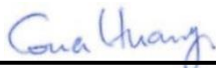


# FCC SAR TEST REPORT

FCC ID : UZ7TC58BE  
Equipment : Touch Computer  
Brand Name : Zebra  
Model Name : TC58BE  
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 Jan. 31, 2024 and testing was started from Feb. 01, 2024 and completed on Apr. 05, 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
FA411108	01	Initial issue of report	May 10, 2024



### 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Zebra Technologies Corporation, Touch Computer, TC58BE, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Head	Body-worn	Hotspot	Product Specific		
		1g SAR (W/kg)					
Licensed	GSM850	0.44	0.38	0.60		1.59	3.99
	GSM1900	1.18	0.67	0.76	3.08		
	WCDMA II	0.75	0.51	0.66			
	WCDMA IV	0.89	0.87	0.76	2.47		
	WCDMA V	0.49	0.45	0.63			
	LTE Band 7	0.75	0.37	0.64			
	LTE Band 12 / 17	0.27	0.41	0.40			
	LTE Band 2 / 25	0.79	1.02	0.80			
	LTE Band 5 / 26	0.43	0.54	0.49			
	LTE Band 38 / 41	0.50	0.26	0.71			
	LTE Band 42	0.46	0.30	0.75			
	LTE Band 4 / 66	0.89	1.18	0.71	2.34		
	LTE Band 71	0.05	0.31	0.14			
	FR1 n7	0.69	0.45	0.59			
	FR1 n12	0.19	0.33	0.32			
	FR1 n2 / n25	0.66	0.55	0.69			
	FR1 n5 / n26	0.37	0.38	0.45			
	FR1 n66	0.71	0.88	0.71			
	FR1 n71	0.03	0.30	0.11			
	FR1 n38 / n41	0.74	0.47	0.73			
FR1 n77 / n78	1.17	0.45	0.74	2.17			
DTS	2.4GHz WLAN	0.54	0.79	1.18		1.59	
NII	5GHz WLAN	0.96	0.64	0.79	2.35	1.59	3.99
6CD	6GHz WLAN	0.29	0.12		0.37	1.59	3.99
DSS	Bluetooth	0.01	< 0.01	0.02		1.59	
DXX	NFC				< 0.01		3.99
Equipment Class	Frequency Band	Head Reported APD (mW/cm <sup>2</sup> )	Body-worn Reported APD (mW/cm <sup>2</sup> )	Extremity Reported APD (mW/cm <sup>2</sup> )	Reported PD (mW/cm <sup>2</sup> )		
6CD	6GHz WLAN	0.21	0.11	0.89	0.48		
Date of Testing:		2024/02/01 ~ 2024/04/05					

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) general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/cm<sup>2</sup>=10 W/m<sup>2</sup>) 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: Daisy Peng**



## 2. Equipment Under Test (EUT) Information

### 2.1 General Information

Product Feature & Specification	
Equipment Name	Touch Computer
Brand Name	Zebra
Model Name	TC58BE
FCC ID	UZ7TC58BE
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 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 n25 : 1850 MHz ~ 1915 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	GSM/GPRS/EGPRS 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	DV1-2
SW Version	SW: nemesis_A13_userdebug_GMS_RelKey_2023-12-12-0451_main_SE
FW Version	13-12-12.00-TG-U00-PRD-NEM-04
MFD	06DEC23
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark:	1. There are six kinds of samples as below. First RF exposure selects sample 1 to test all exposure position and sample 3 and 5 spot check worst case found sample 1. 2. There are five batteries. RF exposure evaluation selects battery 1 as the main test and battery 2/3/4/5 spot check worst case found in battery 1. 3. The device implements the power management and motion sensor detection for SAR compliance at different exposure conditions (head, body-worn, Limbs) and the Smart transmit feature will manage to ensure the power level not exceeding the associated power table. Detail power management decision include in operational description. 4. The device support DBS mode (Dual band simultaneous) for WLAN operation, when the DBS mode is active the device will limit different maximum power for Sim-Tx SAR compliance, Details about the power management decision are provided in the operational description. 5. The device implements the motion sensor detection for SAR compliance and the supplemental SAR tests results and Power Validation include in appendix G



Sample List	
Sample 1	SE55 + 8GB+128G (Samsung/SK Hynix)
Sample 2	SE55 + 8GB+128G (Micron/Micron)
Sample 3	SE4720 + 6GB+64G(SK Hynix /WD)
Sample 4	SE4720 + 8GB+128G(Micron/Micron)
Sample 5	SE4770 + 6GB+64G(SK Hynix /WD)
Sample 6	SE4770 + 8GB+128G(Micron/Micron)

