02	-5.65
SAR-10	2023/12/7	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn703	1.730	36.400	34.6	-4.95	0.913	19.100	18.26	-4.40
SAR-10	2023/12/8	1900	50	D1900V2-5d093	EX3DV4 - SN3925	DAE4 Sn703	1.920	39.900	38.4	-3.76	1.000	20.700	20	-3.38
SAR-10	2023/12/9	1900	50	D1900V2-5d093	EX3DV4 - SN3925	DAE4 Sn703	1.940	39.900	38.8	-2.76	1.020	20.700	20.4	-1.45
SAR-10	2023/12/10	1900	50	D1900V2-5d093	EX3DV4 - SN3925	DAE4 Sn703	1.960	39.900	39.2	-1.75	1.030	20.700	20.6	-0.48
SAR-10	2023/12/24	2450	50	D2450V2-736	EX3DV4 - SN3925	DAE4 Sn703	2.440	54.200	48.8	-9.96	1.140	25.300	22.8	-9.88
SAR-10	2023/12/13	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn703	2.750	58.000	55	-5.17	1.240	25.800	24.8	-3.88
SAR-10	2023/12/14	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn703	2.790	58.000	55.8	-3.79	1.260	25.800	25.2	-2.33
SAR-10	2023/12/15	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn703	2.760	58.000	55.2	-4.83	1.250	25.800	25	-3.10
SAR-10	2023/12/16	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn703	2.720	58.000	54.4	-6.21	1.230	25.800	24.6	-4.65
SAR-10	2023/12/17	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn703	2.770	58.000	55.4	-4.48	1.250	25.800	25	-3.10
SAR-10	2023/12/18	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn703	3.300	67.200	66	-1.79	1.290	25.100	25.8	2.79
SAR-10	2023/12/19	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn703	3.350	67.200	67	-0.30	1.310	25.100	26.2	4.38
SAR-10	2023/12/20	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn703	3.380	68.200	67.6	-0.88	1.280	24.700	25.6	3.64
SAR-10	2023/12/21	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn703	3.420	68.200	68.4	0.29	1.300	24.700	26	5.26
SAR-10	2023/12/22	3900	50	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn703	3.330	68.700	66.6	-3.06	1.210	23.900	24.2	1.26
SAR-10	2023/12/23	3900	50	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn703	3.380	68.700	67.6	-1.60	1.220	23.900	24.4	2.09
SAR-10	2023/12/25	5250	50	D5GHZV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn703	3.660	81.200	73.2	-9.85	1.050	23.200	21	-9.48
SAR-10	2024/1/8	5250	50	D5GHZV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn703	3.670	81.200	73.4	-9.61	1.070	23.200	21.4	-7.76
SAR-10	2023/12/25	5600	50	D5GHZV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn703	4.060	84.700	81.2	-4.13	1.150	24.200	23	-4.96
SAR-10	2024/1/8	5600	50	D5GHZV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn703	4.080	84.700	81.6	-3.66	1.110	24.200	22.2	-8.26
SAR-10	2023/12/25	5750	50	D5GHZV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn703	3.700	80.900	74	-8.53	1.040	22.900	20.8	-9.17
SAR-10	2024/1/8	5750	50	D5GHZV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn703	3.900	80.900	78	-3.58	1.100	22.900	22	-3.93
SAR-10	2023/12/26	6500	100	D6.5GHZV2-1003	EX3DV4 - SN3925	DAE4 Sn703	29.100	297.000	291	-2.02	5.410	54.500	54.1	-0.73

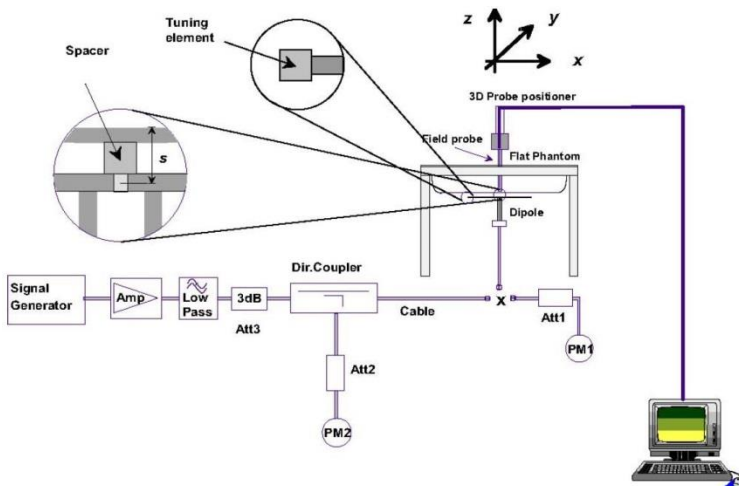


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

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

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm ² (W/m ²)	Targeted 4 cm ² (W/m ²)	Deviation (dB)	Date
SAR01-HY	10G	10GHz_1020	EUmmWV4 - SN9461	DAE4 Sn854	10mm	53.1	54.9	-0.14	2023/12/18

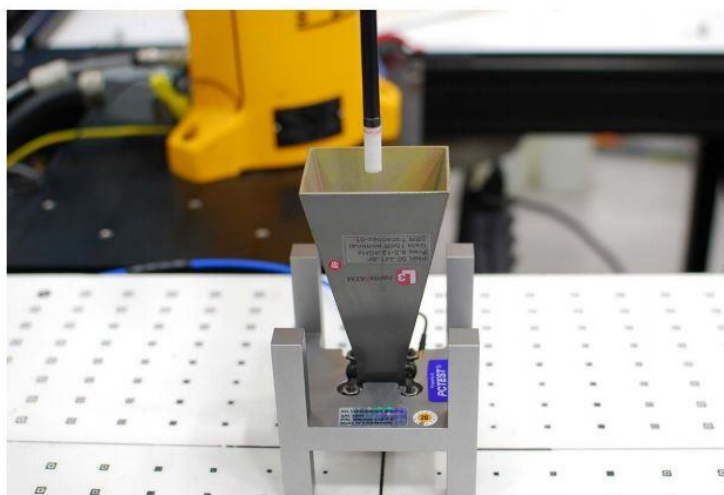


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

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

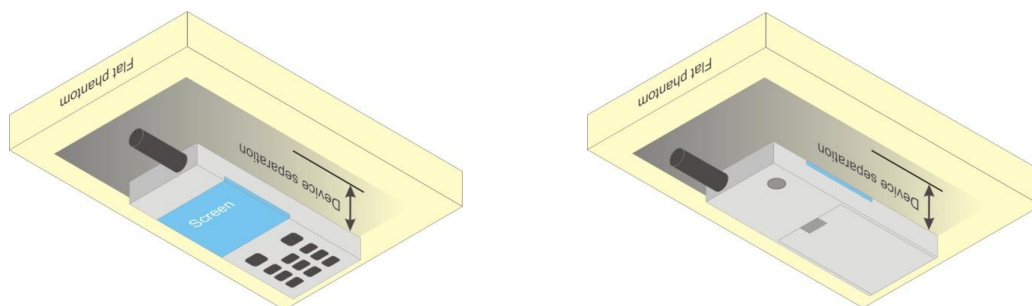


Fig 9.4 Body Worn Position

11.2 Extremity Exposure

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

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

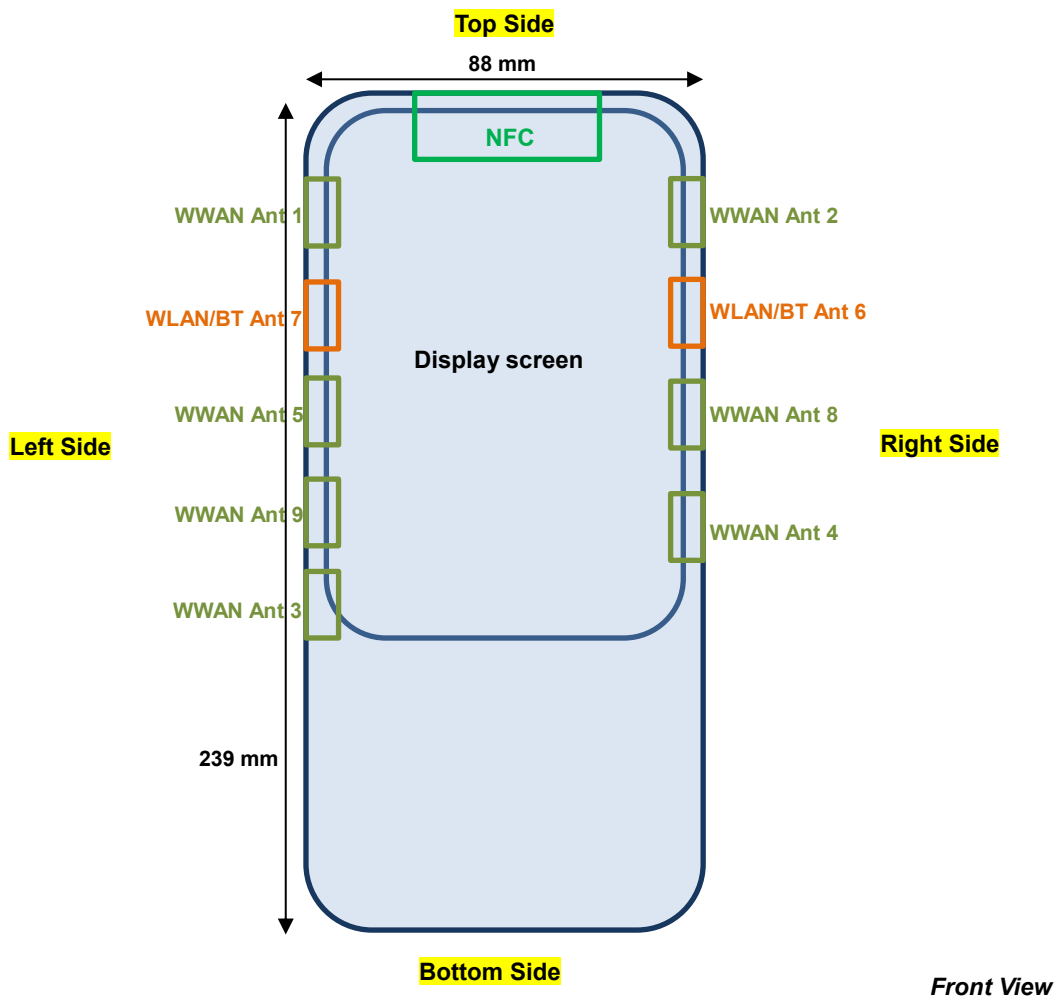


11.3 Wireless Router

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

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

12. Antenna Location


Front View

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 1	>25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
WWAN Ant 2	>25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WWAN Ant 3	>25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm
WWAN Ant 4	>25mm	≤ 25mm	>25mm	>25mm	≤ 25mm	>25mm
WWAN Ant 5	>25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm
WWAN Ant 8	>25mm	≤ 25mm	>25mm	>25mm	≤ 25mm	≤ 25mm
WWAN Ant 9	>25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm
BT&WLAN Ant 6	>25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
BT&WLAN Ant 7	>25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 1	No	Yes	Yes	No	No	Yes
WWAN Ant 2	No	Yes	Yes	No	Yes	No
WWAN Ant 3	No	Yes	No	No	No	Yes
WWAN Ant 4	No	Yes	No	No	Yes	No
WWAN Ant 5	No	Yes	No	No	No	Yes
WWAN Ant 8	No	Yes	No	No	Yes	Yes
WWAN Ant 9	No	Yes	No	No	No	Yes
BT&WLAN Ant 6	No	Yes	Yes	No	Yes	No
BT&WLAN Ant 7	No	Yes	Yes	No	No	Yes

General Note:

- Referring to KDB 941225 D06 v02r01, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

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 SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. 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.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g Extremity SAR is required.
6. When the WiFi is on or off, the device WWAN operation will limit different output power, the RF Exposure evaluation was used higher power level perform and assessment Sim-Tx analysis, if some exposure position does not meet simultaneous transmission requirement, additional SAR at lower power level to meet Sim-Tx compliance.
7. When the WWAN is on or off, the device WLAN operation will limit different output power, the RF Exposure evaluation was used higher power level perform and assessment Sim-Tx analysis, if some exposure position does not meet simultaneous transmission requirement, additional SAR at lower power level to meet Sim-Tx compliance.
8. The device support DBS mode (Dual band simultaneous) for WLAN operation, for RF Exposure was performed at non-DBS power level to do DBS Sim-Tx analysis, if some exposure position does not meet simultaneous transmission requirement additional SAR at DBS power level to meet Sim-Tx compliance.

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 4/5/17/38 SAR test was covered by Band 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. The NR n2/38 SAR test was covered by NR n25/41; due to SAR test for overlapping NR bands can be reduced if the maximum power including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.
 - g. 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.

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain.
6. Additional SISO operation for 2.4GHz WLAN is performed Sim-Tx analysis.
7. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The WiFi 6E PD was performed according 2020 TCB workshop RF Exposure 5G RFX Policies Interim Procedures.
2. First, evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020 and using highest SAR test configurations evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method (2 mm closest meas. plane).
3. Per Interim Procedures. The power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $> 30\%$. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor
4. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. The WiFi 6E RF Exposure results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio, the analysis can be found in this report section 14.
6. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
7. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
8. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
9. The measurement procedure consists of measuring the PD_{inc} at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPD_n fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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

NFC Note:

1. NFC was evaluated for extremity based on hand usage conditions.
2. NFC 13.56MHz antenna port is not available on the device to support conducted power measurement, therefore the measured results are referred to as reported SAR.
3. NFC SAR test tissue-simulating liquid parameter: refer to IEC/IEEE 62209-1528 2020.

**13.1 Hotspot SAR****<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	WCDMA II_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 3	Sample 1	Standard	29 Key	9538	1907.6	23.56	24.00	1.107	0.02	0.093	0.103
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	9538	1907.6	23.56	24.00	1.107	0.03	0.528	0.584
	WCDMA II_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	9538	1907.6	23.56	24.00	1.107	0.15	0.123	0.136
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	9538	1907.6	23.56	24.00	1.107	-0.16	0.476	0.527
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	9538	1907.6	23.56	24.00	1.107	0	0.510	0.564
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	9538	1907.6	23.56	24.00	1.107	-0.1	0.466	0.516
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	9538	1907.6	23.56	24.00	1.107	-0.11	0.495	0.548
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	9538	1907.6	23.56	24.00	1.107	-0.13	0.468	0.518
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	9538	1907.6	23.56	24.00	1.107	-0.11	0.482	0.533
02	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 3	Sample 1	Standard	29 Key	1513	1752.6	23.57	24.00	1.104	-0.15	0.104	0.115
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	1513	1752.6	23.57	24.00	1.104	0.03	0.540	0.596
	WCDMA IV_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	1513	1752.6	23.57	24.00	1.104	0.06	0.112	0.124
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	1513	1752.6	23.57	24.00	1.104	-0.05	0.439	0.485
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	1513	1752.6	23.57	24.00	1.104	-0.11	0.441	0.487
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	1513	1752.6	23.57	24.00	1.104	0.05	0.469	0.518
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	1513	1752.6	23.57	24.00	1.104	-0.17	0.450	0.497
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	1513	1752.6	23.57	24.00	1.104	0.08	0.461	0.509
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	1513	1752.6	23.57	24.00	1.104	0.12	0.472	0.521
03	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 3	Sample 1	Standard	29 Key	4132	826.4	24.62	25.00	1.091	-0.13	0.269	0.294
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	4132	826.4	24.62	25.00	1.091	-0.04	0.398	0.434
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	4132	826.4	24.62	25.00	1.091	0.18	0.211	0.230
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	4132	826.4	24.62	25.00	1.091	-0.18	0.361	0.394
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	4132	826.4	24.62	25.00	1.091	-0.07	0.377	0.411
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	4132	826.4	24.62	25.00	1.091	0.14	0.364	0.397
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	4132	826.4	24.62	25.00	1.091	0.17	0.371	0.405
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	4132	826.4	24.62	25.00	1.091	0	0.383	0.418
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	4132	826.4	24.62	25.00	1.091	0.09	0.358	0.391



FCC SAR TEST REPORT

Report No. : FA3N2803B

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
04	LTE Band 2_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	23.59	24.00	1.099	-0.11	0.110	0.121
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	21.66	23.00	1.361	-0.03	0.075	0.102
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	23.59	24.00	1.099	0	0.522	0.574
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	21.66	23.00	1.361	0.06	0.325	0.442
	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	23.59	24.00	1.099	0.15	0.106	0.116
	LTE Band 2_Ant 1	20M	QPSK	50	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	19100	1900	21.66	23.00	1.361	-0.17	0.071	0.097
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	19100	1900	23.59	24.00	1.099	0.04	0.463	0.509
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	19100	1900	23.59	24.00	1.099	-0.12	0.468	0.514
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	19100	1900	23.59	24.00	1.099	0.01	0.499	0.548
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	19100	1900	23.59	24.00	1.099	0.18	0.487	0.535
05	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	19100	1900	23.59	24.00	1.099	-0.14	0.467	0.513
	LTE Band 2C_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	19100+18902	1900	23.30	24.00	1.175	0	0.482	0.566
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	19100	1900	23.59	24.00	1.099	0.15	0.491	0.540
	LTE Band 7_Ant 5	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	21350	2560	22.74	23.00	1.062	0.16	0.254	0.270
	LTE Band 7_Ant 5	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	21350	2560	21.27	22.00	1.183	-0.11	0.202	0.239
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	21350	2560	22.74	23.00	1.062	-0.02	0.507	0.538
	LTE Band 7_Ant 5	20M	QPSK	50	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	21350	2560	21.27	22.00	1.183	-0.05	0.359	0.425
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	21350	2560	22.74	23.00	1.062	-0.14	0.448	0.476
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	21350	2560	22.74	23.00	1.062	0.02	0.444	0.471
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	21350	2560	22.74	23.00	1.062	-0.03	0.440	0.467
06	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	21350	2560	22.74	23.00	1.062	-0.14	0.441	0.468
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	21350	2560	22.74	23.00	1.062	-0.08	0.421	0.447
	LTE Band 7C_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	20850+21048	2510	22.61	23.00	1.094	-0.02	0.467	0.511
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	21350	2560	22.74	23.00	1.062	0.02	0.396	0.420
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	24.35	25.00	1.161	0.13	0.216	0.251
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	23.41	24.00	1.146	0.11	0.169	0.194
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	24.35	25.00	1.161	0.04	0.235	0.273
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	23.41	24.00	1.146	-0.19	0.189	0.217
	LTE Band 12_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	24.35	25.00	1.161	-0.12	0.184	0.214
	LTE Band 12_Ant 1	10M	QPSK	25	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	23095	707.5	23.41	24.00	1.146	0.06	0.149	0.171
07	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	23095	707.5	24.35	25.00	1.161	-0.04	0.212	0.246
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	23095	707.5	24.35	25.00	1.161	0.15	0.219	0.254
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	23095	707.5	24.35	25.00	1.161	-0.02	0.231	0.268
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	23095	707.5	24.35	25.00	1.161	0.16	0.221	0.257
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	23095	707.5	24.35	25.00	1.161	0.05	0.211	0.245
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	23095	707.5	24.35	25.00	1.161	0.17	0.200	0.232
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	23.75	24.50	1.189	0.16	0.275	0.327
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	22.90	23.50	1.148	-0.03	0.210	0.241
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	23.75	24.50	1.189	0.17	0.366	0.435
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	22.90	23.50	1.148	-0.15	0.290	0.333
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	23.75	24.50	1.189	0.06	0.174	0.207
	LTE Band 26_Ant 1	15M	QPSK	36	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	26865	831.5	22.90	23.50	1.148	-0.08	0.140	0.161
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	26865	831.5	23.75	24.50	1.189	-0.17	0.358	0.425
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	26865	831.5	23.75	24.50	1.189	0.09	0.345	0.410
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	26865	831.5	23.75	24.50	1.189	-0.01	0.352	0.418
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	26865	831.5	23.75	24.50	1.189	0.1	0.357	0.424
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	26865	831.5	23.75	24.50	1.189	-0.02	0.351	0.417
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	20450+20549	829	24.40	24.50	1.023	0.17	0.347	0.355
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	26865	831.5	23.75	24.50	1.189	0.19	0.295	0.351