Specification of Accessories				
Adapter	Brand Name	Zebra	Model	SAWA-65-20005A
			Part Number	PWR-WUA5V12W0US
Battery 1 (1x)	Brand Name	Zebra	Model	BT-000442
			Part Number	BT-000442-0020
Battery 2 (1.5x)	Brand Name	Zebra	Model	BT-000442A
			Part Number	BT-000442-0820
Battery 3 (BLE battery )	Brand Name	Zebra	Model	BT-000442B
			Part Number	BT-000442-002B
Battery 4 (Wireless Battery )	Brand Name	Zebra	Model	BT-000442
			Part Number	BT-000442-002A
Battery 5 (1x)	Brand Name	Zebra	Model	BT-000442
			Part Number	BT-000442-1020
USB TYPE A to TYPE C cable	Brand Name	Zebra	Part Number	CBL-TC5X-USBC2A-01
USB TYPE C to 3.5mm audio connector	Brand Name	Zebra	Part Number	ADP-USBC-35MM1-01
3.5mm Earphone	Brand Name	Zebra	Part Number	HDST-35MM-PTT1-01
Rugged Headset	Brand Name	Zebra	Part Number	HS2100-OTH
USB TYPE C Earphone	Brand Name	Zebra	Part Number	HDST-USBC-PTT1-01
Trigger Handle	Brand Name	Zebra	Part Number	TRG-NGTC5-ELEC-01
Soft Holster	Brand Name	Zebra	Part Number	SG-NGTC5TC7-HLSTR-01
TC53/TC58 RUGGED BOOT	Brand Name	Zebra	Part Number	SG-NGTC5EXO1-01



**2.2 Maximum Tune-up Limit**

**General Note:**

- For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
- The following table shows maximum output power configurations for various exposure conditions (Device State Index DSI) with tune-up tolerance accounted. For smart transmit enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax. In some frequency bands, for some power DSI which associate with the same power level, conducted power measurement for those only need to perform at once. Detail output power measurement refer to appendix F.

**< WWAN >**

Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Free space	Head	Head	Hotspot	Body-worn-Extremity	Body-worn-Extremity
			DSI 0	Standalone	Simultaneous (DBS)	Standalone	Standalone	Simultaneous (DBS)
				DSI 2	DSI 2-W	DSI 3	DSI 1	DSI 1-W
GSM850 GPRS 4TX	1	50.00%	31	31	31	31	31	31
GSM1900 GPRS 4TX	1	50.00%	29	27.7	25.9	24.7	27.8	27.8
WCDMA B2	1	100.00%	25.2	25.2	25.2	23.6	24.9	24.9
WCDMA B4	1	100.00%	25.2	25.2	24.7	21.7	25	23.2
WCDMA B5	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B4	5	100.00%	25.2	25.2	25.2	23	24.5	24.5
LTE B7	5	100.00%	25.2	25.2	25.2	23.9	22.5	22.5
LTE B12/B17	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B25/B2	1	100.00%	25.2	25.2	25.2	23.1	24.4	23.5
LTE B25/B2	5	100.00%	25.2	25.2	25.2	23.3	24.4	24.4
LTE B26/B5	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE-B38 PC3	5	63.30%	25.2	25.2	25.2	23.4	24.5	24.5
LTE B41 PC3	5	63.30%	25.2	25.2	25.2	23.4	24.5	24.5
LTE B42 PC3	8	63.30%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B66/B4	1	100.00%	25.2	25.2	24.7	21.7	24.3	22.6
LTE B66	5	100.00%	25.2	25.2	25.2	23.6	24.5	24.5
LTE B71	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n2	5	100.00%	25.2	25.2	25.2	22.4	25.2	25.2
FR1 n7	5	100.00%	25.2	25.2	25.2	24.3	23.6	23.6
FR1 n12	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n25/n2	1	100.00%	25.2	25.2	25.2	23.8	25.2	25.2
FR1 n25	5	100.00%	25.2	25.2	25.2	22.9	25.2	25.2
FR1 n26/n5	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n38 PC3	5	100.00%	25.2	25.2	25.2	24.1	25.2	25.2
FR1 n41 PC3	5	100.00%	25.2	25.2	25.2	24.1	25.2	25.2
FR1 n41 PC2	5	50.00%	27	27	27	27	27	27
FR1 n41 PC3	2	100.00%	22	22	22	22	22	22
FR1 n41 PC3	3	100.00%	22	22	20.1	22	22	22
FR1 n41 PC3	4	100.00%	22	22	22	22	22	22
FR1 n66	1	100.00%	25.2	25.2	25.2	21.6	24	22.3
FR1 n66	5	100.00%	25.2	25.2	25.2	23.6	25.2	25.2
FR1 n71	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n77 PC3	8	100.00%	25.2	25.2	21.8	21.5	22.9	22.9
FR1 n77 PC2	8	50.00%	27	27	24.8	24.5	25.9	25.9
FR1 n78 PC3	8	100.00%	25.2	25.2	21.8	21.5	22.9	22.9
FR1 n78 PC2	8	50.00%	27	27	24.8	24.5	25.9	25.9
FR1 n77 PC3	9	100.00%	22	22	22	17.9	20.8	20.8
FR1 n77 PC3	9	100.00%	22	22	22	17.9	20.8	20.8
FR1 n78 PC3	9	100.00%	22	22	22	17.9	20.8	20.8
FR1 n78 PC3	9	100.00%	22	22	22	17.9	20.8	20.8
FR1 n77 PC3	4	100.00%	22	22	22	19.5	22	22



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FR1 n77 PC3	4	100.00%	22	22	22	19.5	22	22
FR1 n78 PC3	4	100.00%	22	22	22	19.5	22	22
FR1 n78 PC3	4	100.00%	22	22	22	19.5	22	22
FR1 n77 PC3	3	100.00%	22	22	22	20.3	22	22
FR1 n77 PC3	3	100.00%	22	22	22	20.3	22	22
FR1 n78 PC3	3	100.00%	22	22	22	20.3	22	22
FR1 n78 PC3	3	100.00%	22	22	22	20.3	22	22





**2.3 General LTE SAR Test and Reporting Considerations**

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																										
FCC ID	UZ7TC58BE																																																																									
Equipment Name	Touch 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 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 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 25: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 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 / Voice and Data																																																																									
LTE MPR permanently built-in by design	<p align="center"><b>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N<sub>RB</sub>)</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>												Modulation	Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> )						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Modulation	Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> )						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.																																																																									
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 12.																																																																									
LTE Carrier Aggregation Additional Information	This device supports maximum of 4 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																																									
<b>Transmission (H, M, L) channel numbers and frequencies in each LTE band</b>																																																																										
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.	Ch. #	Freq.	Ch. #	Freq.	Ch. #	Freq.	Ch. #	Freq.	Ch. #	Freq.																																																														



	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(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
<b>LTE Band 5</b>												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
<b>LTE Band 7</b>												
	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)		
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				
<b>LTE Band 12</b>												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
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				
<b>LTE Band 17</b>												
	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					
<b>LTE Band 25</b>												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
<b>LTE Band 26</b>												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
<b>LTE Band 38</b>												
	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)		
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				
<b>LTE Band 41</b>												
	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)		
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)	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)	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				



**2.4 General 5G NR SAR Test and Reporting Considerations**

5G NR Information								
FCC ID	UZ7TC58BE							
Equipment Name	Touch 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 n25: 1850 MHz ~ 1915 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 n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz 30MHz, 40MHz 5G NR n26: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n38: 20MHz, 30MHz, 40MHz 5G NR n41: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n78: 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 B5/7/12/66/71							
LTE Anchor Bands for n5	LTE B2/5/7/66							
LTE Anchor Bands for n7	LTE B5/7/66							
LTE Anchor Bands for n12	LTE B2/66							
LTE Anchor Bands for n25	LTE B12/66							
LTE Anchor Bands for n38	LTE B2/5/12/66/71							
LTE Anchor Bands for n41	LTE B2/4/12/25/26/66							
LTE Anchor Bands for n66	LTE B2/5/7/12/66/71							
LTE Anchor Bands for n71	LTE B2/7/66/71							
LTE Anchor Bands for n77	LTE B2/5/7/12/66							
LTE Anchor Bands for n78	LTE B2/5/7/12/38/41/66/71							
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900
NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839



NR Band 7																						
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz										
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)									
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520								
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535								
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550								
NR Band 12																						
Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz														
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)												
L	140300	701.5		140800	704		141300	706.5														
M	141500	707.5		141500	707.5		141500	707.5														
H	142700	713.5		142200	711		141700	708.5														
NR Band 25																						
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz										
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)									
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870								
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5								
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895								
NR Band 26																						
Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz													
Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)											
L	163300	816.5	163800	819		164300	821.5		164800	824												
M	166300	831.5	166300	831.5		166300	831.5		166300	831.5												
H	169300	846.5	168800	844		168300	841.5		167800	839												
NR Band 38																						
Bandwidth 20MHz				Bandwidth 30MHz				Bandwidth 40MHz														
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)												
L	516000	2580		517002	2585.01		518004	2590.02														
M	519000	2595		519000	2595		519000	2595														
H	522000	2610		520998	2604.99		519996	2599.98														
NR Band 41																						
Bandwidth20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		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)							
L	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	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						
H	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640						
NR Band 66																						
Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz													
Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)											
L	342500	1712.5	343000	1715		343500	1717.5		344000	1720												
M	349000	1745	349000	1745		349000	1745		349000	1745												
H	355500	1777.5	355000	1775		354500	1772.5		354000	1770												
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																						
Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		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)	
L	647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930