FCC SAR TEST REPORT

Report No. : FA3N2803B

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 5	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.16	0.196	0.231
	LTE Band 41_Ant 5	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	41490	2680	23.29	24.00	1.178	62.9	1.006	0.11	0.152	0.180
08	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.01	0.392	0.462
	LTE Band 41_Ant 5	20M	QPSK	50	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	41490	2680	23.29	24.00	1.178	62.9	1.006	0.12	0.269	0.319
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.07	0.372	0.439
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.11	0.362	0.427
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.02	0.350	0.413
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.12	0.375	0.442
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.14	0.380	0.448
	LTE Band 41_HPUE_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	39750	2506	27.00	27.00	1.000	42.9	1.009	0.03	0.453	0.457
	LTE Band 38C_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	37901+38099	2585.1	24.66	25.00	1.081	62.9	1.006	-0.01	0.371	0.404
	LTE Band 41C_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	39750+39948	2506	24.65	25.00	1.084	62.9	1.006	-0.01	0.363	0.396
	LTE Band 41D_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	41055+41292	2636.5	24.65	25.00	1.084	62.9	1.006	-0.01	0.359	0.391
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.14	0.349	0.412
	LTE Band 42_Ant 8	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.14	0.114	0.127
	LTE Band 42_Ant 8	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	42190	3460	20.45	21.50	1.274	62.9	1.006	-0.05	0.086	0.110
09	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	-0.04	0.487	0.542
	LTE Band 42_Ant 8	20M	QPSK	50	0	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	42190	3460	20.45	21.50	1.274	62.9	1.006	0.18	0.292	0.374
	LTE Band 42_Ant 8	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.11	0.426	0.474
	LTE Band 42_Ant 8	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.19	0.410	0.456
	LTE Band 42_Ant 8	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.07	0.433	0.482
	LTE Band 42_Ant 8	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.13	0.429	0.478
	LTE Band 42_Ant 8	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	0.06	0.414	0.461
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	42190	3460	22.06	22.50	1.107	62.9	1.006	-0.16	0.410	0.456

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	23.27	23.50	1.054	0.12	0.112	0.118
	LTE Band 66_Ant 1	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	22.37	22.50	1.030	-0.16	0.089	0.092
10	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	23.27	23.50	1.054	0.02	0.516	0.544
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	22.37	22.50	1.030	0.17	0.400	0.412
	LTE Band 66_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	23.27	23.50	1.054	-0.18	0.131	0.138
	LTE Band 66_Ant 1	20M	QPSK	50	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	132572	1770	22.37	22.50	1.030	0.19	0.104	0.107
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	132572	1770	23.27	23.50	1.054	0.03	0.503	0.530
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	132572	1770	23.27	23.50	1.054	0.15	0.499	0.526
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	132572	1770	23.27	23.50	1.054	0.03	0.498	0.525
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	132572	1770	23.27	23.50	1.054	0.19	0.472	0.498
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	132572	1770	23.27	23.50	1.054	0.01	0.475	0.501
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	132074+132140	1720.2	22.56	23.50	1.242	0.02	0.434	0.539
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	132572+132374	1770	23.23	23.50	1.064	0.02	0.470	0.500
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	132572	1770	23.27	23.50	1.054	0.06	0.451	0.476
11	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	24.05	25.00	1.245	0.05	0.189	0.235
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	23.19	24.00	1.205	0.19	0.145	0.175
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	24.05	25.00	1.245	-0.03	0.154	0.192
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	23.19	24.00	1.205	0.03	0.126	0.152
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	24.05	25.00	1.245	0.14	0.083	0.103
	LTE Band 71_Ant 1	20M	QPSK	50	0	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	133297	680.5	23.19	24.00	1.205	-0.18	0.064	0.077
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	BLE	29 Key	133297	680.5	24.05	25.00	1.245	0.18	0.170	0.212
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	53 Key	133297	680.5	24.05	25.00	1.245	-0.03	0.184	0.229
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	43 Key	133297	680.5	24.05	25.00	1.245	0.15	0.180	0.224
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	58 Key	133297	680.5	24.05	25.00	1.245	-0.01	0.178	0.222
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 1	Standard	34 Key	133297	680.5	24.05	25.00	1.245	-0.02	0.185	0.230
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 3	Sample 2	Standard	29 Key	133297	680.5	24.05	25.00	1.245	0.06	0.171	0.213



FCC SAR TEST REPORT

Report No. : FA3N2803B

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	23.11	23.50	1.094	0.15	0.074	0.081
	FR1 n2_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	22.35	23.50	1.303	0.01	0.067	0.087
12	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	23.11	23.50	1.094	-0.09	0.529	0.579
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	22.35	23.50	1.303	0.14	0.420	0.547
	FR1 n2_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	23.11	23.50	1.094	0.18	0.092	0.101
	FR1 n2_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	380000	1900	22.35	23.50	1.303	-0.12	0.079	0.103
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	380000	1900	23.11	23.50	1.094	-0.18	0.427	0.467
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	380000	1900	23.11	23.50	1.094	0.04	0.470	0.514
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	380000	1900	23.11	23.50	1.094	-0.12	0.444	0.486
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	380000	1900	23.11	23.50	1.094	0.14	0.468	0.512
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	380000	1900	23.11	23.50	1.094	0.12	0.430	0.470
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	380000	1900	23.11	23.50	1.094	0.06	0.466	0.510
	FR1 n7_Ant 5	40M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	507000	2535	23.62	24.00	1.091	0.16	0.320	0.349
	FR1 n7_Ant 5	40M	BPSK	108	54	Front	10mm	DSI 3	Sample 1	Standard	29 Key	507000	2535	23.38	24.00	1.153	0.03	0.279	0.322
13	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	507000	2535	23.62	24.00	1.091	0.01	0.538	0.587
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	507000	2535	23.38	24.00	1.153	-0.03	0.504	0.581
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	507000	2535	23.62	24.00	1.091	0.11	0.520	0.568
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	507000	2535	23.62	24.00	1.091	-0.16	0.515	0.562
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	507000	2535	23.62	24.00	1.091	-0.14	0.488	0.533
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	507000	2535	23.62	24.00	1.091	-0.02	0.484	0.528
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	507000	2535	23.62	24.00	1.091	0.03	0.528	0.576
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	507000	2535	23.62	24.00	1.091	0.02	0.473	0.516
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	24.20	25.00	1.202	-0.06	0.192	0.231
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	23.90	25.00	1.288	-0.15	0.165	0.213
14	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	24.20	25.00	1.202	0.09	0.213	0.256
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	23.90	25.00	1.288	0.16	0.180	0.232
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	24.20	25.00	1.202	0.02	0.138	0.166
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	141500	707.5	23.90	25.00	1.288	0.09	0.119	0.153
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	141500	707.5	24.20	25.00	1.202	0.03	0.196	0.236
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	141500	707.5	24.20	25.00	1.202	0.1	0.209	0.251
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	141500	707.5	24.20	25.00	1.202	-0.16	0.196	0.236
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	141500	707.5	24.20	25.00	1.202	-0.1	0.202	0.243
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	141500	707.5	24.20	25.00	1.202	-0.01	0.191	0.230
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	141500	707.5	24.20	25.00	1.202	-0.15	0.202	0.243
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	24.00	24.50	1.122	0.02	0.281	0.315
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	23.87	24.50	1.156	0.09	0.258	0.298
15	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	24.00	24.50	1.122	0.1	0.346	0.388
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	23.87	24.50	1.156	-0.11	0.316	0.365
	FR1 n26_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	24.00	24.50	1.122	0.03	0.171	0.192
	FR1 n26_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	166300	831.5	23.87	24.50	1.156	-0.14	0.160	0.185
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	166300	831.5	24.00	24.50	1.122	0.13	0.328	0.368
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	166300	831.5	24.00	24.50	1.122	0	0.334	0.375
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	166300	831.5	24.00	24.50	1.122	-0.17	0.319	0.358
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	166300	831.5	24.00	24.50	1.122	0.14	0.329	0.369
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	166300	831.5	24.00	24.50	1.122	-0.07	0.338	0.379
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	166300	831.5	24.00	24.50	1.122	0.07	0.324	0.364
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	24.35	25.00	1.161	0.11	0.238	0.276
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	24.16	25.00	1.213	0.03	0.209	0.254
16	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	24.35	25.00	1.161	0.03	0.505	0.587
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	24.16	25.00	1.213	-0.08	0.435	0.528
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	518598	2592.99	24.35	25.00	1.161	-0.07	0.487	0.566
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	518598	2592.99	24.35	25.00	1.161	-0.1	0.488	0.567
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	518598	2592.99	24.35	25.00	1.161	-0.15	0.451	0.524
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	518598	2592.99	24.35	25.00	1.161	-0.14	0.456	0.530
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	518598	2592.99	24.35	25.00	1.161	-0.12	0.464	0.539
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	26.14	27.00	1.219	0.03	0.389	0.474
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	518598	2592.99	24.35	25.00	1.161	-0.03	0.421	0.489
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	0.12	0.092	0.099



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	FR1 n41_Ant 2	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.85	22.00	1.303	0.1	0.047	0.061
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	-0.06	0.161	0.174
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.85	22.00	1.303	0.17	0.122	0.159
	FR1 n41_Ant 2	100M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	0.09	0.067	0.072
	FR1 n41_Ant 2	100M	BPSK	135	69	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.85	22.00	1.303	-0.14	0.053	0.069
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	518598	2592.99	21.67	22.00	1.079	-0.01	0.146	0.158
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	518598	2592.99	21.67	22.00	1.079	-0.11	0.144	0.155
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	518598	2592.99	21.67	22.00	1.079	-0.03	0.155	0.167
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	518598	2592.99	21.67	22.00	1.079	-0.16	0.151	0.163
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	518598	2592.99	21.67	22.00	1.079	0.03	0.159	0.172
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	-0.18	0.141	0.152
	FR1 n41_Ant 4	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.12	22.00	1.225	0.11	0.048	0.059
	FR1 n41_Ant 4	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.41	22.00	1.442	-0.02	0.042	0.061
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.12	22.00	1.225	0.13	0.093	0.114
	FR1 n41_Ant 4	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.41	22.00	1.442	-0.18	0.085	0.123
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	518598	2592.99	21.12	22.00	1.225	-0.03	0.084	0.103
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	518598	2592.99	21.12	22.00	1.225	-0.11	0.084	0.103
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	518598	2592.99	21.12	22.00	1.225	0.08	0.087	0.107
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	518598	2592.99	21.12	22.00	1.225	-0.13	0.086	0.105
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	518598	2592.99	21.12	22.00	1.225	0.08	0.083	0.102
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	518598	2592.99	21.12	22.00	1.225	0.17	0.082	0.100
	FR1 n41_Ant 3	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.01	22.00	1.256	0.17	0.050	0.063
	FR1 n41_Ant 3	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.56	22.00	1.393	0.03	0.047	0.065
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	21.01	22.00	1.256	0.12	0.129	0.162
	FR1 n41_Ant 3	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	518598	2592.99	20.56	22.00	1.393	-0.05	0.118	0.164
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	518598	2592.99	21.01	22.00	1.256	-0.13	0.124	0.156
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	518598	2592.99	21.01	22.00	1.256	0.18	0.117	0.147
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	518598	2592.99	21.01	22.00	1.256	-0.01	0.124	0.156
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	518598	2592.99	21.01	22.00	1.256	0.11	0.128	0.161
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	518598	2592.99	21.01	22.00	1.256	0.17	0.119	0.149
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	518598	2592.99	21.01	22.00	1.256	-0.08	0.095	0.119
	FR1 n66_Ant 1	40M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.31	25.00	1.172	0.14	0.113	0.132
	FR1 n66_Ant 1	40M	BPSK	108	54	Front	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.04	25.00	1.247	0.06	0.112	0.140
17	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.31	25.00	1.172	0.02	0.503	0.590
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.04	25.00	1.247	-0.15	0.452	0.564
	FR1 n66_Ant 1	40M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.31	25.00	1.172	-0.06	0.133	0.156
	FR1 n66_Ant 1	40M	BPSK	108	54	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	349000	1745	24.04	25.00	1.247	0.14	0.115	0.143
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	349000	1745	24.31	25.00	1.172	-0.07	0.479	0.561
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	349000	1745	24.31	25.00	1.172	0.06	0.472	0.553
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	349000	1745	24.31	25.00	1.172	0.17	0.468	0.549
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	349000	1745	24.31	25.00	1.172	0.01	0.455	0.533
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	349000	1745	24.31	25.00	1.172	-0.01	0.449	0.526
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	349000	1745	24.31	25.00	1.172	0.17	0.452	0.530
18	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.06	25.00	1.242	0.1	0.180	0.223
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.00	25.00	1.259	-0.06	0.170	0.214
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.06	25.00	1.242	-0.09	0.158	0.196
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.00	25.00	1.259	0.15	0.149	0.188
	FR1 n71_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.06	25.00	1.242	-0.18	0.079	0.098
	FR1 n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 3	Sample 1	Standard	29 Key	136100	680.5	24.00	25.00	1.259	0.07	0.074	0.093
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	136100	680.5	24.06	25.00	1.242	-0.15	0.165	0.205
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	136100	680.5	24.06	25.00	1.242	-0.12	0.176	0.219
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	136100	680.5	24.06	25.00	1.242	-0.05	0.176	0.219
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	136100	680.5	24.06	25.00	1.242	-0.02	0.168	0.209
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	136100	680.5	24.06	25.00	1.242	0	0.176	0.219
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 3	Sample 2	Standard	29 Key	136100	680.5	24.06	25.00	1.242	0.14	0.163	0.202
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	19.12	19.50	1.091	0.13	0.089	0.097
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	18.29	19.50	1.321	-0.11	0.080	0.106
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	19.12	19.50	1.091	-0.02	0.363	0.396
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	18.29	19.50	1.321	-0.05	0.338	0.447
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	656000	3840	19.12	19.50	1.091	-0.19	0.334	0.365
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	656000	3840	19.12	19.50	1.091	0.07	0.332	0.362
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	656000	3840	19.12	19.50	1.091	-0.09	0.350	0.382



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	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	656000	3840	19.12	19.50	1.091	-0.06	0.346	0.378
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	656000	3840	19.12	19.50	1.091	-0.15	0.363	0.396
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	22.15	22.50	1.084	-0.11	0.388	0.421
19	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	656000	3840	19.12	19.50	1.091	-0.06	0.536	0.585
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	656000	3840	22.15	22.50	1.084	0.15	0.495	0.537
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.19	19.50	1.074	-0.16	0.154	0.165
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	18.88	19.50	1.153	0.08	0.135	0.156
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.19	19.50	1.074	0.06	0.433	0.465
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	18.88	19.50	1.153	0.14	0.396	0.457
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	633332	3499.98	19.19	19.50	1.074	-0.18	0.390	0.419
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	633332	3499.98	19.19	19.50	1.074	0.17	0.419	0.450
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	633332	3499.98	19.19	19.50	1.074	-0.12	0.397	0.426
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	633332	3499.98	19.19	19.50	1.074	0.04	0.396	0.425
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	633332	3499.98	19.19	19.50	1.074	-0.04	0.395	0.424
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	633332	3499.98	19.19	19.50	1.074	-0.15	0.516	0.554
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	633332	3499.98	22.14	22.50	1.086	0.15	0.477	0.518
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	19.05	19.50	1.109	0.06	0.100	0.111
	FR1 n77_Ant 9	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	18.70	19.50	1.202	-0.01	0.090	0.108
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	19.05	19.50	1.109	0.05	0.498	0.552
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	18.70	19.50	1.202	0.14	0.450	0.541
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	656000	3840	19.05	19.50	1.109	0.07	0.460	0.510
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	656000	3840	19.05	19.50	1.109	0.07	0.467	0.518
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	656000	3840	19.05	19.50	1.109	-0.05	0.455	0.505
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	656000	3840	19.05	19.50	1.109	0.08	0.461	0.511
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	656000	3840	19.05	19.50	1.109	0.14	0.462	0.512
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	22.06	22.50	1.107	0.13	0.462	0.511
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	656000	3840	19.05	19.50	1.109	0.09	0.417	0.463
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.33	19.50	1.040	-0.15	0.083	0.086
	FR1 n77_Ant 9	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.03	19.50	1.114	0.12	0.079	0.088
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.33	19.50	1.040	0.02	0.379	0.394
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	19.03	19.50	1.114	-0.05	0.345	0.384
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	633332	3499.98	19.33	19.50	1.040	-0.09	0.340	0.354
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	633332	3499.98	19.33	19.50	1.040	-0.02	0.356	0.370
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	633332	3499.98	19.33	19.50	1.040	-0.09	0.345	0.359
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	633332	3499.98	19.33	19.50	1.040	-0.02	0.342	0.356
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	633332	3499.98	19.33	19.50	1.040	-0.02	0.344	0.358
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	22.38	22.50	1.028	0.16	0.323	0.332
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	633332	3499.98	19.33	19.50	1.040	-0.08	0.342	0.356
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.85	22.00	1.303	-0.12	0.113	0.147
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.62	22.00	1.374	0.08	0.091	0.125
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.85	22.00	1.303	-0.04	0.433	0.564
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.62	22.00	1.374	0.15	0.379	0.521
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	656000	3840	20.85	22.00	1.303	0.04	0.430	0.560
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	656000	3840	20.85	22.00	1.303	-0.13	0.394	0.513
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	656000	3840	20.85	22.00	1.303	0.05	0.410	0.534
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	656000	3840	20.85	22.00	1.303	-0.08	0.396	0.516
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	656000	3840	20.85	22.00	1.303	0.11	0.433	0.564
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	656000	3840	20.85	22.00	1.303	-0.09	0.395	0.515
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.44	22.00	1.432	0.11	0.162	0.232
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.30	22.00	1.479	-0.09	0.141	0.209
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.44	22.00	1.432	0.07	0.168	0.241
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.30	22.00	1.479	-0.12	0.132	0.195
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	BLE	29 Key	633332	3499.98	20.44	22.00	1.432	0.02	0.166	0.238
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	53 Key	633332	3499.98	20.44	22.00	1.432	-0.05	0.160	0.229
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	43 Key	633332	3499.98	20.44	22.00	1.432	-0.11	0.152	0.218
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	58 Key	633332	3499.98	20.44	22.00	1.432	0.17	0.163	0.233
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 1	Standard	34 Key	633332	3499.98	20.44	22.00	1.432	0.16	0.157	0.225
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	DSI 3	Sample 2	Standard	29 Key	633332	3499.98	20.44	22.00	1.432	0.01	0.167	0.239
	FR1 n77_Ant 3	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.58	22.00	1.387	-0.05	0.112	0.155
	FR1 n77_Ant 3	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.48	22.00	1.419	-0.19	0.099	0.140
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.58	22.00	1.387	0.01	0.364	0.505
	FR1 n77_Ant 3	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	656000	3840	20.48	22.00	1.419	0.13	0.348	0.494



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	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	656000	3840	20.58	22.00	1.387	-0.16	0.334	0.463
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	656000	3840	20.58	22.00	1.387	-0.08	0.343	0.476
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	656000	3840	20.58	22.00	1.387	0.03	0.339	0.470
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	656000	3840	20.58	22.00	1.387	0.14	0.347	0.481
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	656000	3840	20.58	22.00	1.387	0.14	0.351	0.487
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	656000	3840	20.58	22.00	1.387	0.12	0.350	0.485
	FR1 n77_Ant 3	100M	BPSK	1	1	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.14	22.00	1.535	0.18	0.107	0.164
	FR1 n77_Ant 3	100M	BPSK	135	69	Front	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.13	22.00	1.538	0.015	0.096	0.148
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.14	22.00	1.535	0.05	0.120	0.184
	FR1 n77_Ant 3	100M	BPSK	135	69	Left Side	10mm	DSI 3	Sample 1	Standard	29 Key	633332	3499.98	20.13	22.00	1.538	0.07	0.112	0.172
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	BLE	29 Key	633332	3499.98	20.14	22.00	1.535	-0.08	0.117	0.180
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	53 Key	633332	3499.98	20.14	22.00	1.535	0.17	0.109	0.167
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	43 Key	633332	3499.98	20.14	22.00	1.535	0.18	0.119	0.183
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	58 Key	633332	3499.98	20.14	22.00	1.535	0.03	0.107	0.164
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 1	Standard	34 Key	633332	3499.98	20.14	22.00	1.535	0.18	0.115	0.176
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	10mm	DSI 3	Sample 2	Standard	29 Key	633332	3499.98	20.14	22.00	1.535	-0.09	0.114	0.175

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	-0.08	0.039	0.052
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.11	0.256	0.341
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.18	0.231	0.308
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.14	0.236	0.315
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.09	0.240	0.320
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.1	0.252	0.336
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.04	0.254	0.339
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	ON/OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.04	0.283	0.377
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.09	0.073	0.095
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.15	0.324	0.422
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.19	0.317	0.413
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.17	0.322	0.419
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.1	0.292	0.380
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.08	0.308	0.401
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.17	0.294	0.383
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.02	0.076	0.099
20	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	ON/OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.08	0.336	0.438
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.18	0.080	0.097
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.03	0.222	0.270
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.19	0.213	0.259
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.05	0.200	0.243
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.19	0.206	0.250
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.12	0.206	0.250
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.05	0.211	0.257
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.05	0.139	0.169
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.1	0.081	0.098
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON/OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.04	0.234	0.284
	WLAN5GHz	802.11a 6Mbps	Front	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.16	0.366	0.538
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.12	0.727	1.068
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	40	5200	18.70	19.50	1.202	85.66	1.167	-0.12	0.711	0.998
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.19	0.813	1.194
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	40	5200	18.70	19.50	1.202	85.66	1.167	-0.19	0.794	1.114
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	0.13	0.754	1.108
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.01	0.747	1.097
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	44	5220	18.50	19.50	1.259	85.66	1.167	0.15	0.756	1.111
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.14	0.732	1.075
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	44	5220	18.50	19.50	1.259	85.66	1.167	0.14	0.753	1.106
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.16	0.481	0.707
21	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.03	0.823	1.209
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.06	0.322	0.461