NR Band 78																							
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02			
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000
H	653000	3795	652832	3792.48	652666	3789.99	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98			
NR Band 77/78(3450MHz ~ 3550MHz)																							
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495			
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332
H	636332	3544.98	636166	3542.49	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99			

### 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 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- IEC/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 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 Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> in EFS file)>

Band	Antenna	Device Uncertainty (dB)	Duty cycle	Head (Wlan Off)	Body Worn / Extremity (Wlan Off)	Free Space Mode (Wlan Off)	Hotspot (Wlan On)	Head (Wlan On)	Body Worn / Extremity (Wlan On)	Pmax*
				(DSI:2)	(DSI:1)	(DSI:0)	(DSI:3)	(DSI2)	DSI1	
GSM850(4 Tx slots)**	1	1	50.00%	30.9	27	27	29.5			27
GSM1900(4 Tx slots)**	1	1	50.00%	23.7	23.8	25	20.7	1.8		25
WCDMA II	1	1	100.00%	26.6	23.9	24.2	22.6			24.2
WCDMA IV	1	1	100.00%	25.5	24	24.2	20.7	1.8	1.8	24.2
WCDMA V	1	1	100.00%	29	26.7	24.2	25			24.2
LTE B2/25	1	1	100.00%	26.7	23.4	24.2	22.1		0.9	24.2
LTE B2/25	5	1	100.00%	31.8	23.4	24.2	22.3			24.2
LTE B4/66	1	1	100.00%	25.4	23.3	24.2	20.7	1.7	1.7	24.2
LTE B4/66	5	1	100.00%	30.3	23.5	24.2	22.6			24.2
LTE B5/26	1	1	100.00%	29	27.8	24.2	26.3			24.2
LTE B7	5	1	100.00%	38	21.5	24.2	22.9			24.2
LTE B12/B17	1	1	100.00%	31.2	28	24.2	27			24.2
LTE B41/38(PC3)**	5	1	63.30%	40.3	21.5	24.2	20.4			22.2
LTE B41 (PC2)**	5	1	43.30%							22.4
LTE B42**	8	1	63.30%	26.3	22.2	22.2	24.2			22.2
LTE B71	1	1	100.00%	31.5	27.3	24.2	26.9			24.2
n7	5	1	100.00%	36.7	22.6	24.2	23.3			24.2
n12	1	1	100.00%	30.7	27.9	24.2	26.9			24.2
n2/n25	1	1	100.00%	26.6	24.2	24.2	22.8		1.7	24.2
n2/n25	5	1	100.00%	32.1	23.2	24.2	21.9			24.2
n5/n26	1	1	100.00%	29	28.4	24.2	26.6			24.2
n66	1	1	100.00%	26.1	23	24.2	20.6		1.7	24.2
n66	5	1	100.00%	29.3	23.3	24.2	22.6			24.2
n71	1	1	100.00%	31.3	27.6	24.2	26.9			24.2
n38/n41**	5	1	100.00%							24.2
n41_HPUE**	5	1	50.00%	36.3	26.9	24.2	23.1			23.0
n41**	2	1	100.00%	26	24.8	21	23.4			21.0
n41**	3	1	100.00%	21	24	21	22.2	1.8		21.0
n41**	4	1	100.00%	26	27.2	21	27.4			21.0
n77/78_PC3	8	1	100.00%							24.2
n77/78_PC2	8	1	50.00%	22.6	21.9	26	20.5	1.8		23.0
n77/78_PC3	9	1	100.00%	25.5	19.8	21	16.9		2.9	21.0
n77/78_PC3 SRS	4	1	100.00%	24	21.2	21	18.5		2.7	21.0
n77/78_PC3 SRS	3	1	100.00%	23	21.8	21	19.3			21.0

\*P<sub>max</sub> is used for RF tune up procedure. The maximum allowed output power is equal to P<sub>max</sub> + 1dB uncertainty.

\*\*All P<sub>limit</sub> 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<sub>limit</sub> + 1dB device uncertainty, and if P<sub>limit</sub> is higher than P<sub>max</sub>, the device output power will be P<sub>max</sub> 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)

Table with 3 columns: Whole-Body, Partial-Body, Hands, Wrists, Feet and Ankles. Values: 0.4, 8.0, 20.0

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

Table with 3 columns: Whole-Body, Partial-Body, Hands, Wrists, Feet and Ankles. Values: 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 4cm<sup>2</sup> 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 <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	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 ( $\rho$ ). The equation description is as below:

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

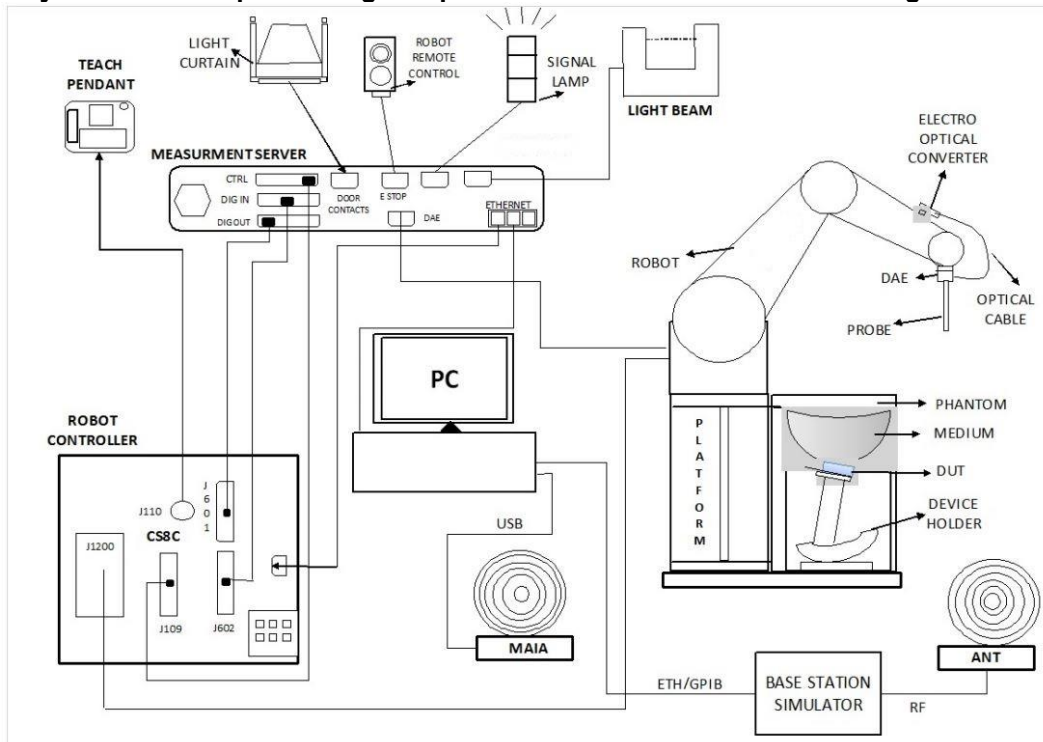
SAR is expressed in units of Watts per kilogram (W/kg)

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  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. In system validation list test site number, if the test site number is include in the Wensan Laboratory, that's mean the test data are subcontracted to Sporton International Inc. Wensan Laboratory.

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>**

<b>Construction</b>	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
<b>Frequency</b>	4 MHz – 4 GHz; Linearity: $\pm 0.2$ dB (30 MHz – 4 GHz)	
<b>Directivity</b>	$\pm 0.2$ dB in TSL (rotation around probe axis) $\pm 0.3$ dB in TSL (rotation normal to probe axis)	
<b>Dynamic Range</b>	5 $\mu$ W/g – >100 mW/g; Linearity: $\pm 0.2$ dB	
<b>Dimensions</b>	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	

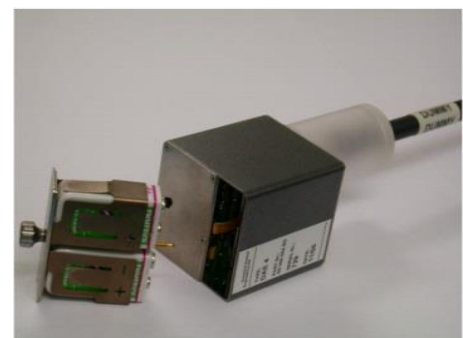
**<EX3DV4 Probe>**

<b>Construction</b>	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
<b>Frequency</b>	4 MHz – >6 GHz Linearity: $\pm 0.2$ dB (30 MHz – 6 GHz)	
<b>Directivity</b>	$\pm 0.3$ dB in TSL (rotation around probe axis) $\pm 0.5$ dB in TSL (rotation normal to probe axis)	
<b>Dynamic Range</b>	10 $\mu$ W/g – >100 mW/g Linearity: $\pm 0.2$ dB (noise: typically <1 $\mu$ W/g)	
<b>Dimensions</b>	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**

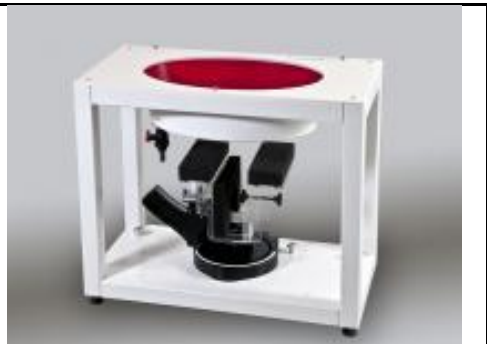
**7.4 Phantom**

**<SAM Twin Phantom>**

<b>Shell Thickness</b>	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm	
<b>Filling Volume</b>	Approx. 25 liters	
<b>Dimensions</b>	Length: 1000 mm; Width: 500 mm; Height: adjustable feet	
<b>Measurement Areas</b>	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>**