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	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.12	0.640	0.917
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	44	5220	17.60	18.00	1.096	85.94	1.164	0.12	0.624	0.796
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.07	0.667	0.955
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	44	5220	17.60	18.00	1.096	85.66	1.167	-0.15	0.652	0.834
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	BLE	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.1	0.664	0.951
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	53 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.03	0.658	0.942
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	43 Key	46	5230	17.10	18.00	1.230	85.94	1.164	-0.1	0.666	0.954
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	58 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.06	0.645	0.924
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	34 Key	46	5230	17.10	18.00	1.230	85.94	1.164	-0.05	0.663	0.949
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 1	Standard	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	-0.12	0.424	0.607
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 2	Standard	29 Key	46	5230	17.10	18.00	1.230	85.94	1.164	0.03	0.685	0.981
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	ON	Non DBS	Sample 2	Standard	29 Key	44	5220	17.60	18.00	1.096	85.94	1.164	0.03	0.675	0.862
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	ANT 6+7(7)	ON	DBS	Sample 2	Standard	29 Key	42	5210	14.00	15.00	1.259	86.09	1.162	0.13	0.361	0.528
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(7)	ON	DBS	Sample 2	Standard	29 Key	42	5210	14.00	15.00	1.259	86.09	1.162	0.09	0.407	0.595
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	0.14	0.110	0.161
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.05	0.446	0.652
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.06	0.774	1.132
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	159	5795	16.90	18.00	1.288	85.94	1.164	-0.1	0.723	1.084
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	0.06	0.735	1.075
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	155	5775	17.00	18.00	1.259	86.09	1.162	0.04	0.770	1.126
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.13	0.761	1.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.03	0.740	1.083
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.08	0.711	1.040
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.15	0.177	0.259
22	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.1	0.930	1.360
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	159	5795	16.90	18.00	1.288	85.94	1.164	-0.1	0.895	1.342
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	155	5775	17.00	17.50	1.122	86.09	1.162	-0.1	0.930	1.213
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	0.03	0.076	0.109
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	0.15	0.307	0.439
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	-0.19	0.533	0.762
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	BLE	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	0.11	0.531	0.759
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	53 Key	155	5775	16.10	17.00	1.230	86.09	1.162	-0.11	0.506	0.723
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	43 Key	155	5775	16.10	17.00	1.230	86.09	1.162	-0.01	0.524	0.749
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	58 Key	155	5775	16.10	17.00	1.230	86.09	1.162	-0.04	0.509	0.728
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	34 Key	155	5775	16.10	17.00	1.230	86.09	1.162	0.02	0.489	0.699
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 1	Standard	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	0.06	0.122	0.174
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 2	Standard	29 Key	155	5775	16.10	17.00	1.230	86.09	1.162	-0.14	0.702	1.004
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	ANT 6+7(6)	ON	Non DBS	Sample 2	Standard	29 Key	159	5795	16.80	17.00	1.047	85.94	1.164	0.12	0.685	0.835
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	ON	DBS	Sample 2	Standard	29 Key	155	5775	14.00	15.00	1.259	86.09	1.162	-0.04	0.389	0.569



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	3Mbps	Front	10mm	Ant 6	Sample 1	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.03	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.01	0.002	0.002
	Bluetooth	3Mbps	Top Side	10mm	Ant 6	Sample 1	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	BLE	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	-0.17	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	Standard	53 Key	78	2480	3.52	4.00	1.116	77.03	1.081	-0.12	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	Standard	43 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	Standard	58 Key	78	2480	3.52	4.00	1.116	77.03	1.081	-0.1	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 1	Standard	34 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.19	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	10mm	Ant 6	Sample 2	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	-0.18	< 0.001	< 0.001
	Bluetooth	2Mbps	Front	10mm	Ant 7	Sample 1	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.02	< 0.001	< 0.001
23	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.08	0.003	0.003
	Bluetooth	2Mbps	Top Side	10mm	Ant 7	Sample 1	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.03	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	BLE	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.06	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	Standard	53 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.01	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	Standard	43 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.09	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	Standard	58 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.01	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 1	Standard	34 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.17	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	10mm	Ant 7	Sample 2	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.17	< 0.001	< 0.001

**13.2 Body Worn Accessory SAR****<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power State	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	9538	1907.6	24.94	25.00	1.014	0.12	0.085	0.086
24	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	9538	1907.6	24.94	25.00	1.014	0.05	0.284	0.288
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	9538	1907.6	24.94	25.00	1.014	-0.17	0.266	0.270
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	9538	1907.6	24.94	25.00	1.014	0.06	0.274	0.278
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	9538	1907.6	24.94	25.00	1.014	0.13	0.263	0.267
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	9538	1907.6	24.94	25.00	1.014	0.05	0.261	0.265
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	9538	1907.6	24.94	25.00	1.014	-0.17	0.270	0.274
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	9538	1907.6	24.94	25.00	1.014	-0.09	0.264	0.268
	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	1513	1752.6	24.59	25.00	1.099	0.12	0.125	0.137
25	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	1513	1752.6	24.59	25.00	1.099	0.01	0.365	0.401
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	1513	1752.6	24.59	25.00	1.099	0.19	0.341	0.375
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	1513	1752.6	24.59	25.00	1.099	-0.14	0.362	0.398
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	1513	1752.6	24.59	25.00	1.099	0.18	0.357	0.392
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	1513	1752.6	24.59	25.00	1.099	-0.06	0.340	0.374
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	1513	1752.6	24.59	25.00	1.099	0.01	0.351	0.386
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	1513	1752.6	24.59	25.00	1.099	0.06	0.336	0.369
26	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	4132	826.4	24.62	25.00	1.091	-0.1	0.216	0.236
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	4132	826.4	24.62	25.00	1.091	-0.05	0.134	0.146
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	4132	826.4	24.62	25.00	1.091	-0.07	0.211	0.230
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	4132	826.4	24.62	25.00	1.091	0.19	0.207	0.226
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	4132	826.4	24.62	25.00	1.091	-0.1	0.200	0.218
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	4132	826.4	24.62	25.00	1.091	-0.17	0.195	0.213
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	4132	826.4	24.62	25.00	1.091	-0.02	0.192	0.210
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	4132	826.4	24.62	25.00	1.091	-0.19	0.182	0.199

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 2_Ant 1	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	19100	1900	24.53	25.00	1.114	0.05	0.075	0.084
27	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	19100	1900	22.75	24.00	1.334	-0.15	0.052	0.069
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	19100	1900	24.53	25.00	1.114	0.01	0.259	0.289
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	19100	1900	22.75	24.00	1.334	0.17	0.171	0.228
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	19100	1900	24.53	25.00	1.114	0.17	0.241	0.269
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	19100	1900	24.53	25.00	1.114	0.01	0.254	0.283
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	19100	1900	24.53	25.00	1.114	0.12	0.234	0.261
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	19100	1900	24.53	25.00	1.114	-0.09	0.247	0.275
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	19100	1900	24.53	25.00	1.114	0.06	0.253	0.282
	LTE Band 2C_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	19100+18902	1900	24.30	25.00	1.175	0.01	0.231	0.271
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	19100	1900	24.53	25.00	1.114	-0.19	0.230	0.256
	LTE Band 7_Ant 5	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	21100	2535	24.04	25.00	1.247	0.11	0.297	0.370
	LTE Band 7_Ant 5	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	21100	2535	23.11	24.00	1.227	-0.15	0.246	0.302
28	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	21100	2535	24.04	25.00	1.247	0.03	0.380	0.474
	LTE Band 7_Ant 5	20M	QPSK	50	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	21100	2535	23.11	24.00	1.227	0.12	0.301	0.369
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	21100	2535	24.04	25.00	1.247	0.17	0.341	0.425
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	21100	2535	24.04	25.00	1.247	-0.01	0.355	0.443
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	21100	2535	24.04	25.00	1.247	0.06	0.359	0.448
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	21100	2535	24.04	25.00	1.247	0.07	0.363	0.453
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	21100	2535	24.04	25.00	1.247	0.07	0.341	0.425
	LTE Band 7C_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	20850+21048	2510	24.53	25.00	1.114	0.03	0.371	0.413
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	21100	2535	24.04	25.00	1.247	-0.08	0.342	0.427
29	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	23095	707.5	24.35	25.00	1.161	0	0.112	0.130
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	23095	707.5	23.41	24.00	1.146	0.01	0.098	0.112
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	23095	707.5	24.35	25.00	1.161	0.12	0.056	0.065
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	23095	707.5	23.41	24.00	1.146	-0.01	0.043	0.049
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	23095	707.5	24.35	25.00	1.161	-0.06	0.110	0.128



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	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	23095	707.5	24.35	25.00	1.161	-0.16	0.106	0.123
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	23095	707.5	24.35	25.00	1.161	0.18	0.109	0.127
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	23095	707.5	24.35	25.00	1.161	0.13	0.100	0.116
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	23095	707.5	24.35	25.00	1.161	-0.02	0.111	0.129
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	23095	707.5	24.35	25.00	1.161	-0.05	0.100	0.116
30	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	26865	831.5	23.75	24.50	1.189	-0.11	0.211	0.251
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	26865	831.5	22.90	23.50	1.148	0.05	0.171	0.196
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	26865	831.5	23.75	24.50	1.189	0.12	0.136	0.162
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	26865	831.5	22.90	23.50	1.148	-0.11	0.107	0.123
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	26865	831.5	23.75	24.50	1.189	-0.05	0.196	0.233
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	26865	831.5	23.75	24.50	1.189	0.15	0.198	0.235
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	26865	831.5	23.75	24.50	1.189	-0.12	0.189	0.225
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	26865	831.5	23.75	24.50	1.189	-0.12	0.195	0.232
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	26865	831.5	23.75	24.50	1.189	0.18	0.203	0.241
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	20450+20549	829	24.40	24.50	1.023	-0.11	0.223	0.228
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	26865	831.5	23.75	24.50	1.189	0.13	0.176	0.209

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 5	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	0.01	0.154	0.182
	LTE Band 41_Ant 5	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	41490	2680	23.29	24.00	1.178	62.9	1.006	0.13	0.121	0.143
31	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	0.04	0.257	0.303
	LTE Band 41_Ant 5	20M	QPSK	50	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	41490	2680	23.29	24.00	1.178	62.9	1.006	-0.11	0.207	0.245
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.17	0.256	0.302
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.08	0.254	0.300
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	0.04	0.230	0.271
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.13	0.244	0.288
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	0.06	0.254	0.300
	LTE Band 38C_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	37901+38099	2585.1	24.66	25.00	1.081	62.9	1.006	0.01	0.251	0.273
	LTE Band 41C_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	39750+39948	2506	24.65	25.00	1.084	62.9	1.006	0.02	0.242	0.264
	LTE Band 41D_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	41055+40857	2636.5	24.65	25.00	1.084	62.9	1.006	-0.05	0.233	0.254
	LTE Band 41_HPUE_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	39750	2506	27.00	27.00	1.000	42.9	1.009	-0.06	0.298	0.301
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	41490	2680	24.31	25.00	1.172	62.9	1.006	0.14	0.232	0.274
	LTE Band 42_Ant 8	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42590	3500	23.55	25.00	1.396	62.9	1.006	0.14	0.120	0.169
	LTE Band 42_Ant 8	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42590	3500	22.39	24.00	1.449	62.9	1.006	0.03	0.094	0.137
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.11	0.700	0.983
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42190	3460	23.46	25.00	1.426	62.9	1.006	-0.03	0.652	0.935
32	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	0.04	0.741	1.090
	LTE Band 42_Ant 8	20M	QPSK	50	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42590	3500	22.39	24.00	1.449	62.9	1.006	0.15	0.521	0.759
	LTE Band 42_Ant 8	20M	QPSK	100	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	42590	3500	22.33	24.00	1.469	62.9	1.006	-0.15	0.412	0.609
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	0.15	0.713	1.049
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	-0.08	0.714	1.050
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	0.07	0.704	1.036
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	0.13	0.707	1.040
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	0.13	0.683	1.005
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	42590	3500	23.55	25.00	1.396	62.9	1.006	0.07	0.673	0.945
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	42190	3460	23.46	25.00	1.426	62.9	1.006	0.12	0.642	0.921
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	42990	3540	23.35	25.00	1.462	62.9	1.006	-0.02	0.733	1.078
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right Side	0mm	DSI 1_WIFI ON	Holster	Sample 1	Standard	29 Key	-	42990	3540	22.05	22.50	1.109	62.9	1.006	0.03	0.490	0.547



FCC SAR TEST REPORT

Report No. : FA3N2803B

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132572	1770	24.18	25.00	1.208	-0.15	0.100	0.121
	LTE Band 66_Ant 1	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132572	1770	23.28	24.00	1.180	0.06	0.088	0.104
33	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132572	1770	24.18	25.00	1.208	0.04	0.342	0.413
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132572	1770	23.28	24.00	1.180	0.13	0.274	0.323
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	132572	1770	24.18	25.00	1.208	0.18	0.311	0.376
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	132572	1770	24.18	25.00	1.208	-0.08	0.334	0.403
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	132572	1770	24.18	25.00	1.208	-0.11	0.306	0.370
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	132572	1770	24.18	25.00	1.208	-0.01	0.317	0.383
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	132572	1770	24.18	25.00	1.208	-0.17	0.322	0.389
	LTE Band 66B_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132047+132140	1717.5	24.56	25.00	1.107	0.04	0.350	0.387
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	132072+132270	1720	24.03	25.00	1.250	0.04	0.311	0.389
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	132572	1770	24.18	25.00	1.208	0.02	0.303	0.366
34	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	133297	680.5	24.05	25.00	1.245	0	0.147	0.183
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	133297	680.5	23.19	24.00	1.205	0.02	0.083	0.100
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	133297	680.5	24.05	25.00	1.245	-0.12	0.064	0.080
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	133297	680.5	23.19	24.00	1.205	-0.06	0.058	0.070
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	133297	680.5	24.05	25.00	1.245	-0.14	0.135	0.168
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	133297	680.5	24.05	25.00	1.245	-0.09	0.143	0.178
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	133297	680.5	24.05	25.00	1.245	0.06	0.140	0.174
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	133297	680.5	24.05	25.00	1.245	-0.02	0.134	0.167
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	133297	680.5	24.05	25.00	1.245	-0.04	0.137	0.170
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	133297	680.5	24.05	25.00	1.245	0.15	0.109	0.136



FCC SAR TEST REPORT

Report No. : FA3N2803B

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	380000	1900	24.57	25.00	1.104	0.11	0.096	0.106
	FR1 n2_Ant 1	20M	BPSK	50	28	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	380000	1900	24.33	25.00	1.167	-0.12	0.090	0.105
35	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	380000	1900	24.57	25.00	1.104	0.09	0.315	0.348
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	380000	1900	24.33	25.00	1.167	-0.07	0.273	0.319
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	380000	1900	24.57	25.00	1.104	-0.04	0.301	0.332
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	380000	1900	24.57	25.00	1.104	0.14	0.284	0.314
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	380000	1900	24.57	25.00	1.104	0.11	0.292	0.322
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	380000	1900	24.57	25.00	1.104	0.03	0.306	0.338
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	380000	1900	24.57	25.00	1.104	0.12	0.312	0.344
	FR1 n2_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	380000	1900	24.57	25.00	1.104	0.12	0.271	0.299
	FR1 n7_Ant 5	40M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	507000	2535	24.55	25.00	1.109	0.02	0.463	0.514
	FR1 n7_Ant 5	40M	BPSK	108	54	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	507000	2535	24.38	25.00	1.153	-0.18	0.414	0.478
36	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	507000	2535	24.55	25.00	1.109	-0.02	0.514	0.570
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	507000	2535	24.38	25.00	1.153	0.13	0.493	0.569
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	507000	2535	24.55	25.00	1.109	0.1	0.482	0.535
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	507000	2535	24.55	25.00	1.109	-0.09	0.486	0.539
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	507000	2535	24.55	25.00	1.109	-0.05	0.508	0.563
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	507000	2535	24.55	25.00	1.109	0.12	0.466	0.517
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	507000	2535	24.55	25.00	1.109	-0.17	0.462	0.512
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	507000	2535	24.55	25.00	1.109	0.05	0.455	0.505
37	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	141500	707.5	24.20	25.00	1.202	-0.12	0.074	0.089
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	141500	707.5	23.90	25.00	1.288	0.02	0.066	0.085
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	141500	707.5	24.20	25.00	1.202	-0.05	0.041	0.049
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	141500	707.5	23.90	25.00	1.288	-0.03	0.029	0.037
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	141500	707.5	24.20	25.00	1.202	0.19	0.068	0.082
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	141500	707.5	24.20	25.00	1.202	-0.09	0.069	0.083
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	141500	707.5	24.20	25.00	1.202	-0.08	0.066	0.079
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	141500	707.5	24.20	25.00	1.202	-0.18	0.069	0.083
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	141500	707.5	24.20	25.00	1.202	-0.06	0.067	0.081
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	141500	707.5	24.20	25.00	1.202	0.14	0.057	0.069
38	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	166300	831.5	24.00	24.50	1.122	0.08	0.208	0.233
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	166300	831.5	23.87	24.50	1.156	-0.15	0.183	0.212
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	166300	831.5	24.00	24.50	1.122	-0.03	0.115	0.129
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	166300	831.5	23.87	24.50	1.156	0.15	0.100	0.116
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	166300	831.5	24.00	24.50	1.122	-0.06	0.196	0.220
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	166300	831.5	24.00	24.50	1.122	-0.19	0.192	0.215
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	166300	831.5	24.00	24.50	1.122	0.07	0.195	0.219
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	166300	831.5	24.00	24.50	1.122	-0.1	0.203	0.228
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	166300	831.5	24.00	24.50	1.122	0.12	0.198	0.222
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	166300	831.5	24.00	24.50	1.122	0.11	0.170	0.191
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	24.35	25.00	1.161	0.14	0.236	0.274
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	24.16	25.00	1.213	-0.13	0.223	0.271
39	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	24.35	25.00	1.161	0.03	0.334	0.388
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	24.16	25.00	1.213	-0.11	0.298	0.362
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	518598	2592.99	24.35	25.00	1.161	-0.12	0.325	0.377
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	518598	2592.99	24.35	25.00	1.161	-0.16	0.324	0.376
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	518598	2592.99	24.35	25.00	1.161	-0.12	0.313	0.364
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	518598	2592.99	24.35	25.00	1.161	-0.12	0.313	0.364
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	518598	2592.99	24.35	25.00	1.161	0.01	0.317	0.368
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	26.14	27.00	1.219	0.09	0.268	0.327
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	518598	2592.99	24.35	25.00	1.161	0.15	0.299	0.347
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.67	22.00	1.079	0.14	0.089	0.096
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.85	22.00	1.303	0.12	0.061	0.079
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.67	22.00	1.079	-0.07	0.101	0.109
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.85	22.00	1.303	-0.05	0.069	0.090
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	518598	2592.99	21.67	22.00	1.079	-0.07	0.093	0.100
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	518598	2592.99	21.67	22.00	1.079	0.12	0.098	0.106
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	518598	2592.99	21.67	22.00	1.079	-0.03	0.093	0.100



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	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	518598	2592.99	21.67	22.00	1.079	0.13	0.099	0.107
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	518598	2592.99	21.67	22.00	1.079	-0.16	0.098	0.106
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	518598	2592.99	21.67	22.00	1.079	0.13	0.081	0.087
	FR1 n41_Ant 4	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.12	22.00	1.225	0.11	0.020	0.024
	FR1 n41_Ant 4	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.41	22.00	1.442	-0.09	0.014	0.020
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.12	22.00	1.225	-0.03	0.028	0.034
	FR1 n41_Ant 4	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.41	22.00	1.442	0.14	0.024	0.035
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	518598	2592.99	21.12	22.00	1.225	0.04	0.027	0.033
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	518598	2592.99	21.12	22.00	1.225	-0.07	0.026	0.032
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	518598	2592.99	21.12	22.00	1.225	0.03	0.027	0.033
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	518598	2592.99	21.12	22.00	1.225	-0.18	0.026	0.032
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	518598	2592.99	21.12	22.00	1.225	-0.01	0.025	0.031
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	518598	2592.99	21.12	22.00	1.225	-0.11	0.013	0.016
	FR1 n41_Ant 3	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.01	22.00	1.256	0.1	0.001	0.001
	FR1 n41_Ant 3	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.56	22.00	1.393	-0.11	0.001	0.001
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	21.01	22.00	1.256	0.14	0.049	0.062
	FR1 n41_Ant 3	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	518598	2592.99	20.56	22.00	1.393	0.08	0.033	0.046
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	518598	2592.99	21.01	22.00	1.256	0.02	0.046	0.058
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	518598	2592.99	21.01	22.00	1.256	0.01	0.045	0.057
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	518598	2592.99	21.01	22.00	1.256	0.15	0.045	0.057
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	518598	2592.99	21.01	22.00	1.256	0.01	0.048	0.060
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	518598	2592.99	21.01	22.00	1.256	0.09	0.045	0.057
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	518598	2592.99	21.01	22.00	1.256	0.06	0.023	0.029
	FR1 n66_Ant 1	40M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	349000	1745	24.31	25.00	1.172	0.11	0.089	0.104
	FR1 n66_Ant 1	40M	BPSK	108	54	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	349000	1745	24.04	25.00	1.247	-0.14	0.077	0.096
40	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	349000	1745	24.31	25.00	1.172	0.14	0.321	0.376
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	349000	1745	24.04	25.00	1.247	-0.07	0.273	0.341
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	349000	1745	24.31	25.00	1.172	0.14	0.305	0.358
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	349000	1745	24.31	25.00	1.172	-0.08	0.290	0.340
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	349000	1745	24.31	25.00	1.172	-0.1	0.287	0.336
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	349000	1745	24.31	25.00	1.172	-0.09	0.311	0.365
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	349000	1745	24.31	25.00	1.172	-0.13	0.311	0.365
	FR1 n66_Ant 1	40M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	349000	1745	24.31	25.00	1.172	-0.08	0.294	0.345
41	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	136100	680.5	24.06	25.00	1.242	0.14	0.090	0.112
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	136100	680.5	24.00	25.00	1.259	0.11	0.078	0.098
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	136100	680.5	24.06	25.00	1.242	-0.05	0.034	0.042
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	136100	680.5	24.00	25.00	1.259	-0.1	0.028	0.035
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	136100	680.5	24.06	25.00	1.242	0.05	0.087	0.108
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	136100	680.5	24.06	25.00	1.242	0	0.085	0.106
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	136100	680.5	24.06	25.00	1.242	0.14	0.084	0.104
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	136100	680.5	24.06	25.00	1.242	-0.17	0.086	0.107
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	136100	680.5	24.06	25.00	1.242	0.02	0.081	0.101
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	136100	680.5	24.06	25.00	1.242	0.15	0.066	0.082
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	22.54	23.00	1.112	0.05	0.369	0.410
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	22.05	23.00	1.245	-0.18	0.318	0.396
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	22.54	23.00	1.112	-0.03	1.180	1.312
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	22.05	23.00	1.245	0.14	0.884	1.100
	FR1 n77_Ant 8	100M	BPSK	270	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	21.34	23.00	1.466	0.15	0.759	1.112
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	Earphone	656000	3840	22.54	23.00	1.112	0.1	0.907	1.008
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	656000	3840	22.54	23.00	1.112	-0.15	0.879	0.977
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	656000	3840	22.54	23.00	1.112	-0.13	0.895	0.995
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	656000	3840	22.54	23.00	1.112	0.19	0.911	1.013
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	656000	3840	22.54	23.00	1.112	-0.07	0.893	0.993
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	656000	3840	22.54	23.00	1.112	0.17	0.918	1.021
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	25.53	26.00	1.114	0.09	1.090	1.215
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	656000	3840	22.54	23.00	1.112	-0.11	0.916	1.018
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1 WIFI ON	Holster	Sample 1	Standard	29 Key	-	656000	3840	19.06	19.50	1.107	-0.05	0.528	0.584
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	22.55	23.00	1.109	0.15	0.173	0.192
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	21.73	23.00	1.340	-0.06	0.158	0.212
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	22.55	23.00	1.109	-0.03	1.050	1.165
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	21.73	23.00	1.340	0.12	0.726	0.973
	FR1 n77_Ant 8	100M	BPSK	270	0	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	21.60	23.00	1.380	0.18	0.726	1.002



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	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	633332	3499.98	22.55	23.00	1.109	0.02	0.793	0.880
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	633332	3499.98	22.55	23.00	1.109	0.01	0.789	0.875
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	633332	3499.98	22.55	23.00	1.109	-0.16	0.758	0.841
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	633332	3499.98	22.55	23.00	1.109	0.01	0.789	0.875
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	633332	3499.98	22.55	23.00	1.109	0.02	0.775	0.860
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	25.55	26.00	1.109	0.15	0.989	1.097
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	633332	3499.98	22.55	23.00	1.109	-0.16	0.736	0.816
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	0mm	DSI 1_WIFI ON	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	19.22	19.50	1.067	0.01	0.453	0.483
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	23.30	25.00	1.479	0.11	0.153	0.226
	FR1 n77_Ant 9	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	23.19	25.00	1.517	0.1	0.140	0.212
42	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	23.30	25.00	1.479	-0.02	0.926	1.370
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	23.19	25.00	1.517	-0.05	0.767	1.164
	FR1 n77_Ant 9	100M	BPSK	270	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	22.68	24.50	1.521	0.08	0.789	1.200
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	Earphone	656000	3840	23.30	25.00	1.479	0.04	0.865	1.279
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	656000	3840	23.30	25.00	1.479	0.09	0.844	1.248
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	656000	3840	23.30	25.00	1.479	0.15	0.901	1.333
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	656000	3840	23.30	25.00	1.479	-0.15	0.828	1.225
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	656000	3840	23.30	25.00	1.479	0.17	0.869	1.285
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	656000	3840	23.30	25.00	1.479	0.08	0.871	1.288
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	25.33	27.00	1.469	0.18	0.808	1.187
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	656000	3840	23.30	25.00	1.479	-0.17	0.862	1.275
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1_WIFI ON	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.61	21.00	1.094	0.01	0.547	0.598
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	23.20	25.00	1.514	0.02	0.082	0.124
	FR1 n77_Ant 9	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	23.15	25.00	1.531	-0.11	0.078	0.119
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	23.20	25.00	1.514	-0.17	0.567	0.858
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	23.15	25.00	1.531	0.05	0.552	0.845
	FR1 n77_Ant 9	100M	BPSK	270	0	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	22.63	24.50	1.538	-0.18	0.486	0.748
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	633332	3499.98	23.20	25.00	1.514	-0.08	0.557	0.843
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	633332	3499.98	23.20	25.00	1.514	0.18	0.554	0.839
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	633332	3499.98	23.20	25.00	1.514	0.18	0.530	0.802
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	633332	3499.98	23.20	25.00	1.514	0.17	0.517	0.783
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	633332	3499.98	23.20	25.00	1.514	-0.03	0.565	0.855
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	25.18	27.00	1.521	0.12	0.512	0.779
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	633332	3499.98	23.20	25.00	1.514	0.12	0.488	0.739
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	0mm	DSI 1_WIFI ON	Holster	Sample 2	Standard	29 Key	-	633332	3499.98	20.81	21.00	1.045	-0.01	0.311	0.325
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.85	22.00	1.303	0.01	0.128	0.167
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.62	22.00	1.374	0.09	0.110	0.151
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.85	22.00	1.303	-0.02	0.183	0.238
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.62	22.00	1.374	0.15	0.149	0.205
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	656000	3840	20.85	22.00	1.303	-0.05	0.167	0.218
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	656000	3840	20.85	22.00	1.303	-0.08	0.177	0.231
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	656000	3840	20.85	22.00	1.303	0.12	0.174	0.227
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	656000	3840	20.85	22.00	1.303	0.01	0.180	0.235
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	656000	3840	20.85	22.00	1.303	0.08	0.165	0.215
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	656000	3840	20.85	22.00	1.303	-0.15	0.139	0.181
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.44	22.00	1.432	0.14	0.088	0.126
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.30	22.00	1.479	0.02	0.066	0.098
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.44	22.00	1.432	0.1	0.200	0.286
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.30	22.00	1.479	0.15	0.178	0.263
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	633332	3499.98	20.44	22.00	1.432	0.07	0.186	0.266
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	633332	3499.98	20.44	22.00	1.432	-0.18	0.179	0.256
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	633332	3499.98	20.44	22.00	1.432	-0.09	0.183	0.262
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	633332	3499.98	20.44	22.00	1.432	0.13	0.188	0.269
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	633332	3499.98	20.44	22.00	1.432	0.09	0.197	0.282
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	633332	3499.98	20.44	22.00	1.432	-0.05	0.173	0.248
	FR1 n77_Ant 3	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.58	22.00	1.387	0.11	0.087	0.121
	FR1 n77_Ant 3	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.48	22.00	1.419	0.18	0.063	0.089
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.58	22.00	1.387	-0.04	0.291	0.404
	FR1 n77_Ant 3	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	656000	3840	20.48	22.00	1.419	0.17	0.256	0.363
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	656000	3840	20.58	22.00	1.387	0.06	0.269	0.373
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	656000	3840	20.58	22.00	1.387	0.04	0.269	0.373
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	656000	3840	20.58	22.00	1.387	-0.06	0.288	0.399



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	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	656000	3840	20.58	22.00	1.387	-0.02	0.279	0.387
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	656000	3840	20.58	22.00	1.387	0.13	0.267	0.370
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	656000	3840	20.58	22.00	1.387	-0.06	0.226	0.313
	FR1 n77_Ant 3	100M	BPSK	1	1	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.14	22.00	1.535	0.15	0.048	0.074
	FR1 n77_Ant 3	100M	BPSK	135	69	Front	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.13	22.00	1.538	-0.18	0.042	0.065
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.14	22.00	1.535	0.07	0.159	0.244
	FR1 n77_Ant 3	100M	BPSK	135	69	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	29 Key	-	633332	3499.98	20.13	22.00	1.538	0.11	0.147	0.226
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	BLE	29 Key	-	633332	3499.98	20.14	22.00	1.535	0.18	0.142	0.218
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	53 Key	-	633332	3499.98	20.14	22.00	1.535	0.07	0.144	0.221
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	43 Key	-	633332	3499.98	20.14	22.00	1.535	-0.05	0.152	0.233
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	58 Key	-	633332	3499.98	20.14	22.00	1.535	0.02	0.154	0.236
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 1	Standard	34 Key	-	633332	3499.98	20.14	22.00	1.535	-0.11	0.145	0.223
	FR1 n77_Ant 3	100M	BPSK	1	1	Left Side	0mm	DSI 1	Holster	Sample 2	Standard	29 Key	-	633332	3499.98	20.14	22.00	1.535	-0.14	0.130	0.200

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Cap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	-0.16	0.120	0.160
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	0.06	0.118	0.157
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	0.11	0.118	0.157
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	-0.16	0.117	0.156
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	0	0.112	0.149
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	-0.05	0.114	0.152
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6	ON / OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	6	2437	20.90	21.50	1.148	86.11	1.161	-0.09	0.126	0.168
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.06	0.075	0.098
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	-0.11	0.181	0.236
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.19	0.169	0.220
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.16	0.179	0.233
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.09	0.171	0.223
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.03	0.163	0.212
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.1	0.168	0.219
43	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	Ant 7	ON / OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	6	2437	21.00	21.50	1.122	86.11	1.161	0.03	0.187	0.244
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	0.12	0.083	0.101
	WLAN2.4GHz	802.11b 1Mbps	Left Side	0mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	-0.11	0.129	0.157
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	0.18	0.115	0.140
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	-0.18	0.122	0.148
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	0.13	0.127	0.154
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	0.12	0.128	0.156
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	-0.19	0.118	0.143
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	0.06	0.069	0.084
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	ANT 6+7(6)	ON / OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	6	2437	21.30	21.50	1.047	86.11	1.161	-0.16	0.091	0.111
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	-0.18	0.324	0.476
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	-0.09	0.718	1.055
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	56	5280	18.40	19.50	1.288	85.66	1.167	-0.15	0.637	0.958
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	-0.19	0.632	0.929
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	0.18	0.639	0.939
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	0.08	0.637	0.936
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	0.01	0.653	0.959
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	0.07	0.593	0.871
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	-0.07	0.655	0.962
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	56	5280	18.40	19.50	1.288	85.66	1.167	-0.07	0.612	0.920
44	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	60	5300	18.50	19.50	1.259	85.66	1.167	-0.14	0.727	1.068
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	56	5280	18.40	19.50	1.288	85.66	1.167	-0.14	0.689	1.036
	WLAN5GHz	802.11a 6Mbps	Front	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	0.12	0.323	0.433
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.06	0.662	0.887
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	56	5280	17.90	18.50	1.148	85.66	1.167	0.11	0.632	0.847
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	0.06	0.654	0.876
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	56	5280	17.90	18.50	1.148	85.66	1.167	0.14	0.602	0.807
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	BLE	29 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.16	0.623	0.835
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	53 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.19	0.632	0.847
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	43 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.16	0.643	0.862
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	58 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.15	0.629	0.843
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	34 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	0.1	0.616	0.825
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 2	Standard	29 Key	-	60	5300	17.90	18.50	1.148	85.66	1.167	-0.12	0.686	0.919
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	ON	DBS	Holster	Sample 2	Standard	29 Key	-	54	5270	16.70	17.00	1.072	85.94	1.164	0.17	0.536	0.669



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	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	ANT 6+7(6)	ON	DBS	Holster	Sample 2	Standard	29 Key	-	54	5270	16.70	17.00	1.072	85.94	1.164	0.01	0.495	0.617
	WLAN5GHz	802.11a 6Mbps	Front	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.09	0.203	0.278
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.03	0.928	1.272
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	132	5660	18.30	19.00	1.175	85.66	1.167	0.02	0.839	1.150
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	0.13	0.876	1.201
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	0.06	0.835	1.145
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.15	0.911	1.249
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.06	0.833	1.142
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	0.11	0.893	1.224
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.13	0.754	1.034
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	132	5660	18.30	19.00	1.175	85.66	1.167	-0.13	0.712	0.976
45	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.04	0.933	1.279
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	132	5660	18.30	19.00	1.175	85.66	1.167	-0.04	0.882	1.209
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.13	0.172	0.214
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	-0.15	0.787	0.980
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	110	5550	17.70	18.00	1.072	85.94	1.164	-0.09	0.731	0.912
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.15	0.639	0.796
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	BLE	29 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.02	0.743	0.925
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	53 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	-0.07	0.708	0.882
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	43 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.18	0.772	0.961
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	58 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.05	0.706	0.879
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	34 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	-0.07	0.757	0.943
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 2	Standard	29 Key	-	138	5690	17.70	18.00	1.072	86.09	1.162	0.1	0.791	0.985
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 2	Standard	29 Key	-	110	5550	17.70	18.00	1.072	86.09	1.162	-0.15	0.728	0.906
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	DBS	Holster	Sample 2	Standard	29 Key	-	106	5530	15.70	16.00	1.072	86.09	1.162	0.06	0.546	0.680
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.16	0.152	0.198
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.08	0.742	0.967
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	151	5755	17.50	18.00	1.122	85.94	1.164	-0.12	0.722	0.943
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.13	0.719	0.937
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	-0.02	0.718	0.936
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	-0.15	0.704	0.918
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.19	0.698	0.910
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	34 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.1	0.703	0.917
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	0.17	0.605	0.789
46	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	155	5775	17.50	18.00	1.122	86.09	1.162	-0.09	0.846	1.103
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	159	5795	17.50	18.00	1.122	85.94	1.164	-0.12	0.809	1.057
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	0.15	0.116	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.06	0.569	0.813
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	29 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.16	0.454	0.649
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	BLE	29 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	0.09	0.550	0.786
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	53 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.18	0.549	0.785
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	43 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.06	0.513	0.733
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	58 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	0.04	0.520	0.743
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 1	Standard	34 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.12	0.512	0.732
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 2	Standard	29 Key	-	155	5775	16.10	17.00	1.230	86.09	1.162	-0.11	0.636	0.909
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	ANT 6+7(6)	ON	Non DBS	Holster	Sample 2	Standard	29 Key	-	159	5795	16.80	17.00	1.047	85.94	1.164	0.07	0.615	0.750
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	ANT 6+7(6)	ON	DBS	Holster	Sample 2	Standard	29 Key	-	155	5775	15.50	16.00	1.122	86.09	1.162	-0.13	0.568	0.741

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	15	6025	14.50	15.00	1.122	86.67	1.154	0.05	0.108	0.140	0.69	0.893
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	15	6025	14.50	15.00	1.122	86.67	1.154	-0.18	0.379	0.491	2.57	3.328
47	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	47	6185	14.40	15.00	1.148	86.67	1.154	-0.03	0.435	0.576	2.97	3.935
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	111	6505	12.00	13.00	1.259	86.67	1.154	0.1	0.183	0.266	1.11	1.613
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	143	6665	13.20	13.50	1.072	86.67	1.154	0.12	0.225	0.278	1.41	1.744
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	29 Key	-	207	6985	12.50	13.50	1.259	86.67	1.154	-0.06	0.165	0.240	0.941	1.367
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	BLE	29 Key	-	47	6185	14.40	15.00	1.148	86.67	1.154	-0.11	0.420	0.556	2.84	3.763
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	53 Key	-	47	6185	14.40	15.00	1.148	86.67	1.154	0.08	0.419	0.555	2.77	3.670
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	43 Key	-	47	6185	14.40	15.00	1.148	86.67	1.154	-0.16	0.429	0.568	2.91	3.856
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Holster	Sample 1	Standard	58 Key	-	47	6185	14.40	15.00	1.148	86.67	1.154	0.14	0.410	0.543	2.79	3.697



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	3Mbps	Front	0mm	Ant 6	Holster	Sample 1	Standard	29 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	0	< 0.001	< 0.001
48	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	Standard	29 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	0.19	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	BLE	29 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	-0.15	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	Standard	53 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	-0.18	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	Standard	43 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	0.05	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	Standard	58 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	-0.07	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 1	Standard	34 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	0.02	< 0.001	< 0.001
	Bluetooth	3Mbps	Right Side	0mm	Ant 6	Holster	Sample 2	Standard	29 Key	-	78	2480	3.52	4.00	1.116	77.03	1.081	0	< 0.001	< 0.001
	Bluetooth	2Mbps	Front	0mm	Ant 7	Holster	Sample 1	Standard	29 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	0	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	Standard	29 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	-0.13	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	BLE	29 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	0.04	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	Standard	53 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	0.04	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	Standard	43 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	-0.03	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	Standard	58 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	-0.01	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 1	Standard	34 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	0.11	< 0.001	< 0.001
	Bluetooth	2Mbps	Left Side	0mm	Ant 7	Holster	Sample 2	Standard	29 Key	-	0	2402	2.40	2.50	1.023	76.8	1.085	0	< 0.001	< 0.001

**13.3 Extremity SAR****<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
49	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	29 Key	9538	1907.6	24.94	25.00	1.014	0	0.371	0.376
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	BLE	29 Key	9538	1907.6	24.94	25.00	1.014	0.19	0.341	0.346
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	53 Key	9538	1907.6	24.94	25.00	1.014	0.05	0.358	0.363
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	43 Key	9538	1907.6	24.94	25.00	1.014	0.13	0.336	0.341
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	58 Key	9538	1907.6	24.94	25.00	1.014	0.11	0.335	0.340
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	34 Key	9538	1907.6	24.94	25.00	1.014	-0.11	0.339	0.344
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 2	Standard	29 Key	9538	1907.6	24.94	25.00	1.014	0.06	0.315	0.319
50	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	29 Key	1513	1752.6	24.59	25.00	1.099	0.01	0.630	0.692
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	BLE	29 Key	1513	1752.6	24.59	25.00	1.099	0.02	0.599	0.658
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	53 Key	1513	1752.6	24.59	25.00	1.099	0.1	0.580	0.637
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	43 Key	1513	1752.6	24.59	25.00	1.099	-0.07	0.587	0.645
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	58 Key	1513	1752.6	24.59	25.00	1.099	0.14	0.623	0.685
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	34 Key	1513	1752.6	24.59	25.00	1.099	0.16	0.596	0.655
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 2	Standard	29 Key	1513	1752.6	24.59	25.00	1.099	-0.08	0.555	0.610
51	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	29 Key	4132	826.4	24.62	25.00	1.091	0.01	0.359	0.392
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	BLE	29 Key	4132	826.4	24.62	25.00	1.091	-0.11	0.350	0.382
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	53 Key	4132	826.4	24.62	25.00	1.091	-0.04	0.338	0.369
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	43 Key	4132	826.4	24.62	25.00	1.091	-0.19	0.343	0.374
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	58 Key	4132	826.4	24.62	25.00	1.091	0.16	0.337	0.368
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 1	Standard	34 Key	4132	826.4	24.62	25.00	1.091	0.08	0.337	0.368
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	DSI 1	Sample 2	Standard	29 Key	4132	826.4	24.62	25.00	1.091	0.14	0.273	0.298