<b>Shell Thickness</b>	2 ± 0.2 mm (sagging: <1%)	
<b>Filling Volume</b>	Approx. 30 liters	
<b>Dimensions</b>	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 dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$	≤ 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 ≤ 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 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 shoes 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: $\Delta x_{Zoom}, \Delta y_{Zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm*	3 – 4 GHz: $\leq 5$ mm* 4 – 6 GHz: $\leq 4$ mm*	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	$\leq 5$ mm	3 – 4 GHz: $\leq 4$ mm 4 – 5 GHz: $\leq 3$ mm 5 – 6 GHz: $\leq 2$ mm	
	graded grid	$\Delta z_{Zoom}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface	$\leq 4$ mm	3 – 4 GHz: $\leq 3$ mm 4 – 5 GHz: $\leq 2.5$ mm 5 – 6 GHz: $\leq 2$ mm
		$\Delta z_{Zoom}(n>1)$ : between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	$\geq 30$ mm	3 – 4 GHz: $\geq 28$ mm 4 – 5 GHz: $\geq 25$ mm 5 – 6 GHz: $\geq 22$ mm	
Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ 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 for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

**8.6 Power Drift Monitoring**

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



### 9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit <sup>(2)</sup>	D750V3	1012	Aug. 18, 2021	Aug. 15, 2024
SPEAG	750MHz System Validation Kit <sup>(2)</sup>	D750V3	1107	Jun. 22, 2022	Jun. 20, 2024
SPEAG	835MHz System Validation Kit <sup>(2)</sup>	D835V2	499	Aug. 18, 2021	Aug. 15, 2024
SPEAG	835MHz System Validation Kit <sup>(2)</sup>	D835V2	4d060	Mar. 24, 2022	Mar. 22, 2024
SPEAG	1750MHz System Validation Kit <sup>(2)</sup>	D1750V2	1068	Nov. 21, 2022	Nov. 19, 2024
SPEAG	1900MHz System Validation Kit <sup>(2)</sup>	D1900V2	5d093	Mar. 25, 2022	Mar. 23, 2024
SPEAG	1900MHz System Validation Kit <sup>(2)</sup>	D1900V2	5d185	Jun. 17, 2022	Jun. 15, 2024
SPEAG	2450MHz System Validation Kit <sup>(2)</sup>	D2450V2	736	Aug. 17, 2021	Aug. 14, 2024
SPEAG	2450MHz System Validation Kit <sup>(2)</sup>	D2450V2	929	Nov. 21, 2022	Nov. 19, 2024
SPEAG	2450MHz System Validation Kit <sup>(2)</sup>	D2450V2	806	Mar. 24, 2022	Mar. 22, 2024
SPEAG	2600MHz System Validation Kit <sup>(2)</sup>	D2600V2	1008	Aug. 17, 2021	Aug. 14, 2024
SPEAG	2600MHz System Validation Kit <sup>(2)</sup>	D2600V2	1078	Jun. 23, 2022	Jun. 21, 2024
SPEAG	3500MHz System Validation Kit <sup>(2)</sup>	D3500V2	1014	Jan. 17, 2022	Jan. 14, 2025
SPEAG	3500MHz System Validation Kit <sup>(2)</sup>	D3500V2	1036	Mar. 23, 2022	Mar. 21, 2024
SPEAG	3700MHz System Validation Kit <sup>(2)</sup>	D3700V2	1006	Jun. 20, 2022	Jun. 18, 2024
SPEAG	3900MHz System Validation Kit <sup>(2)</sup>	D3900V2	1017	Apr. 22, 2022	Apr. 20, 2024
SPEAG	3900MHz System Validation Kit	D3900V2	1092	May. 15, 2023	May. 14, 2024
SPEAG	5GHz System Validation Kit <sup>(2)</sup>	D5GHZV2	1006	May. 25, 2023	May. 23, 2025
SPEAG	5GHz System Validation Kit <sup>(2)</sup>	D5GHZV2	1171	Apr. 20, 2021	Apr. 17, 2024
SPEAG	6500MHz System Validation Kit	D6.5GHZV2	1083	Oct. 20, 2023	Oct. 19, 2024
SPEAG	5G Verification Source	10GHz	1020	Jan. 18, 2024	Jan. 17, 2025
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9441	Nov. 17, 2023	Nov. 16, 2024
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 18, 2024	Jan. 17, 2025
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 18, 2024	Jan. 17, 2025
SPEAG	Data Acquisition Electronics	DAE4	661	May. 23, 2023	May. 22, 2024
SPEAG	Data Acquisition Electronics	DAE4	853	Jul. 14, 2023	Jul. 13, 2024
SPEAG	Data Acquisition Electronics	DAE4	1424	Dec. 07, 2023	Dec. 06, 2024
SPEAG	Data Acquisition Electronics	DAE4	1647	Dec. 27, 2023	Dec. 26, 2024
SPEAG	Data Acquisition Electronics	DAE4	1694	Nov. 17, 2023	Nov. 16, 2024
SPEAG	Data Acquisition Electronics	DAE4	1696	Oct. 23, 2023	Oct. 22, 2024
SPEAG	Data Acquisition Electronics	DAE4	1697	Nov. 20, 2023	Nov. 19, 2024
SPEAG	Data Acquisition Electronics	DAE4	1707	Dec. 06, 2023	Dec. 05, 2024
SPEAG	Data Acquisition Electronics	DAE4	1805	May. 16, 2023	May. 15, 2024
SPEAG	Data Acquisition Electronics	DAE4ip	1800	May. 31, 2023	May. 30, 2024
SPEAG	Dosimetric E-Field Probe	ES3DV3	3124	Nov. 21, 2023	Nov. 20, 2024
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 18, 2023	Sep. 17, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Mar. 22, 2023	Mar. 21, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 24, 2023	Oct. 23, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 22, 2024	Jan. 21, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7306	Jul. 18, 2023	Jul. 17, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Dec. 14, 2023	Dec. 13, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	May. 22, 2023	May. 21, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7700	Feb. 01, 2024	Jan. 31, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7785	Nov. 23, 2023	Nov. 22, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7791	Feb. 21, 2024	Feb. 20, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7813	May. 24, 2023	May. 23, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7814	May. 30, 2023	May. 29, 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 ± 2°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 <sub>r</sub> )	Conductivity Target (σ)	Permittivity Target (ε <sub>r</sub> )	Delta (σ) (%)	Delta (ε <sub>r</sub> ) (%)	Limit (%)	Date
750	22.2	0.892	42.057	0.89	41.90	0.22	0.37	±5	2024/2/6
750	22.3	0.895	43.476	0.89	41.90	0.56	3.76	±5	2024/2/9
750	22.7	0.882	42.210	0.89	41.90	-0.90	0.74	±5	2024/2/17
750	22.6	0.886	41.766	0.89	41.90	-0.45	-0.32	±5	2024/2/26
750	22.8	0.897	43.071	0.89	41.90	0.79	2.79	±5	2024/3/8
750	22.7	0.881	42.876	0.89	41.90	-1.01	2.33	±5	2024/3/22
835	22.5	0.912	42.480	0.90	41.50	1.33	2.36	±5	2024/2/5
835	22.5	0.920	41.982	0.90	41.50	2.22	1.16	±5	2024/2/11
835	22.6	0.926	42.880	0.90	41.50	2.89	3.33	±5	2024/2/16
835	22.9	0.930	42.765	0.90	41.50	3.33	3.05	±5	2024/2/29
835	22.9	0.932	42.761	0.90	41.50	3.56	3.04	±5	2024/3/9
835	22.7	0.911	42.460	0.90	41.50	1.22	2.31	±5	2024/3/22
1750	22.4	1.382	41.232	1.37	40.10	0.88	2.82	±5	2024/2/7
1750	22.6	1.364	40.291	1.37	40.10	-0.44	0.48	±5	2024/2/12
1750	22.5	1.358	40.517	1.37	40.10	-0.88	1.04	±5	2024/2/15
1750	22.4	1.379	40.579	1.37	40.10	0.66	1.19	±5	2024/3/3
1750	22	1.349	40.303	1.37	40.10	-1.53	0.51	±5	2024/3/10
1750	22.7	1.364	40.393	1.37	40.10	-0.44	0.73	±5	2024/3/20
1750	22.2	1.379	40.627	1.37	40.10	0.66	1.31	±5	2024/3/25
1750	22.7	1.370	40.533	1.37	40.10	0.00	1.08	±5	2024/3/27
1900	22.3	1.436	38.703	1.40	40.00	2.57	-3.24	±5	2024/2/1
1900	22.4	1.428	38.859	1.40	40.00	2.00	-2.85	±5	2024/2/10
1900	22.1	1.432	38.582	1.40	40.00	2.29	-3.55	±5	2024/2/21
1900	22.7	1.444	39.252	1.40	40.00	3.14	-1.87	±5	2024/2/27
1900	22.1	1.377	40.271	1.40	40.00	-1.64	0.68	±5	2024/3/11
1900	22.7	1.440	38.845	1.40	40.00	2.86	-2.89	±5	2024/3/20
1900	22.2	1.457	39.079	1.40	40.00	4.07	-2.30	±5	2024/3/25
1900	22.8	1.438	38.891	1.40	40.00	2.71	-2.77	±5	2024/3/28
2600	22.2	1.989	39.768	1.96	39.00	1.48	1.97	±5	2024/2/4
2600	22.2	1.993	39.297	1.96	39.00	1.68	0.76	±5	2024/2/8
2600	22.3	1.979	39.388	1.96	39.00	0.97	0.99	±5	2024/2/13
2600	22.7	1.994	39.468	1.96	39.00	1.73	1.20	±5	2024/2/14
2600	22.8	2.017	38.178	1.96	39.00	2.91	-2.11	±5	2024/2/18
2600	22.4	2.001	39.522	1.96	39.00	2.09	1.34	±5	2024/2/24
2600	22.5	1.984	37.886	1.96	39.00	1.22	-2.86	±5	2024/2/25
2600	22.8	1.951	39.564	1.96	39.00	-0.46	1.45	±5	2024/2/28
2600	22.3	1.992	39.427	1.96	39.00	1.63	1.09	±5	2024/3/2
2600	22.2	1.986	39.301	1.96	39.00	1.33	0.77	±5	2024/3/12
2600	22.7	1.990	39.066	1.96	39.00	1.53	0.17	±5	2024/3/21
2600	22.6	1.979	39.371	1.96	39.00	0.97	0.95	±5	2024/3/26
3500	22.5	2.951	37.910	2.91	37.90	1.41	0.03	±5	2024/2/2
3500	22.9	2.951	37.814	2.91	37.90	1.41	-0.23	±5	2024/2/19