FCC SAR TEST REPORT

Report No. : FA3N2803B

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
52	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	19100	1900	24.53	25.00	1.114	-0.02	0.384	0.428
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	19100	1900	22.75	24.00	1.334	0.02	0.263	0.351
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	19100	1900	24.53	25.00	1.114	0.09	0.354	0.394
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	19100	1900	24.53	25.00	1.114	0.07	0.367	0.409
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	19100	1900	24.53	25.00	1.114	0.09	0.366	0.408
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	19100	1900	24.53	25.00	1.114	-0.17	0.344	0.383
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	19100	1900	24.53	25.00	1.114	-0.19	0.383	0.427
	LTE Band 2C_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	19100+18902	1900	24.30	25.00	1.175	0.06	0.351	0.412
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	19100	1900	24.53	25.00	1.114	0.15	0.340	0.379
53	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	21100	2535	24.04	25.00	1.247	0.02	0.916	1.143
	LTE Band 7_Ant 5	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	21100	2535	23.11	24.00	1.227	0.14	0.786	0.965
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	21100	2535	24.04	25.00	1.247	0.09	0.875	1.091
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	21100	2535	24.04	25.00	1.247	0.05	0.895	1.116
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	21100	2535	24.04	25.00	1.247	-0.09	0.835	1.042
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	21100	2535	24.04	25.00	1.247	-0.05	0.817	1.019
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	21100	2535	24.04	25.00	1.247	-0.13	0.837	1.044
	LTE Band 7C_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	20850+21048	2510	24.53	25.00	1.114	0.09	0.904	1.007
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	21100	2535	24.04	25.00	1.247	-0.06	0.824	1.028
54	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	23095	707.5	24.35	25.00	1.161	0.03	0.507	0.589
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	23095	707.5	23.41	24.00	1.146	0.02	0.431	0.494
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	23095	707.5	24.35	25.00	1.161	0.16	0.506	0.588
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	23095	707.5	24.35	25.00	1.161	-0.12	0.470	0.546
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	23095	707.5	24.35	25.00	1.161	-0.08	0.460	0.534
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	23095	707.5	24.35	25.00	1.161	0.11	0.468	0.544
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	23095	707.5	24.35	25.00	1.161	0.02	0.461	0.535
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	23095	707.5	24.35	25.00	1.161	-0.18	0.419	0.487
55	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	26865	831.5	23.75	24.50	1.189	-0.04	0.510	0.606
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	26865	831.5	22.90	23.50	1.148	0.15	0.437	0.502
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	26865	831.5	23.75	24.50	1.189	0.08	0.491	0.584
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	26865	831.5	23.75	24.50	1.189	0.13	0.455	0.541
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	26865	831.5	23.75	24.50	1.189	-0.07	0.505	0.600
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	26865	831.5	23.75	24.50	1.189	0.12	0.496	0.589
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	26865	831.5	23.75	24.50	1.189	-0.05	0.472	0.561
	LTE Band 5B_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	20450+20549	829	24.40	24.50	1.023	0.15	0.509	0.521
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	26865	831.5	23.75	24.50	1.189	-0.18	0.432	0.513



FCC SAR TEST REPORT

Report No. : FA3N2803B

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
56	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0	0.330	0.389
	LTE Band 41_Ant 5	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	41490	2680	23.29	24.00	1.178	62.9	1.006	0.01	0.285	0.338
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.13	0.301	0.355
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.15	0.326	0.384
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.15	0.323	0.381
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	-0.06	0.313	0.369
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.19	0.308	0.363
	LTE Band 38C_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	37901+38099	2585.1	24.66	25.00	1.081	62.9	1.006	0.07	0.323	0.351
	LTE Band 41C_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	39750+39948	2506	24.65	25.00	1.084	62.9	1.006	0.12	0.317	0.346
	LTE Band 41D_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	41055+40857	2636.5	24.65	25.00	1.084	62.9	1.006	-0.09	0.311	0.339
	LTE Band 41_HPUE_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	39750	2506	27.00	27.00	1.000	42.9	1.009	-0.02	0.381	0.384
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	41490	2680	24.31	25.00	1.172	62.9	1.006	0.03	0.283	0.334
57	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.02	0.177	0.249
	LTE Band 42_Ant 8	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	42590	3500	22.39	24.00	1.449	62.9	1.006	0.14	0.153	0.223
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	0.04	0.162	0.228
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.19	0.171	0.240
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.19	0.169	0.237
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	0.08	0.159	0.223
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	0.17	0.164	0.230
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.01	0.150	0.211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
58	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	132572	1770	24.18	25.00	1.208	0.01	0.561	0.678
	LTE Band 66_Ant 1	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	132572	1770	23.28	24.00	1.180	0.15	0.489	0.577
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	132572	1770	24.18	25.00	1.208	0.07	0.531	0.641
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	132572	1770	24.18	25.00	1.208	-0.12	0.541	0.653
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	132572	1770	24.18	25.00	1.208	-0.07	0.561	0.678
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	132572	1770	24.18	25.00	1.208	-0.02	0.537	0.649
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	132572	1770	24.18	25.00	1.208	0.19	0.519	0.627
	LTE Band 66B_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	132047+132140	1717.5	24.56	25.00	1.107	0.06	0.543	0.601
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	132072+132270	1720	24.03	25.00	1.250	-0.13	0.511	0.639
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	132572	1770	24.18	25.00	1.208	-0.19	0.503	0.608
59	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	133297	680.5	24.05	25.00	1.245	0.03	0.497	0.619
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	0mm	DSI 1	Sample 1	Standard	29 Key	133297	680.5	23.19	24.00	1.205	-0.05	0.427	0.515
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	BLE	29 Key	133297	680.5	24.05	25.00	1.245	0.08	0.462	0.575
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	53 Key	133297	680.5	24.05	25.00	1.245	-0.05	0.487	0.606
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	43 Key	133297	680.5	24.05	25.00	1.245	0.17	0.482	0.600
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	58 Key	133297	680.5	24.05	25.00	1.245	0.07	0.492	0.612
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 1	Standard	34 Key	133297	680.5	24.05	25.00	1.245	0.06	0.496	0.617
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	DSI 1	Sample 2	Standard	29 Key	133297	680.5	24.05	25.00	1.245	0.07	0.351	0.437



FCC SAR TEST REPORT

Report No. : FA3N2803B

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
60	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	380000	1900	24.57	25.00	1.104	0.05	0.377	0.416
	FR1 n2_Ant 1	20M	BPSK	50	28	Back	0mm	DSI 1	Sample 1	Standard	29 Key	380000	1900	24.33	25.00	1.167	0.15	0.318	0.371
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	380000	1900	24.57	25.00	1.104	0.05	0.354	0.391
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	380000	1900	24.57	25.00	1.104	0.04	0.352	0.389
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	380000	1900	24.57	25.00	1.104	-0.19	0.340	0.375
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	380000	1900	24.57	25.00	1.104	-0.03	0.368	0.406
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	380000	1900	24.57	25.00	1.104	0.12	0.340	0.375
	FR1 n2_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	380000	1900	24.57	25.00	1.104	-0.11	0.315	0.348
61	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	507000	2535	24.55	25.00	1.109	0	1.120	1.242
	FR1 n7_Ant 5	40M	BPSK	108	54	Back	0mm	DSI 1	Sample 1	Standard	29 Key	507000	2535	24.38	25.00	1.153	0.12	0.962	1.110
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	507000	2535	24.55	25.00	1.109	0.07	1.060	1.176
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	507000	2535	24.55	25.00	1.109	0.19	1.040	1.154
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	507000	2535	24.55	25.00	1.109	0.17	1.100	1.220
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	507000	2535	24.55	25.00	1.109	-0.18	1.040	1.154
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	507000	2535	24.55	25.00	1.109	-0.13	1.070	1.187
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	507000	2535	24.55	25.00	1.109	-0.06	1.040	1.154
62	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	141500	707.5	24.20	25.00	1.202	0.02	0.500	0.601
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	DSI 1	Sample 1	Standard	29 Key	141500	707.5	23.90	25.00	1.288	0.17	0.432	0.557
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	141500	707.5	24.20	25.00	1.202	0.02	0.492	0.592
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	141500	707.5	24.20	25.00	1.202	0.16	0.457	0.549
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	141500	707.5	24.20	25.00	1.202	0.06	0.492	0.592
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	141500	707.5	24.20	25.00	1.202	0.05	0.476	0.572
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	141500	707.5	24.20	25.00	1.202	-0.04	0.489	0.588
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	141500	707.5	24.20	25.00	1.202	-0.15	0.428	0.515
63	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	166300	831.5	24.00	24.50	1.122	-0.01	0.509	0.571
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	DSI 1	Sample 1	Standard	29 Key	166300	831.5	23.87	24.50	1.156	0.16	0.438	0.506
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	166300	831.5	24.00	24.50	1.122	0.18	0.493	0.553
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	166300	831.5	24.00	24.50	1.122	-0.04	0.480	0.539
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	166300	831.5	24.00	24.50	1.122	-0.18	0.468	0.525
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	166300	831.5	24.00	24.50	1.122	-0.18	0.489	0.549
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	166300	831.5	24.00	24.50	1.122	-0.18	0.495	0.555
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	166300	831.5	24.00	24.50	1.122	0.03	0.371	0.416
64	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	24.35	25.00	1.161	-0.14	1.110	1.289
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	24.16	25.00	1.213	0.02	0.947	1.149
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	518598	2592.99	24.35	25.00	1.161	-0.16	1.050	1.220
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	518598	2592.99	24.35	25.00	1.161	0.17	1.050	1.220
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	518598	2592.99	24.35	25.00	1.161	-0.1	1.020	1.185
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	518598	2592.99	24.35	25.00	1.161	-0.19	1.030	1.196
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	518598	2592.99	24.35	25.00	1.161	0.17	1.080	1.254
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	26.14	27.00	1.219	0.12	0.915	1.115
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	518598	2592.99	24.35	25.00	1.161	0.07	0.885	1.028
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	-0.06	0.157	0.169
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	20.85	22.00	1.303	0.17	0.111	0.145
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	518598	2592.99	21.67	22.00	1.079	-0.05	0.148	0.160
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	518598	2592.99	21.67	22.00	1.079	0.05	0.151	0.163
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	518598	2592.99	21.67	22.00	1.079	-0.11	0.141	0.152
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	518598	2592.99	21.67	22.00	1.079	0.18	0.152	0.164
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	518598	2592.99	21.67	22.00	1.079	-0.06	0.148	0.160
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	518598	2592.99	21.67	22.00	1.079	-0.18	0.149	0.161
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	21.12	22.00	1.225	-0.18	0.078	0.096
	FR1 n41_Ant 4	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	20.41	22.00	1.442	0.12	0.066	0.095
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	518598	2592.99	21.12	22.00	1.225	0.03	0.074	0.091
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	518598	2592.99	21.12	22.00	1.225	0.14	0.075	0.092
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	518598	2592.99	21.12	22.00	1.225	0.09	0.074	0.091
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	518598	2592.99	21.12	22.00	1.225	-0.13	0.076	0.093
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	518598	2592.99	21.12	22.00	1.225	0.08	0.071	0.087
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	518598	2592.99	21.12	22.00	1.225	-0.02	0.069	0.084
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	21.01	22.00	1.256	-0.06	0.136	0.171



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	FR1 n41_Ant 3	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	518598	2592.99	20.56	22.00	1.393	0.15	0.116	0.162
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	518598	2592.99	21.01	22.00	1.256	-0.03	0.122	0.153
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	518598	2592.99	21.01	22.00	1.256	0	0.131	0.165
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	518598	2592.99	21.01	22.00	1.256	0.07	0.130	0.163
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	518598	2592.99	21.01	22.00	1.256	-0.18	0.129	0.162
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	518598	2592.99	21.01	22.00	1.256	0.16	0.122	0.153
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	518598	2592.99	21.01	22.00	1.256	0.11	0.120	0.151
65	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	349000	1745	24.31	25.00	1.172	0.02	0.554	0.649
	FR1 n66_Ant 1	40M	BPSK	108	54	Back	0mm	DSI 1	Sample 1	Standard	29 Key	349000	1745	24.04	25.00	1.247	0.15	0.477	0.595
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	349000	1745	24.31	25.00	1.172	-0.11	0.547	0.641
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	349000	1745	24.31	25.00	1.172	0.1	0.505	0.592
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	349000	1745	24.31	25.00	1.172	0.13	0.542	0.635
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	349000	1745	24.31	25.00	1.172	-0.18	0.545	0.639
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	349000	1745	24.31	25.00	1.172	-0.16	0.502	0.588
	FR1 n66_Ant 1	40M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	349000	1745	24.31	25.00	1.172	-0.18	0.400	0.469
66	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	136100	680.5	24.06	25.00	1.242	0.03	0.492	0.611
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	0mm	DSI 1	Sample 1	Standard	29 Key	136100	680.5	24.00	25.00	1.259	0.15	0.423	0.533
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	136100	680.5	24.06	25.00	1.242	-0.18	0.448	0.556
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	136100	680.5	24.06	25.00	1.242	-0.15	0.443	0.550
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	136100	680.5	24.06	25.00	1.242	-0.02	0.454	0.564
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	136100	680.5	24.06	25.00	1.242	0.11	0.448	0.556
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	136100	680.5	24.06	25.00	1.242	0.07	0.442	0.549
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	136100	680.5	24.06	25.00	1.242	-0.11	0.394	0.489
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	22.54	23.00	1.112	-0.02	0.286	0.318
	FR1 n77_Ant 8	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	22.05	23.00	1.245	-0.18	0.246	0.306
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	656000	3840	22.54	23.00	1.112	0.01	0.258	0.287
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	656000	3840	22.54	23.00	1.112	-0.13	0.278	0.309
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	656000	3840	22.54	23.00	1.112	0.11	0.261	0.290
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	656000	3840	22.54	23.00	1.112	0.03	0.258	0.287
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	656000	3840	22.54	23.00	1.112	-0.09	0.275	0.306
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	25.53	26.00	1.114	0.12	0.269	0.300
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	656000	3840	22.54	23.00	1.112	-0.11	0.248	0.276
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	22.55	23.00	1.109	-0.12	0.255	0.283
	FR1 n77_Ant 8	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	21.73	23.00	1.340	0.15	0.219	0.293
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	633332	3499.98	22.55	23.00	1.109	0.07	0.251	0.278
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	633332	3499.98	22.55	23.00	1.109	-0.07	0.243	0.270
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	633332	3499.98	22.55	23.00	1.109	-0.12	0.240	0.266
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	633332	3499.98	22.55	23.00	1.109	0.03	0.247	0.274
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	633332	3499.98	22.55	23.00	1.109	0.04	0.236	0.262
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	25.55	26.00	1.109	0.02	0.244	0.271
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	633332	3499.98	22.55	23.00	1.109	0.01	0.228	0.253
67	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	23.30	25.00	1.479	-0.18	0.580	0.858
	FR1 n77_Ant 9	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	23.19	25.00	1.517	0.03	0.498	0.755
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	656000	3840	23.30	25.00	1.479	0.13	0.531	0.785
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	656000	3840	23.30	25.00	1.479	0.19	0.552	0.816
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	656000	3840	23.30	25.00	1.479	0	0.563	0.833
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	656000	3840	23.30	25.00	1.479	0.03	0.572	0.846
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	656000	3840	23.30	25.00	1.479	-0.08	0.560	0.828
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	25.33	27.00	1.469	0.14	0.501	0.736
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	656000	3840	23.30	25.00	1.479	0	0.419	0.620
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	23.20	25.00	1.514	-0.09	0.224	0.339
	FR1 n77_Ant 9	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	23.15	25.00	1.531	0.1	0.192	0.294
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	633332	3499.98	23.20	25.00	1.514	0.06	0.214	0.324
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	633332	3499.98	23.20	25.00	1.514	-0.08	0.224	0.339
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	633332	3499.98	23.20	25.00	1.514	0.17	0.208	0.315
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	633332	3499.98	23.20	25.00	1.514	0.05	0.208	0.315
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	633332	3499.98	23.20	25.00	1.514	0.07	0.223	0.338
	FR1 n77_HPUE_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	25.18	27.00	1.521	0.14	0.188	0.286
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	633332	3499.98	23.20	25.00	1.514	0.16	0.215	0.325
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	20.85	22.00	1.303	0	0.185	0.241
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	20.62	22.00	1.374	0.06	0.158	0.217
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	656000	3840	20.85	22.00	1.303	-0.12	0.170	0.222

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	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	656000	3840	20.85	22.00	1.303	0.18	0.174	0.227
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	656000	3840	20.85	22.00	1.303	0.01	0.178	0.232
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	656000	3840	20.85	22.00	1.303	0.13	0.166	0.216
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	656000	3840	20.85	22.00	1.303	-0.03	0.181	0.236
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	656000	3840	20.85	22.00	1.303	-0.05	0.146	0.190
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	20.44	22.00	1.432	0.16	0.129	0.185
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	20.30	22.00	1.479	0.15	0.102	0.151
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	633332	3499.98	20.44	22.00	1.432	-0.07	0.120	0.172
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	633332	3499.98	20.44	22.00	1.432	0.12	0.118	0.169
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	633332	3499.98	20.44	22.00	1.432	0.11	0.115	0.165
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	633332	3499.98	20.44	22.00	1.432	-0.06	0.129	0.185
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	633332	3499.98	20.44	22.00	1.432	0.05	0.123	0.176
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	633332	3499.98	20.44	22.00	1.432	-0.18	0.096	0.137
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	20.58	22.00	1.387	-0.07	0.077	0.107
	FR1 n77_Ant 3	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	656000	3840	20.48	22.00	1.419	-0.19	0.062	0.088
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	656000	3840	20.58	22.00	1.387	-0.05	0.074	0.103
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	656000	3840	20.58	22.00	1.387	0.04	0.070	0.097
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	656000	3840	20.58	22.00	1.387	-0.04	0.071	0.098
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	656000	3840	20.58	22.00	1.387	-0.16	0.074	0.103
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	656000	3840	20.58	22.00	1.387	-0.05	0.069	0.096
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	656000	3840	20.58	22.00	1.387	0.06	0.059	0.082
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	20.14	22.00	1.535	0.04	0.073	0.112
	FR1 n77_Ant 3	100M	BPSK	135	69	Back	0mm	DSI 1	Sample 1	Standard	29 Key	633332	3499.98	20.13	22.00	1.538	0.14	0.062	0.095
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	BLE	29 Key	633332	3499.98	20.14	22.00	1.535	-0.04	0.072	0.110
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	53 Key	633332	3499.98	20.14	22.00	1.535	0.01	0.066	0.101
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	43 Key	633332	3499.98	20.14	22.00	1.535	-0.06	0.068	0.104
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	58 Key	633332	3499.98	20.14	22.00	1.535	-0.06	0.065	0.100
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 1	Standard	34 Key	633332	3499.98	20.14	22.00	1.535	0.02	0.067	0.103
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	DSI 1	Sample 2	Standard	29 Key	633332	3499.98	20.14	22.00	1.535	-0.15	0.052	0.080



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<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.08	0.101	0.135
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	BLE	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.18	0.098	0.131
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	Standard	53 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.02	0.094	0.125
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	Standard	43 Key	6	2437	20.90	21.50	1.148	86.11	1.161	-0.02	0.095	0.127
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	Standard	58 Key	6	2437	20.90	21.50	1.148	86.11	1.161	-0.17	0.093	0.124
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 1	Standard	34 Key	6	2437	20.90	21.50	1.148	86.11	1.161	-0.14	0.100	0.133
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	ON / OFF	DBS/Non-DBS	Sample 2	Standard	29 Key	6	2437	20.90	21.50	1.148	86.11	1.161	0.03	0.088	0.117
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.14	0.291	0.379
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	BLE	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.18	0.288	0.375
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	Standard	53 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.04	0.281	0.366
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	Standard	43 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.03	0.270	0.352
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	Standard	58 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.13	0.283	0.369
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 1	Standard	34 Key	6	2437	21.00	21.50	1.122	86.11	1.161	0.09	0.273	0.356
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	ON / OFF	DBS/Non-DBS	Sample 2	Standard	29 Key	6	2437	21.00	21.50	1.122	86.11	1.161	-0.06	0.276	0.360
68	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.18	0.325	0.395
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	BLE	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.15	0.298	0.362
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	Standard	53 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.04	0.323	0.393
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	Standard	43 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.14	0.303	0.368
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	Standard	58 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.19	0.320	0.389
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 1	Standard	34 Key	6	2437	21.30	21.50	1.047	86.11	1.161	-0.19	0.316	0.384
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	ANT 6+7(6)	ON / OFF	DBS/Non-DBS	Sample 2	Standard	29 Key	6	2437	21.30	21.50	1.047	86.11	1.161	0.07	0.313	0.381
69	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	29 Key	60	5300	18.50	19.50	1.259	85.66	1.167	-0.17	0.310	0.455
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	BLE	29 Key	60	5300	18.50	19.50	1.259	85.66	1.167	-0.17	0.285	0.419
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	53 Key	60	5300	18.50	19.50	1.259	85.66	1.167	0.17	0.291	0.428
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	43 Key	60	5300	18.50	19.50	1.259	85.66	1.167	0.03	0.290	0.426
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	58 Key	60	5300	18.50	19.50	1.259	85.66	1.167	0.03	0.294	0.432
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	34 Key	60	5300	18.50	19.50	1.259	85.66	1.167	-0.02	0.290	0.426
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 2	Standard	29 Key	60	5300	18.50	19.50	1.259	85.66	1.167	-0.17	0.298	0.438
70	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	29 Key	144	5720	18.30	19.00	1.175	85.66	1.167	-0.01	0.560	0.768
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	BLE	29 Key	144	5720	18.30	19.00	1.175	85.66	1.167	0.12	0.507	0.695
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	53 Key	144	5720	18.30	19.00	1.175	85.66	1.167	-0.15	0.505	0.692
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	43 Key	144	5720	18.30	19.00	1.175	85.66	1.167	0.11	0.537	0.736
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	58 Key	144	5720	18.30	19.00	1.175	85.66	1.167	0.11	0.551	0.755
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 1	Standard	34 Key	144	5720	18.30	19.00	1.175	85.66	1.167	-0.11	0.517	0.709
	WLAN5GHz	802.11a 6Mbps	Back	0mm	ANT 6+7(7)	OFF	Non DBS	Sample 2	Standard	29 Key	144	5720	18.30	19.00	1.175	85.66	1.167	-0.17	0.516	0.707
71	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	Standard	29 Key	155	5775	17.50	18.00	1.122	86.09	1.162	-0.12	0.425	0.554
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	BLE	29 Key	155	5775	17.50	18.00	1.122	86.09	1.162	-0.06	0.400	0.522
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	Standard	53 Key	155	5775	17.50	18.00	1.122	86.09	1.162	-0.16	0.386	0.503
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	Standard	43 Key	155	5775	17.50	18.00	1.122	86.09	1.162	-0.05	0.408	0.532
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	Standard	58 Key	155	5775	17.50	18.00	1.122	86.09	1.162	0.14	0.398	0.519
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 1	Standard	34 Key	155	5775	17.50	18.00	1.122	86.09	1.162	-0.02	0.397	0.518
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	ANT 6+7(6)	OFF	Non DBS	Sample 2	Standard	29 Key	155	5775	17.50	18.00	1.122	86.09	1.162	0.05	0.380	0.495



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Measured APD (W/m ²)	Reported APD (W/m ²)
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	15	6025	14.50	15.00	1.122	86.67	1.154	0.12	0.136	0.176	1.26	1.631
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	47	6185	14.40	15.00	1.148	86.67	1.154	0.05	0.144	0.191	3.55	4.704
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	111	6505	12.00	13.00	1.259	86.67	1.154	-0.06	0.142	0.206	3.11	4.518
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	143	6665	13.20	13.50	1.072	86.67	1.154	-0.12	0.151	0.187	3.31	4.093
72	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	29 Key	207	6985	12.50	13.50	1.259	86.67	1.154	-0.04	0.158	0.230	3.62	5.259
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	BLE	29 Key	207	6985	12.50	13.50	1.259	86.67	1.154	-0.17	0.155	0.225	3.56	5.172
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	53 Key	207	6985	12.50	13.50	1.259	86.67	1.154	-0.1	0.140	0.203	3.42	4.969
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	43 Key	207	6985	12.50	13.50	1.259	86.67	1.154	-0.14	0.152	0.221	3.51	5.099
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	58 Key	207	6985	12.50	13.50	1.259	86.67	1.154	-0.11	0.151	0.219	3.49	5.070
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 1	Standard	34 Key	207	6985	12.50	13.50	1.259	86.67	1.154	0.19	0.145	0.211	3.58	5.201
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	ANT 6+7(7)	ON / OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	207	6985	12.50	13.50	1.259	86.67	1.154	0.08	0.152	0.221	3.42	4.969

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.05	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	BLE	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.19	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	Standard	53 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.12	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	Standard	43 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.01	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	Standard	58 Key	78	2480	3.52	4.00	1.116	77.03	1.081	-0.15	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 1	Standard	34 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.19	< 0.001	< 0.001
	Bluetooth	3Mbps	Back	0mm	Ant 6	Sample 2	Standard	29 Key	78	2480	3.52	4.00	1.116	77.03	1.081	0.01	< 0.001	< 0.001
73	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.12	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	BLE	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.06	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	Standard	53 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.03	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	Standard	43 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.12	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	Standard	58 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.05	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 1	Standard	34 Key	0	2402	2.40	2.50	1.023	76.8	1.085	-0.01	< 0.001	< 0.001
	Bluetooth	2Mbps	Back	0mm	Ant 7	Sample 2	Standard	29 Key	0	2402	2.40	2.50	1.023	76.8	1.085	0.01	< 0.001	< 0.001

<NFC SAR>

Plot No.	Band	Test Position	Gap (mm)	Sample	Battery	Keypad	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)
74	NFC	Back	0mm	Sample 1	Standard	29 Key	13.56	-0.08	< 0.001
	NFC	Back	0mm	Sample 1	BLE	29 Key	13.56	0.06	< 0.001
	NFC	Back	0mm	Sample 1	Standard	53 Key	13.56	-0.19	< 0.001
	NFC	Back	0mm	Sample 1	Standard	43 Key	13.56	-0.1	< 0.001
	NFC	Back	0mm	Sample 1	Standard	58 Key	13.56	0.09	< 0.001
	NFC	Back	0mm	Sample 1	Standard	34 Key	13.56	-0.04	< 0.001
	NFC	Back	0mm	Sample 2	Standard	29 Key	13.56	0.11	< 0.001

13.4 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	Sample 1	15	6025	14.50	0.0625	5.7	-0.09048129	3.14	3.26
WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	15	6025	14.50	0.25	5.82		2.18	2.19
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	Sample 1	207	6985	12.50	0.0625	7.43	0.136563173	3.22	3.29
WLAN6GHz	802.11ax-HE160 MCS0	Back	8.59mm	Ant 6+7(7)	Sample 1	207	6985	12.50	0.25	7.2		2.32	2.4

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Holster	Sample	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grid Step (λ)	Scaling Factor for Measurement Uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7(7)	Holster	Sample 1	47	6185	14.40	15.00	1.148	87.01	1.149	0.0625	1.5535	0.05	0.646	1.32	0.767	1.57
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 1	47	6185	14.40	15.00	1.148	87.01	1.149	0.0625	1.5535	-0.04	1.66	3.40	1.97	4.04
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7(7)	Holster	Sample 1	47	6185	14.40	15.00	1.148	87.01	1.149	0.0625	1.5535	0.11	1.46	2.99	1.57	3.22
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 1	15	6025	14.50	15.00	1.122	87.01	1.149	0.0625	1.5535	0.04	2.03	4.07	2.26	4.53
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 1	111	6505	12.00	13.00	1.259	87.01	1.149	0.0625	1.5535	-0.1	0.745	1.67	0.761	1.71
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 1	143	6665	13.20	13.50	1.072	87.01	1.149	0.0625	1.5535	0.09	0.792	1.51	0.858	1.64
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 1	207	6985	12.50	13.50	1.259	87.01	1.149	0.0625	1.5535	0.01	0.852	1.91	0.861	1.93
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7(7)	Holster	Sample 2	15	6025	14.50	15.00	1.122	87.01	1.149	0.0625	1.5535	0.06	1.65	3.30	1.72	3.44
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 1	15	6025	14.50	15.00	1.122	86.67	1.154	0.0625	1.5535	0.07	3.14	6.32	3.26	6.56
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 1	47	6185	14.40	15.00	1.148	86.67	1.154	0.0625	1.5535	-0.15	3.44	7.08	3.53	7.27
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 1	111	6505	12.00	13.00	1.259	86.67	1.154	0.0625	1.5535	0.02	3.17	7.15	3.19	7.20
75	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 1	143	6665	13.20	13.50	1.072	86.67	1.154	0.0625	1.5535	0.14	3.95	7.59	4.12	7.91
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 1	207	6985	12.50	13.50	1.259	86.67	1.154	0.0625	1.5535	-0.02	3.22	7.27	3.29	7.43
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7(7)	-	Sample 2	143	6665	13.20	13.50	1.072	86.67	1.154	0.0625	1.5535	0.02	2.74	5.26	2.9	5.57

13.5 Supplemental SAR Results

General Note:

- Guidance is here provided in regard to RF devices that use sensors to detect a "on-body" use conditions, in order to control the RF conducted power to maintain RF exposure compliance. For these cases, it is also necessary to address "off-body, but close" use condition, such as the device on a stationary surface (e.g., a table), thus with the sensors not triggered and therefore operating at maximum power, but close enough to a person's body to pose RF exposure compliance concerns.
- Accordingly, it is possible to consider that, if the particular device under test (DUT) is shown to be RF-exposure-compliant at 25 mm without any power reduction, then any off-body use will also lead to an exposure that, on average, is within the compliance threshold. This argument is based on the fact that, for this particular DUT under consideration, operations at distances closer than 25 mm will likely lead to contact with the DUT, even temporary or accidental, thus triggering the sensor-based power reduction feature.

Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
FR1 n77_Ant 8	100M	BPSK	1	1	Front	25mm	DSI 0	Sample 1	Standard	29 Key	656000	3840	23.63	25.00	1.371	0.02	0.036	0.049
FR1 n77_Ant 8	100M	BPSK	1	1	Right Side	25mm	DSI 0	Sample 1	Standard	29 Key	656000	3840	23.63	25.00	1.371	0.09	0.077	0.106
FR1 n77_Ant 9	100M	BPSK	1	1	Front	25mm	DSI 0	Sample 1	Standard	29 Key	656000	3840	23.30	25.00	1.479	0.17	0.151	0.223
FR1 n77_Ant 9	100M	BPSK	1	1	Left Side	25mm	DSI 0	Sample 1	Standard	29 Key	656000	3840	23.30	25.00	1.479	-0.19	0.474	0.701

**13.6 Repeated SAR Measurement**

No.	Band	Mode	Test Position	Gap (mm)	Antenna	WWAN ON / OFF	DBS / Non-DBS	Sample	Battery	Keypad	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	-0.03	0.823	-	1.209
2nd	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	ANT 6+7(7)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	44	5220	18.50	19.50	1.259	85.66	1.167	0.15	0.809	1.017	1.189
1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	-0.1	0.930	-	1.360
2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	ANT 6+7(6)	OFF	DBS / Non-DBS	Sample 2	Standard	29 Key	155	5775	17.00	18.00	1.259	86.09	1.162	0.05	0.912	1.019	1.334

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	WWAN ON / OFF	DBS / Non-DBS	Holster	Sample	Battery	Keypad	Earphone	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	FR1 n77_Ant 8	100M_BPSK_1_1	Right Side	0mm		DSI 1			Holster	Sample 1	Standard	29 Key	-	656000	3840	22.54	23.00	1.112			-0.03	1.180	-	1.312
2nd	FR1 n77_Ant 8	100M_BPSK_1_1	Right Side	0mm		DSI 1			Holster	Sample 1	Standard	29 Key	-	656000	3840	22.54	23.00	1.112			-0.11	1.100	1.073	1.223
1st	FR1 n77_Ant 8	100M_BPSK_1_1	Right Side	0mm		DSI 1			Holster	Sample 1	Standard	29 Key	-	633332	3499.98	22.55	23.00	1.109			-0.03	1.050	-	1.165
2nd	FR1 n77_Ant 8	100M_BPSK_1_1	Right Side	0mm		DSI 1			Holster	Sample 1	Standard	29 Key	-	633332	3499.98	22.55	23.00	1.109			0.05	1.020	1.029	1.131
1st	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)		OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	-0.04	0.933	-	1.279
2nd	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	ANT 6+7(7)		OFF	DBS / Non-DBS	Holster	Sample 2	Standard	29 Key	-	144	5720	18.30	19.00	1.175	85.66	1.167	0.02	0.911	1.024	1.249

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.

13.7 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%

<Hotspot condition>

	LTE Band 41_Ant 5	LTE Band 41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	0.462	0.457
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	217.01
Linearity SAR(W/kg)	0.50	
% deviation from expected linearity		-8.76%

	FR1 n41_Ant 5	FR1 n41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	0.587	0.474
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	0.47	
% deviation from expected linearity		1.90%

	FR1 n77_Ant 8	FR1 n77_Ant 8
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	19.5	22.5
Reported 1g SAR (W/kg)	0.585	0.537
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR(W/kg)	0.58	
% deviation from expected linearity		-7.99%

	FR1 n77_Ant 9	FR1 n77_Ant 9
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	19.5	22.5
Reported 1g SAR (W/kg)	0.552	0.511
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR(W/kg)	0.55	
% deviation from expected linearity		-7.21%

<Body-worn condition>

	LTE Band 41_Ant 5	LTE Band 41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	0.303	0.301
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	217.01
Linearity SAR(W/kg)	0.33	
% deviation from expected linearity		-8.37%

	FR1 n41_Ant 5	FR1 n41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	0.388	0.327
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	0.31	
% deviation from expected linearity		6.35%

	FR1 n77_Ant 8	FR1 n77_Ant 8
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23	26
Reported 1g SAR (W/kg)	1.312	1.215
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR(W/kg)	1.31	
% deviation from expected linearity		-7.17%

	FR1 n77_Ant 9	FR1 n77_Ant 9
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	1.37	1.187
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	1.09	
% deviation from expected linearity		9.34%

<Extremity condition>

	LTE Band 41_Ant 5	LTE Band 41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 10g SAR (W/kg)	0.389	0.384
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	217.01
Linearity SAR(W/kg)	0.42	
% deviation from expected linearity		-8.95%

	FR1 n41_Ant 5	FR1 n41_Ant 5
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 10g SAR (W/kg)	1.289	1.115
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	1.02	
% deviation from expected linearity		9.16%

	FR1 n77_Ant 8	FR1 n77_Ant 8
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23	26
Reported 10g SAR (W/kg)	0.318	0.3
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR(W/kg)	0.32	
% deviation from expected linearity		-5.44%

	FR1 n77_Ant 9	FR1 n77_Ant 9
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 10g SAR (W/kg)	0.858	0.736
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	0.68	
% deviation from expected linearity		8.25%

14. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Hotspot	Body-Worn	Product Specific
Non-DBS				
1.	2.4G/5G/6E WLAN Ant 6 + Bluetooth Ant 7 + NFC	Yes	Yes	Yes
2.	2.4G/5G/6E WLAN Ant 7 + Bluetooth Ant 6 + NFC	Yes	Yes	Yes
3.	5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 6/2 + NFC	Yes	Yes	Yes
4.	WWAN + 2.4G/5G/6E WLAN Ant 6 + Bluetooth Ant 7 + NFC	Yes	Yes	Yes
5.	WWAN + 2.4G/5G/6E WLAN Ant 7 + Bluetooth Ant 6 + NFC	Yes	Yes	Yes
6.	WWAN + 5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 6/2 + NFC	Yes	Yes	Yes
DBS				
7.	2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6 + NFC	Yes	Yes	Yes
8.	2.4G WLAN Ant 7 + 5G/6E WLAN Ant 7 + NFC	Yes	Yes	Yes
9.	2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
10.	2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
11.	2.4G WLAN Ant 7 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
12.	2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 7 + NFC	Yes	Yes	Yes
13.	2.4G WLAN Ant 7 + 5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 6 + NFC	Yes	Yes	Yes
14.	2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 6 + NFC	Yes	Yes	Yes
15.	2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 7 + NFC	Yes	Yes	Yes
16.	WWAN + 2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6 + NFC	Yes	Yes	Yes
17.	WWAN + 2.4G WLAN Ant 7 + 5G/6E WLAN Ant 7 + NFC	Yes	Yes	Yes
18.	WWAN + 2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
19.	WWAN + 2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
20.	WWAN + 2.4G WLAN Ant 7 + 5G/6E WLAN Ant 6+7 MIMO + NFC	Yes	Yes	Yes
21.	WWAN + 2.4G WLAN Ant 6 + 5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 7 + NFC	Yes	Yes	Yes
22.	WWAN + 2.4G WLAN Ant 7 + 5G/6E WLAN Ant 6+7 MIMO + Bluetooth Ant 6 + NFC	Yes	Yes	Yes
23.	WWAN + 2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 6 + NFC	Yes	Yes	Yes
24.	WWAN + 2.4G WLAN MIMO Ant 6+7 + 5G/6E WLAN Ant 7 + NFC	Yes	Yes	Yes

General Note:

- The worst case reported SAR for each configuration was used for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation < 1.6W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, 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.
 - If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

**14.1 Hotspot Exposure Conditions****<WWAN off, non-DBS mode>**

Exposure Position	2	3	4	5	7	8	2+8 Summed 1g SAR (W/kg)	3+7 Summed 1g SAR (W/kg)	5+7 Summed 1g SAR (W/kg)	5+8 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 6 1g SAR (W/kg)	WLAN2.4GHz Ant 7 1g SAR (W/kg)	WLAN2.4GHz Ant 6+7 1g SAR (W/kg)	WLAN5GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)				
Front	0.052	0.095	0.097	0.538	0.001	0.001	0.053	0.096	0.539	0.539
Left side		0.438	0.284	1.068		0.003	0.003	0.438	1.068	1.071
Right side	0.377		0.169	1.360	0.002		0.377	0.002	1.362	1.360
Top side	0.001	0.099	0.098	0.707	0.001	0.001	0.002	0.100	0.708	0.708

<WWAN off, DBS mode>

Exposure Position	2	3	4	5	6	7	8	2+5+8 Summed 1g SAR (W/kg)	3+5+7 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 6 1g SAR (W/kg)	WLAN2.4GHz Ant 7 1g SAR (W/kg)	WLAN2.4GHz Ant 6+7 1g SAR (W/kg)	WLAN5GHz Ant 6+7 1g SAR (W/kg)	WLAN6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)			
Front	0.052	0.095	0.097	0.538		0.001	0.001	0.591	0.634	0.635
Left side		0.438	0.284	1.068			0.003	1.071	1.506	1.352
Right side	0.377		0.169	1.213		0.002		1.590	1.215	1.382
Top side	0.001	0.099	0.098	0.707		0.001	0.001	0.709	0.807	0.805

<WWAN on, non-DBS mode>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+2+8 Summed 1g SAR (W/kg)	1+3+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN 2.4GHz Ant 6 1g SAR (W/kg)	WLAN 2.4GHz Ant 7 1g SAR (W/kg)	WLAN 2.4GHz Ant 6+7 1g SAR (W/kg)	WLAN 5GHz Ant 6+7 1g SAR (W/kg)	WLAN 6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)				
WCDMA II_Ant 1	Front	0.103	0.052	0.095	0.097	0.461		0.001	0.001	0.156	0.199	0.565	0.565
	Left side	0.584		0.438	0.284	0.917			0.003	0.587	1.022	1.501	1.504
	Top side	0.136	0.001	0.099	0.098	0.607		0.001	0.001	0.138	0.236	0.744	0.744
WCDMA IV_Ant 1	Front	0.115	0.052	0.095	0.097	0.461		0.001	0.001	0.168	0.211	0.577	0.577
	Left side	0.596		0.438	0.284	0.917			0.003	0.599	1.034	1.513	1.516
	Top side	0.124	0.001	0.099	0.098	0.607		0.001	0.001	0.126	0.224	0.732	0.732
WCDMA V_Ant 1	Front	0.294	0.052	0.095	0.097	0.461		0.001	0.001	0.347	0.390	0.756	0.756
	Left side	0.434		0.438	0.284	0.917			0.003	0.437	0.872	1.351	1.354
	Top side	0.230	0.001	0.099	0.098	0.607		0.001	0.001	0.232	0.330	0.838	0.838
LTE Band 2_Ant 1	Front	0.121	0.052	0.095	0.097	0.461		0.001	0.001	0.174	0.217	0.583	0.583
	Left side	0.574		0.438	0.284	0.917			0.003	0.577	1.012	1.491	1.494
	Top side	0.116	0.001	0.099	0.098	0.607		0.001	0.001	0.118	0.216	0.724	0.724
LTE Band 7_Ant 5	Front	0.270	0.052	0.095	0.097	0.461		0.001	0.001	0.323	0.366	0.732	0.732
	Left side	0.538		0.438	0.284	0.917			0.003	0.541	0.976	1.455	1.458
LTE Band 12_Ant 1	Front	0.251	0.052	0.095	0.097	0.461		0.001	0.001	0.304	0.347	0.713	0.713
	Left side	0.273		0.438	0.284	0.917			0.003	0.276	0.711	1.190	1.193
	Top side	0.214	0.001	0.099	0.098	0.607		0.001	0.001	0.216	0.314	0.822	0.822
LTE Band 26_Ant 1	Front	0.327	0.052	0.095	0.097	0.461		0.001	0.001	0.380	0.423	0.789	0.789
	Left side	0.435		0.438	0.284	0.917			0.003	0.438	0.873	1.352	1.355
	Top side	0.207	0.001	0.099	0.098	0.607		0.001	0.001	0.209	0.307	0.815	0.815
LTE Band 41_Ant 5	Front	0.231	0.052	0.095	0.097	0.461		0.001	0.001	0.284	0.327	0.693	0.693
	Left side	0.462		0.438	0.284	0.917			0.003	0.465	0.900	1.379	1.382
LTE Band 42_Ant 8	Front	0.127	0.052	0.095	0.097	0.461		0.001	0.001	0.180	0.223	0.589	0.589
	Right side	0.542	0.377		0.169	1.004		0.002		0.919	0.544	1.548	1.546
LTE Band 66_Ant 1	Front	0.118	0.052	0.095	0.097	0.461		0.001	0.001	0.171	0.214	0.580	0.580
	Left side	0.544		0.438	0.284	0.917			0.003	0.547	0.982	1.461	1.464
	Top side	0.138	0.001	0.099	0.098	0.607		0.001	0.001	0.140	0.238	0.746	0.746

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LTE Band 71_Ant 1	Front	0.235	0.052	0.095	0.097	0.461		0.001	0.001	0.288	0.331	0.697	0.697
	Left side	0.192		0.438	0.284	0.917			0.003	0.195	0.630	1.109	1.112
	Top side	0.103	0.001	0.099	0.098	0.607		0.001	0.001	0.105	0.203	0.711	0.711
FR1 n2_Ant 1	Front	0.087	0.052	0.095	0.097	0.461		0.001	0.001	0.140	0.183	0.549	0.549
	Left side	0.579		0.438	0.284	0.917			0.003	0.582	1.017	1.496	1.499
	Top side	0.103	0.001	0.099	0.098	0.607		0.001	0.001	0.105	0.203	0.711	0.711
FR1 n7_Ant 5	Front	0.349	0.052	0.095	0.097	0.461		0.001	0.001	0.402	0.445	0.811	0.811
	Left side	0.587		0.438	0.284	0.917			0.003	0.590	1.025	1.504	1.507
FR1 n12_Ant 1	Front	0.231	0.052	0.095	0.097	0.461		0.001	0.001	0.284	0.327	0.693	0.693
	Left side	0.256		0.438	0.284	0.917			0.003	0.259	0.694	1.173	1.176
	Top side	0.166	0.001	0.099	0.098	0.607		0.001	0.001	0.168	0.266	0.774	0.774
FR1 n26_Ant 1	Front	0.315	0.052	0.095	0.097	0.461		0.001	0.001	0.368	0.411	0.777	0.777
	Left side	0.388		0.438	0.284	0.917			0.003	0.391	0.826	1.305	1.308
	Top side	0.192	0.001	0.099	0.098	0.607		0.001	0.001	0.194	0.292	0.800	0.800
FR1 n41_Ant 5	Front	0.276	0.052	0.095	0.097	0.461		0.001	0.001	0.329	0.372	0.738	0.738
	Left side	0.587		0.438	0.284	0.917			0.003	0.590	1.025	1.504	1.507
FR1 n41_Ant 2	Front	0.099	0.052	0.095	0.097	0.461		0.001	0.001	0.152	0.195	0.561	0.561
	Right side	0.174	0.377		0.169	1.004		0.002		0.551	0.176	1.180	1.178
	Top side	0.072	0.001	0.099	0.098	0.607		0.001	0.001	0.074	0.172	0.680	0.680
FR1 n41_Ant 4	Front	0.061	0.052	0.095	0.097	0.461		0.001	0.001	0.114	0.157	0.523	0.523
	Right side	0.123	0.377		0.169	1.004		0.002		0.500	0.125	1.129	1.127
FR1 n41_Ant 3	Front	0.065	0.052	0.095	0.097	0.461		0.001	0.001	0.118	0.161	0.527	0.527
	Left side	0.164		0.438	0.284	0.917			0.003	0.167	0.602	1.081	1.084
FR1 n66_Ant 1	Front	0.140	0.052	0.095	0.097	0.461		0.001	0.001	0.193	0.236	0.602	0.602
	Left side	0.590		0.438	0.284	0.917			0.003	0.593	1.028	1.507	1.510
	Top side	0.156	0.001	0.099	0.098	0.607		0.001	0.001	0.158	0.256	0.764	0.764
FR1 n71_Ant 1	Front	0.223	0.052	0.095	0.097	0.461		0.001	0.001	0.276	0.319	0.685	0.685
	Left side	0.219		0.438	0.284	0.917			0.003	0.222	0.657	1.136	1.139
	Top side	0.098	0.001	0.099	0.098	0.607		0.001	0.001	0.100	0.198	0.706	0.706
FR1 n77_Ant 8	Front	0.165	0.052	0.095	0.097	0.461		0.001	0.001	0.218	0.261	0.627	0.627
	Right side	0.585	0.377		0.169	1.004		0.002		0.962	0.587	1.591	1.589
FR1 n77_Ant 9	Front	0.111	0.052	0.095	0.097	0.461		0.001	0.001	0.164	0.207	0.573	0.573
	Left side	0.552		0.438	0.284	0.917			0.003	0.555	0.990	1.469	1.472
FR1 n77_Ant 4	Front	0.232	0.052	0.095	0.097	0.461		0.001	0.001	0.285	0.328	0.694	0.694
	Right side	0.564	0.377		0.169	1.004		0.002		0.941	0.566	1.570	1.568
FR1 n77_Ant 3	Front	0.164	0.052	0.095	0.097	0.461		0.001	0.001	0.217	0.260	0.626	0.626
	Left side	0.505		0.438	0.284	0.917			0.003	0.508	0.943	1.422	1.425

**<WWAN on, DBS mode>**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+2+5+8 Summed 1g SAR (W/kg)	1+3+5+7 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
		WWAN	WLAN 2.4GHz Ant 6	WLAN 2.4GHz Ant 7	WLAN 2.4GHz Ant 6+7	WLAN 5GHz Ant 6+7	WLAN 6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
WCDMA II_Ant 1	Front	0.103	0.052	0.095	0.097	0.461		0.001	0.001	0.617	0.660	0.661
	Left side	0.584		0.438	0.284	0.528			0.003	1.115	1.550	1.396
	Top side	0.136	0.001	0.099	0.098	0.607		0.001	0.001	0.745	0.843	0.841
WCDMA IV_Ant 1	Front	0.115	0.052	0.095	0.097	0.461		0.001	0.001	0.629	0.672	0.673
	Left side	0.596		0.438	0.284	0.528			0.003	1.127	1.562	1.408
	Top side	0.124	0.001	0.099	0.098	0.607		0.001	0.001	0.733	0.831	0.829
WCDMA V_Ant 1	Front	0.294	0.052	0.095	0.097	0.461		0.001	0.001	0.808	0.851	0.852
	Left side	0.434		0.438	0.284	0.528			0.003	0.965	1.400	1.246
	Top side	0.230	0.001	0.099	0.098	0.607		0.001	0.001	0.839	0.937	0.935
LTE Band 2_Ant 1	Front	0.121	0.052	0.095	0.097	0.461		0.001	0.001	0.635	0.678	0.679
	Left side	0.574		0.438	0.284	0.528			0.003	1.105	1.540	1.386
	Top side	0.116	0.001	0.099	0.098	0.607		0.001	0.001	0.725	0.823	0.821
LTE Band 7_Ant 5	Front	0.270	0.052	0.095	0.097	0.461		0.001	0.001	0.784	0.827	0.828
	Left side	0.538		0.438	0.284	0.528			0.003	1.069	1.504	1.350
LTE Band 12_Ant 1	Front	0.251	0.052	0.095	0.097	0.461		0.001	0.001	0.765	0.808	0.809
	Left side	0.273		0.438	0.284	0.528			0.003	0.804	1.239	1.085
	Top side	0.214	0.001	0.099	0.098	0.607		0.001	0.001	0.823	0.921	0.919
LTE Band 26_Ant 1	Front	0.327	0.052	0.095	0.097	0.461		0.001	0.001	0.841	0.884	0.885
	Left side	0.435		0.438	0.284	0.528			0.003	0.966	1.401	1.247
	Top side	0.207	0.001	0.099	0.098	0.607		0.001	0.001	0.816	0.914	0.912
LTE Band 41_Ant 5	Front	0.231	0.052	0.095	0.097	0.461		0.001	0.001	0.745	0.788	0.789
	Left side	0.462		0.438	0.284	0.528			0.003	0.993	1.428	1.274
LTE Band 42_Ant 8	Front	0.127	0.052	0.095	0.097	0.461		0.001	0.001	0.641	0.684	0.685
	Right side	0.542	0.377		0.169	0.595		0.002		1.514	1.139	1.306
LTE Band 66_Ant 1	Front	0.118	0.052	0.095	0.097	0.461		0.001	0.001	0.632	0.675	0.676
	Left side	0.544		0.438	0.284	0.528			0.003	1.075	1.510	1.356
	Top side	0.138	0.001	0.099	0.098	0.607		0.001	0.001	0.747	0.845	0.843
LTE Band 71_Ant 1	Front	0.235	0.052	0.095	0.097	0.461		0.001	0.001	0.749	0.792	0.793
	Left side	0.192		0.438	0.284	0.528			0.003	0.723	1.158	1.004
	Top side	0.103	0.001	0.099	0.098	0.607		0.001	0.001	0.712	0.810	0.808
FR1 n2_Ant 1	Front	0.087	0.052	0.095	0.097	0.461		0.001	0.001	0.601	0.644	0.645
	Left side	0.579		0.438	0.284	0.528			0.003	1.110	1.545	1.391
	Top side	0.103	0.001	0.099	0.098	0.607		0.001	0.001	0.712	0.810	0.808
FR1 n7_Ant 5	Front	0.349	0.052	0.095	0.097	0.461		0.001	0.001	0.863	0.906	0.907
	Left side	0.587		0.438	0.284	0.528			0.003	1.118	1.553	1.399
FR1 n12_Ant 1	Front	0.231	0.052	0.095	0.097	0.461		0.001	0.001	0.745	0.788	0.789
	Left side	0.256		0.438	0.284	0.528			0.003	0.787	1.222	1.068
	Top side	0.166	0.001	0.099	0.098	0.607		0.001	0.001	0.775	0.873	0.871
FR1 n26_Ant 1	Front	0.315	0.052	0.095	0.097	0.461		0.001	0.001	0.829	0.872	0.873
	Left side	0.388		0.438	0.284	0.528			0.003	0.919	1.354	1.200
	Top side	0.192	0.001	0.099	0.098	0.607		0.001	0.001	0.801	0.899	0.897
FR1 n41_Ant 5	Front	0.276	0.052	0.095	0.097	0.461		0.001	0.001	0.790	0.833	0.834
	Left side	0.587		0.438	0.284	0.528			0.003	1.118	1.553	1.399
FR1 n41_Ant 2	Front	0.099	0.052	0.095	0.097	0.461		0.001	0.001	0.613	0.656	0.657
	Right side	0.174	0.377		0.169	0.595		0.002		1.146	0.771	0.938
	Top side	0.072	0.001	0.099	0.098	0.607		0.001	0.001	0.681	0.779	0.777
FR1 n41_Ant 4	Front	0.061	0.052	0.095	0.097	0.461		0.001	0.001	0.575	0.618	0.619
	Right side	0.123	0.377		0.169	0.595		0.002		1.095	0.720	0.887
FR1 n41_Ant 3	Front	0.065	0.052	0.095	0.097	0.461		0.001	0.001	0.579	0.622	0.623

	Left side	0.164		0.438	0.284	0.528			0.003	0.695	1.130	0.976
FR1 n66_Ant 1	Front	0.140	0.052	0.095	0.097	0.461		0.001	0.001	0.654	0.697	0.698
	Left side	0.590		0.438	0.284	0.528			0.003	1.121	1.556	1.402
	Top side	0.156	0.001	0.099	0.098	0.607		0.001	0.001	0.765	0.863	0.861
FR1 n71_Ant 1	Front	0.223	0.052	0.095	0.097	0.461		0.001	0.001	0.737	0.780	0.781
	Left side	0.219		0.438	0.284	0.528			0.003	0.750	1.185	1.031
	Top side	0.098	0.001	0.099	0.098	0.607		0.001	0.001	0.707	0.805	0.803
FR1 n77_Ant 8	Front	0.165	0.052	0.095	0.097	0.461		0.001	0.001	0.679	0.722	0.723
	Right side	0.585	0.377		0.169	0.595		0.002		1.557	1.182	1.349
FR1 n77_Ant 9	Front	0.111	0.052	0.095	0.097	0.461		0.001	0.001	0.625	0.668	0.669
	Left side	0.552		0.438	0.284	0.528			0.003	1.083	1.518	1.364
FR1 n77_Ant 4	Front	0.232	0.052	0.095	0.097	0.461		0.001	0.001	0.746	0.789	0.790
	Right side	0.564	0.377		0.169	0.595		0.002		1.536	1.161	1.328
FR1 n77_Ant 3	Front	0.164	0.052	0.095	0.097	0.461		0.001	0.001	0.678	0.721	0.722
	Left side	0.505		0.438	0.284	0.528			0.003	1.036	1.471	1.317

14.2 Body-Worn Accessory Exposure Conditions

<WWAN off, non-DBS mode>

Exposure Position	2	3	4	5	6	7	8	2+8	3+7	5+7	5+8	6+7	6+8
	WLAN2.4GHz Ant 6	WLAN2.4GHz Ant 7	WLAN2.4GHz Ant 6+7	WLAN5GHz Ant 6+7	WLAN6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)						
Front at 0mm Holster	0.001	0.098	0.101	0.476	0.140	0.001	0.001	0.002	0.099	0.477	0.477	0.141	0.141
Left Side at 0mm Holster		0.244	0.157	1.279	0.576		0.001	0.001	0.244	1.279	1.280	0.576	0.577
Right Side at 0mm Holster	0.168		0.084	1.034	0.392	0.001		0.168	0.001	1.035	1.034	0.393	0.392

<WWAN off, DBS mode>

Exposure Position	2	3	4	5	6	7	8	2+5+8	3+5+7	2+6+8	3+6+7	4+5	4+6
	WLAN2.4GHz Ant 6	WLAN2.4GHz Ant 7	WLAN2.4GHz Ant 6+7	WLAN5GHz Ant 6+7	WLAN6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)						
Front at 0mm Holster	0.001	0.098	0.101	0.476	0.140	0.001	0.001	0.478	0.575	0.142	0.239	0.577	0.241
Left Side at 0mm Holster		0.244	0.157	1.279	0.576		0.001	1.280	1.523	0.577	0.820	1.436	0.733
Right Side at 0mm Holster	0.168		0.084	1.034	0.392	0.001		1.202	1.035	0.560	0.393	1.118	0.476



FCC SAR TEST REPORT

Report No. : FA3N2803B

<WWAN on, non-DBS mode>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+2+8	1+3+7	1+5+7	1+5+8	1+6+7	1+6+8
		WWAN	WLAN	WLAN	WLAN	WLAN	WLAN	Bluetooth	Bluetooth	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	2.4GHz Ant 6 1g SAR (W/kg)	2.4GHz Ant 7 1g SAR (W/kg)	2.4GHz Ant 6+7 1g SAR (W/kg)	5GHz Ant 6+7 1g SAR (W/kg)	6GHz Ant 6+7 1g SAR (W/kg)	Ant 6 1g SAR (W/kg)	Ant 7 1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA II_Ant 1	Front at 0mm Holster	0.086	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.088	0.185	0.520	0.520	0.227	0.227
	Left Side at 0mm Holster	0.288		0.244	0.157	0.985	0.576		0.001	0.289	0.532	1.273	1.274	0.864	0.865
WCDMA IV_Ant 1	Front at 0mm Holster	0.137	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.139	0.236	0.571	0.571	0.278	0.278
	Left Side at 0mm Holster	0.401		0.244	0.157	0.985	0.576		0.001	0.402	0.645	1.386	1.387	0.977	0.978
WCDMA V_Ant 1	Front at 0mm Holster	0.236	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.238	0.335	0.670	0.670	0.377	0.377
	Left Side at 0mm Holster	0.146		0.244	0.157	0.985	0.576		0.001	0.147	0.390	1.131	1.132	0.722	0.723
LTE Band 2_Ant 1	Front at 0mm Holster	0.084	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.086	0.183	0.518	0.518	0.225	0.225
	Left Side at 0mm Holster	0.289		0.244	0.157	0.985	0.576		0.001	0.290	0.533	1.274	1.275	0.865	0.866
LTE Band 7_Ant 5	Front at 0mm Holster	0.370	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.372	0.469	0.804	0.804	0.511	0.511
	Left Side at 0mm Holster	0.474		0.244	0.157	0.985	0.576		0.001	0.475	0.718	1.459	1.460	1.050	1.051
LTE Band 12_Ant 1	Front at 0mm Holster	0.130	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.132	0.229	0.564	0.564	0.271	0.271
	Left Side at 0mm Holster	0.065		0.244	0.157	0.985	0.576		0.001	0.066	0.309	1.050	1.051	0.641	0.642
LTE Band 26_Ant 1	Front at 0mm Holster	0.251	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.253	0.350	0.685	0.685	0.392	0.392
	Left Side at 0mm Holster	0.162		0.244	0.157	0.985	0.576		0.001	0.163	0.406	1.147	1.148	0.738	0.739
LTE Band 41_Ant 5	Front at 0mm Holster	0.182	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.184	0.281	0.616	0.616	0.323	0.323
	Left Side at 0mm Holster	0.303		0.244	0.157	0.985	0.576		0.001	0.304	0.547	1.288	1.289	0.879	0.880
LTE Band 42_Ant 8	Front at 0mm Holster	0.169	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.171	0.268	0.603	0.603	0.310	0.310
	Right Side at 0mm Holster	0.547	0.168		0.084	0.876	0.392	0.001		0.715	0.548	1.424	1.423	0.940	0.939
LTE Band 66_Ant 1	Front at 0mm Holster	0.121	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.123	0.220	0.555	0.555	0.262	0.262
	Left Side at 0mm Holster	0.413		0.244	0.157	0.985	0.576		0.001	0.414	0.657	1.398	1.399	0.989	0.990
LTE Band 71_Ant 1	Front at 0mm Holster	0.183	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.185	0.282	0.617	0.617	0.324	0.324
	Left Side at 0mm Holster	0.178		0.244	0.157	0.985	0.576		0.001	0.179	0.422	1.163	1.164	0.754	0.755
FR1 n2_Ant 1	Front at 0mm Holster	0.106	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.108	0.205	0.540	0.540	0.247	0.247
	Left Side at 0mm Holster	0.348		0.244	0.157	0.985	0.576		0.001	0.349	0.592	1.333	1.334	0.924	0.925
FR1 n7_Ant 5	Front at 0mm Holster	0.514	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.516	0.613	0.948	0.948	0.655	0.655
	Left Side at 0mm Holster	0.570		0.244	0.157	0.985	0.576		0.001	0.571	0.814	1.555	1.556	1.146	1.147
FR1 n12_Ant 1	Front at 0mm Holster	0.089	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.091	0.188	0.523	0.523	0.230	0.230
	Left Side at 0mm Holster	0.049		0.244	0.157	0.985	0.576		0.001	0.050	0.293	1.034	1.035	0.625	0.626
FR1 n26_Ant 1	Front at 0mm Holster	0.233	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.235	0.332	0.667	0.667	0.374	0.374
	Left Side at 0mm Holster	0.129		0.244	0.157	0.985	0.576		0.001	0.130	0.373	1.114	1.115	0.705	0.706
FR1 n41_Ant 5	Front at 0mm Holster	0.274	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.276	0.373	0.708	0.708	0.415	0.415
	Left Side at 0mm Holster	0.388		0.244	0.157	0.985	0.576		0.001	0.389	0.632	1.373	1.374	0.964	0.965
FR1 n41_Ant 2	Front at 0mm Holster	0.096	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.098	0.195	0.530	0.530	0.237	0.237
	Right Side at 0mm Holster	0.109	0.168		0.084	0.876	0.392	0.001		0.277	0.110	0.986	0.985	0.502	0.501
FR1 n41_Ant 4	Front at 0mm Holster	0.024	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.026	0.123	0.458	0.458	0.165	0.165
	Right Side at 0mm Holster	0.035	0.168		0.084	0.876	0.392	0.001		0.203	0.036	0.912	0.911	0.428	0.427
FR1 n41_Ant 3	Front at 0mm Holster	0.001	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.003	0.100	0.435	0.435	0.142	0.142
	Left Side at 0mm Holster	0.062		0.244	0.157	0.985	0.576		0.001	0.063	0.306	1.047	1.048	0.638	0.639
FR1 n66_Ant 1	Front at 0mm Holster	0.104	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.106	0.203	0.538	0.538	0.245	0.245
	Left Side at 0mm Holster	0.376		0.244	0.157	0.985	0.576		0.001	0.377	0.620	1.361	1.362	0.952	0.953
FR1 n71_Ant 1	Front at 0mm Holster	0.112	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.114	0.211	0.546	0.546	0.253	0.253
	Left Side at 0mm Holster	0.042		0.244	0.157	0.985	0.576		0.001	0.043	0.286	1.027	1.028	0.618	0.619
FR1 n77_Ant 8	Front at 0mm Holster	0.410	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.412	0.509	0.844	0.844	0.551	0.551
	Right Side at 0mm Holster	0.584	0.168		0.084	0.876	0.392	0.001		0.752	0.585	1.461	1.460	0.977	0.976
FR1 n77_Ant 9	Front at 0mm Holster	0.226	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.228	0.325	0.660	0.660	0.367	0.367
	Left Side at 0mm Holster	0.598		0.244	0.157	0.985	0.576		0.001	0.599	0.842	1.583	1.584	1.174	1.175
FR1 n77_Ant 4	Front at 0mm Holster	0.167	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.169	0.266	0.601	0.601	0.308	0.308
	Right Side at 0mm Holster	0.286	0.168		0.084	0.876	0.392	0.001		0.454	0.287	1.163	1.162	0.679	0.678
FR1 n77_Ant 3	Front at 0mm Holster	0.121	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.123	0.220	0.555	0.555	0.262	0.262
	Left Side at 0mm Holster	0.404		0.244	0.157	0.985	0.576		0.001	0.405	0.648	1.389	1.390	0.980	0.981



<WWAN on, DBS mode>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+2+5+8 Summed 1g SAR (W/kg)	1+3+5+7 Summed 1g SAR (W/kg)	1+2+6+8 Summed 1g SAR (W/kg)	1+3+6+7 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)
		WWAN	WLAN 2.4GHz Ant 6	WLAN 2.4GHz Ant 7	WLAN 2.4GHz Ant 6+7	WLAN 5GHz Ant 6+7	WLAN 6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7						
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)						
WCDMA II_Ant 1	Front at 0mm Holster	0.086	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.521	0.618	0.228	0.325	0.620	0.327
	Left Side at 0mm Holster	0.288		0.244	0.157	0.741	0.576		0.001	1.030	1.273	0.865	1.108	1.186	1.021
WCDMA IV_Ant 1	Front at 0mm Holster	0.137	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.572	0.669	0.279	0.376	0.671	0.378
	Left Side at 0mm Holster	0.401		0.244	0.157	0.741	0.576		0.001	1.143	1.386	0.978	1.221	1.299	1.134
WCDMA V_Ant 1	Front at 0mm Holster	0.236	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.671	0.768	0.378	0.475	0.770	0.477
	Left Side at 0mm Holster	0.146		0.244	0.157	0.741	0.576		0.001	0.888	1.131	0.723	0.966	1.044	0.879
LTE Band 2_Ant 1	Front at 0mm Holster	0.084	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.519	0.616	0.226	0.323	0.618	0.325
	Left Side at 0mm Holster	0.289		0.244	0.157	0.741	0.576		0.001	1.031	1.274	0.866	1.109	1.187	1.022
LTE Band 7_Ant 5	Front at 0mm Holster	0.370	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.805	0.902	0.512	0.609	0.904	0.611
	Left Side at 0mm Holster	0.474		0.244	0.157	0.741	0.576		0.001	1.216	1.459	1.051	1.294	1.372	1.207
LTE Band 12_Ant 1	Front at 0mm Holster	0.130	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.565	0.662	0.272	0.369	0.664	0.371
	Left Side at 0mm Holster	0.065		0.244	0.157	0.741	0.576		0.001	0.807	1.050	0.642	0.885	0.963	0.798
LTE Band 26_Ant 1	Front at 0mm Holster	0.251	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.686	0.783	0.393	0.490	0.785	0.492
	Left Side at 0mm Holster	0.162		0.244	0.157	0.741	0.576		0.001	0.904	1.147	0.739	0.982	1.060	0.895
LTE Band 41_Ant 5	Front at 0mm Holster	0.182	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.617	0.714	0.324	0.421	0.716	0.423
	Left Side at 0mm Holster	0.303		0.244	0.157	0.741	0.576		0.001	1.045	1.288	0.880	1.123	1.201	1.036
LTE Band 42_Ant 8	Front at 0mm Holster	0.169	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.604	0.701	0.311	0.408	0.703	0.410
	Right Side at 0mm Holster	0.547	0.168		0.084	0.796	0.392	0.001		1.511	1.344	1.107	0.940	1.427	1.023
LTE Band 66_Ant 1	Front at 0mm Holster	0.121	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.556	0.653	0.263	0.360	0.655	0.362
	Left Side at 0mm Holster	0.413		0.244	0.157	0.741	0.576		0.001	1.155	1.398	0.990	1.233	1.311	1.146
LTE Band 71_Ant 1	Front at 0mm Holster	0.183	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.618	0.715	0.325	0.422	0.717	0.424
	Left Side at 0mm Holster	0.178		0.244	0.157	0.741	0.576		0.001	0.920	1.163	0.755	0.998	1.076	0.911
FR1 n2_Ant 1	Front at 0mm Holster	0.106	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.541	0.638	0.248	0.345	0.640	0.347
	Left Side at 0mm Holster	0.348		0.244	0.157	0.741	0.576		0.001	1.090	1.333	0.925	1.168	1.246	1.081
FR1 n7_Ant 5	Front at 0mm Holster	0.514	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.949	1.046	0.656	0.753	1.048	0.755
	Left Side at 0mm Holster	0.570		0.244	0.157	0.741	0.576		0.001	1.312	1.555	1.147	1.390	1.468	1.303
FR1 n12_Ant 1	Front at 0mm Holster	0.089	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.524	0.621	0.231	0.328	0.623	0.330
	Left Side at 0mm Holster	0.049		0.244	0.157	0.741	0.576		0.001	0.791	1.034	0.626	0.869	0.947	0.782
FR1 n26_Ant 1	Front at 0mm Holster	0.233	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.668	0.765	0.375	0.472	0.767	0.474
	Left Side at 0mm Holster	0.129		0.244	0.157	0.741	0.576		0.001	0.871	1.114	0.706	0.949	1.027	0.862
FR1 n41_Ant 5	Front at 0mm Holster	0.274	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.709	0.806	0.416	0.513	0.808	0.515
	Left Side at 0mm Holster	0.388		0.244	0.157	0.741	0.576		0.001	1.130	1.373	0.965	1.208	1.286	1.121
FR1 n41_Ant 2	Front at 0mm Holster	0.096	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.531	0.628	0.238	0.335	0.630	0.337
	Right Side at 0mm Holster	0.109	0.168		0.084	0.796	0.392	0.001		1.073	0.906	0.669	0.502	0.989	0.585
FR1 n41_Ant 4	Front at 0mm Holster	0.024	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.459	0.556	0.166	0.263	0.558	0.265
	Right Side at 0mm Holster	0.035	0.168		0.084	0.796	0.392	0.001		0.999	0.832	0.595	0.428	0.915	0.511
FR1 n41_Ant 3	Front at 0mm Holster	0.001	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.436	0.533	0.143	0.240	0.535	0.242
	Left Side at 0mm Holster	0.062		0.244	0.157	0.741	0.576		0.001	0.804	1.047	0.639	0.882	0.960	0.795
FR1 n66_Ant 1	Front at 0mm Holster	0.104	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.539	0.636	0.246	0.343	0.638	0.345
	Left Side at 0mm Holster	0.376		0.244	0.157	0.741	0.576		0.001	1.118	1.361	0.953	1.196	1.274	1.109
FR1 n71_Ant 1	Front at 0mm Holster	0.112	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.547	0.644	0.254	0.351	0.646	0.353
	Left Side at 0mm Holster	0.042		0.244	0.157	0.741	0.576		0.001	0.784	1.027	0.619	0.862	0.940	0.775
FR1 n77_Ant 8	Front at 0mm Holster	0.410	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.845	0.942	0.552	0.649	0.944	0.651
	Right Side at 0mm Holster	0.584	0.168		0.084	0.796	0.392	0.001		1.548	1.381	1.144	0.977	1.464	1.060
FR1 n77_Ant 9	Front at 0mm Holster	0.226	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.661	0.758	0.368	0.465	0.760	0.467
	Left Side at 0mm Holster	0.598		0.244	0.157	0.741	0.576		0.001	1.340	1.583	1.175	1.418	1.496	1.331
FR1 n77_Ant 4	Front at 0mm Holster	0.167	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.602	0.699	0.309	0.406	0.701	0.408
	Right Side at 0mm Holster	0.286	0.168		0.084	0.796	0.392	0.001		1.250	1.083	0.846	0.679	1.166	0.762
FR1 n77_Ant 3	Front at 0mm Holster	0.121	0.001	0.098	0.101	0.433	0.140	0.001	0.001	0.556	0.653	0.263	0.360	0.655	0.362
	Left Side at 0mm Holster	0.404		0.244	0.157	0.741	0.576		0.001	1.146	1.389	0.981	1.224	1.302	1.137

14.3 Extremity Exposure Conditions

<WWAN off, non-DBS mode>

Exposure Position	2	3	4	5	6	7	8	9	2+8+9 Summed 10g SAR (W/kg)	3+7+9 Summed 10g SAR (W/kg)	5+7+9 Summed 10g SAR (W/kg)	5+8+9 Summed 10g SAR (W/kg)	6+7+9 Summed 10g SAR (W/kg)	6+8+9 Summed 10g SAR (W/kg)
	WLAN2.4GHz Ant 6	WLAN2.4GHz Ant 7	WLAN2.4GHz Ant 6+7	WLAN5GHz Ant 6+7	WLAN6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7	NFC						
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)						
Back	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.137	0.381	0.770	0.770	0.232	0.232

<WWAN off, DBS mode>

Exposure Position	2	3	4	5	6	7	8	9	2+5+8+9 Summed 10g SAR (W/kg)	3+5+7+9 Summed 10g SAR (W/kg)	2+6+8+9 Summed 10g SAR (W/kg)	3+6+7+9 Summed 10g SAR (W/kg)	4+5+9 Summed 10g SAR (W/kg)	4+6+9 Summed 10g SAR (W/kg)
	WLAN2.4GHz Ant 6	WLAN2.4GHz Ant 7	WLAN2.4GHz Ant 6+7	WLAN5GHz Ant 6+7	WLAN6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7	NFC						
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)						
Back	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.905	1.149	0.367	0.611	1.164	0.626

<WWAN on, non-DBS mode>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	9	1+2+8+9 Summed 10g SAR (W/kg)	1+3+7+9 Summed 10g SAR (W/kg)	1+5+7+9 Summed 10g SAR (W/kg)	1+5+8+9 Summed 10g SAR (W/kg)	1+6+7+9 Summed 10g SAR (W/kg)	1+6+8+9 Summed 10g SAR (W/kg)
		WWAN	WLAN 2.4GHz Ant 6	WLAN 2.4GHz Ant 7	WLAN 2.4GHz Ant 6+7	WLAN 5GHz Ant 6+7	WLAN 6GHz Ant 6+7	Bluetooth Ant 6	Bluetooth Ant 7	NFC						
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)						
WCDMA II_Ant 1	Back	0.376	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.513	0.757	1.146	1.146	0.608	0.608
WCDMA IV_Ant 1	Back	0.692	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.829	1.073	1.462	1.462	0.924	0.924
WCDMA V_Ant 1	Back	0.392	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.529	0.773	1.162	1.162	0.624	0.624
LTE Band 2_Ant 1	Back	0.428	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.565	0.809	1.198	1.198	0.660	0.660
LTE Band 7_Ant 5	Back	1.143	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.280	1.524	1.913	1.913	1.375	1.375
LTE Band 12_Ant 1	Back	0.589	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.726	0.970	1.359	1.359	0.821	0.821
LTE Band 26_Ant 1	Back	0.606	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.743	0.987	1.376	1.376	0.838	0.838
LTE Band 41_Ant 5	Back	0.389	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.526	0.770	1.159	1.159	0.621	0.621
LTE Band 42_Ant 8	Back	0.249	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.386	0.630	1.019	1.019	0.481	0.481
LTE Band 66_Ant 1	Back	0.678	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.815	1.059	1.448	1.448	0.910	0.910
LTE Band 71_Ant 1	Back	0.619	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.756	1.000	1.389	1.389	0.851	0.851
FR1 n2_Ant 1	Back	0.416	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.553	0.797	1.186	1.186	0.648	0.648
FR1 n7_Ant 5	Back	1.242	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.379	1.623	2.012	2.012	1.474	1.474
FR1 n12_Ant 1	Back	0.601	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.738	0.982	1.371	1.371	0.833	0.833
FR1 n26_Ant 1	Back	0.571	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.708	0.952	1.341	1.341	0.803	0.803
FR1 n41_Ant 2	Back	1.289	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.426	1.670	2.059	2.059	1.521	1.521
FR1 n41_Ant 4	Back	0.169	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.306	0.550	0.939	0.939	0.401	0.401
FR1 n41_Ant 3	Back	0.096	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.233	0.477	0.866	0.866	0.328	0.328
FR1 n66_Ant 1	Back	0.171	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.308	0.552	0.941	0.941	0.403	0.403
FR1 n71_Ant 1	Back	0.649	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.786	1.030	1.419	1.419	0.881	0.881
FR1 n77_Ant 8	Back	0.611	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.748	0.992	1.381	1.381	0.843	0.843
FR1 n77_Ant 9	Back	0.318	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.455	0.699	1.088	1.088	0.550	0.550
FR1 n77_Ant 4	Back	0.858	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.995	1.239	1.628	1.628	1.090	1.090
FR1 n77_Ant 3	Back	0.241	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.378	0.622	1.011	1.011	0.473	0.473
FR1 n77_Ant 3	Back	0.112	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	0.249	0.493	0.882	0.882	0.344	0.344



<WWAN on, DBS mode>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	9	1+2+5+8+9 Summed 10g SAR (W/kg)	1+3+5+7+9 Summed 10g SAR (W/kg)	1+2+6+8+9 Summed 10g SAR (W/kg)	1+3+6+7+9 Summed 10g SAR (W/kg)	1+4+5+9 Summed 10g SAR (W/kg)	1+4+6+9 Summed 10g SAR (W/kg)
		WWAN 10g SAR (W/kg)	WLAN 2.4GHz Ant 6 10g SAR (W/kg)	WLAN 2.4GHz Ant 7 10g SAR (W/kg)	WLAN 2.4GHz Ant 6+7 10g SAR (W/kg)	WLAN 5GHz Ant 6+7 10g SAR (W/kg)	WLAN 6GHz Ant 6+7 10g SAR (W/kg)	Bluetooth Ant 6 10g SAR (W/kg)	Bluetooth Ant 7 10g SAR (W/kg)	NFC 10g SAR (W/kg)						
WCDMA II_Ant 1	Back	0.376	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.281	1.525	0.743	0.987	1.540	1.002
WCDMA IV_Ant 1	Back	0.692	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.597	1.841	1.059	1.303	1.856	1.318
WCDMA V_Ant 1	Back	0.392	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.297	1.541	0.759	1.003	1.556	1.018
LTE Band 2_Ant 1	Back	0.428	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.333	1.577	0.795	1.039	1.592	1.054
LTE Band 7_Ant 5	Back	1.143	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	2.048	2.292	1.510	1.754	2.307	1.769
LTE Band 12_Ant 1	Back	0.589	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.494	1.738	0.956	1.200	1.753	1.215
LTE Band 26_Ant 1	Back	0.606	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.511	1.755	0.973	1.217	1.770	1.232
LTE Band 41_Ant 5	Back	0.389	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.294	1.538	0.756	1.000	1.553	1.015
LTE Band 42_Ant 8	Back	0.249	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.154	1.398	0.616	0.860	1.413	0.875
LTE Band 66_Ant 1	Back	0.678	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.583	1.827	1.045	1.289	1.842	1.304
LTE Band 71_Ant 1	Back	0.619	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.524	1.768	0.986	1.230	1.783	1.245
FR1 n2_Ant 1	Back	0.416	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.321	1.565	0.783	1.027	1.580	1.042
FR1 n7_Ant 5	Back	1.242	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	2.147	2.391	1.609	1.853	2.406	1.868
FR1 n12_Ant 1	Back	0.601	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.506	1.750	0.968	1.212	1.765	1.227
FR1 n26_Ant 1	Back	0.571	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.476	1.720	0.938	1.182	1.735	1.197
FR1 n41_Ant 5	Back	1.289	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	2.194	2.438	1.656	1.900	2.453	1.915
FR1 n41_Ant 2	Back	0.169	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.074	1.318	0.536	0.780	1.333	0.795
FR1 n41_Ant 4	Back	0.096	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.001	1.245	0.463	0.707	1.260	0.722
FR1 n41_Ant 3	Back	0.171	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.076	1.320	0.538	0.782	1.335	0.797
FR1 n66_Ant 1	Back	0.649	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.554	1.798	1.016	1.260	1.813	1.275
FR1 n71_Ant 1	Back	0.611	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.516	1.760	0.978	1.222	1.775	1.237
FR1 n77_Ant 8	Back	0.318	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.223	1.467	0.685	0.929	1.482	0.944
FR1 n77_Ant 9	Back	0.858	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.763	2.007	1.225	1.469	2.022	1.484
FR1 n77_Ant 4	Back	0.241	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.146	1.390	0.608	0.852	1.405	0.867
FR1 n77_Ant 3	Back	0.112	0.135	0.379	0.395	0.768	0.230	0.001	0.001	0.001	1.017	1.261	0.479	0.723	1.276	0.738

Test Engineer : Dennis Hsieh, EN Liu and Jay Chien

15. Uncertainty Assessment

Declaration of Conformity:

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

Comments and Explanations:

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

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

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

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

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

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

(b) κ is the coverage factor

Standard Uncertainty for Assumed Distribution

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

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

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

Applicable for SAR Measurements:

Uncertainty Budget (4 MHz - 10 GHz range)							
Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	18.60	N	2	1	1	9.3	9.3
Axial Isotropy	4.70	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.60	R	1.732	0.7	0.7	3.9	3.9
Linearity	4.70	R	1.732	1	1	2.7	2.7
Modulation Response	4.68	R	1.732	1	1	2.7	2.7
System Detection Limits	1.00	R	1.732	1	1	0.6	0.6
Boundary Effects	2.00	R	1.732	1	1	1.2	1.2
Readout Electronics	0.30	N	1	1	1	0.3	0.3
Response Time	0.00	R	1.732	1	1	0.0	0.0
Integration Time	2.60	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.00	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.00	R	1.732	1	1	1.7	1.7
Probe Positioner	0.40	R	1.732	1	1	0.2	0.2
Probe Positioning	6.70	R	1.732	1	1	3.9	3.9
Post-processing	4.00	R	1.732	1	1	2.3	2.3
Test Sample Related							
Device Holder	3.60	N	1	1	1	3.6	3.6
Test sample Positioning	3.03	N	1	1	1	3.0	3.0
Power Scaling	0.00	R	1.732	1	1	0.0	0.0
Power Drift	5.00	R	1.732	1	1	2.9	2.9
Phantom and Setup							
Phantom Uncertainty	7.60	R	1.732	1	1	4.4	4.4
SAR correction	0.00	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.03	N	1	0.78	0.77	0.0	0.0
Liquid Conductivity (target)	5.00	R	1.732	0.78	0.77	2.3	2.2
Liquid Conductivity (mea.)	2.50	R	1.732	0.78	0.77	1.1	1.1
Temp. unc. - Conductivity	3.68	R	1.732	0.78	0.77	1.7	1.6
Liquid Permittivity Repeatability	0.02	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.00	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.50	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.84	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						14.5%	14.2%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						29.0%	28.4%

Applicable for Power Density Measurements:

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

16. References

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- [4] SPEAG DASY System Handbook
- [5] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
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- [10] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [11] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
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- [13] IEC/IEEE 62209-1528:2020, "Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)", Oct. 2020
- [14] SPEAG DASY6 System Handbook
- [15] SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)