3500	22.8	2.963	37.865	2.91	37.90	1.82	-0.09	±5	2024/2/22
3500	22.3	2.991	37.663	2.91	37.90	2.78	-0.63	±5	2024/2/23
3500	22.3	2.945	38.035	2.91	37.90	1.20	0.36	±5	2024/3/1
3500	22.3	2.974	38.180	2.91	37.90	2.20	0.74	±5	2024/3/4
3500	22.8	2.987	38.330	2.91	37.90	2.65	1.13	±5	2024/3/7
3500	22.4	2.943	37.630	2.91	37.90	1.13	-0.71	±5	2024/3/19
3500	22.6	2.951	37.566	2.91	37.90	1.41	-0.88	±5	2024/3/23
3500	22.2	2.939	37.456	2.91	37.90	1.00	-1.17	±5	2024/3/24
3700	22.2	3.119	37.627	3.12	37.70	-0.03	-0.19	±5	2024/2/22
3700	22.3	3.179	37.364	3.12	37.70	1.89	-0.89	±5	2024/2/23
3700	22.3	3.111	37.788	3.12	37.70	-0.29	0.23	±5	2024/3/1
3700	22.3	3.131	37.943	3.12	37.70	0.35	0.64	±5	2024/3/4
3700	22.8	3.145	38.093	3.12	37.70	0.80	1.04	±5	2024/3/7
3700	22.4	3.099	37.392	3.12	37.70	-0.67	-0.82	±5	2024/3/19
3700	22.6	3.107	37.328	3.12	37.70	-0.42	-0.99	±5	2024/3/23
3700	22.2	3.095	37.218	3.12	37.70	-0.80	-1.28	±5	2024/3/24
3900	22.8	3.293	37.383	3.33	37.51	-1.11	-0.34	±5	2024/2/22
3900	22.3	3.384	37.086	3.33	37.51	1.62	-1.13	±5	2024/2/23
3900	22.3	3.299	37.693	3.33	37.51	-0.93	0.49	±5	2024/3/1
3900	22.3	3.305	37.698	3.33	37.51	-0.75	0.50	±5	2024/3/4
3900	22.8	3.320	37.848	3.33	37.51	-0.30	0.90	±5	2024/3/7
3900	22.4	3.271	37.148	3.33	37.51	-1.77	-0.97	±5	2024/3/19
3900	22.6	3.280	37.084	3.33	37.51	-1.50	-1.14	±5	2024/3/23
3900	22.2	3.267	36.974	3.33	37.51	-1.89	-1.43	±5	2024/3/24
13	22.2	0.728	54.443	0.75	55.00	-2.93	-1.01	±5	2024/2/19
2450	22.3	1.800	39.960	1.80	39.20	0.00	1.94	±5	2024/3/3
2450	22.4	1.804	40.060	1.80	39.20	0.22	2.19	±5	2024/3/4
2450	22.2	1.807	40.160	1.80	39.20	0.39	2.45	±5	2024/3/5
2450	22.5	1.782	38.953	1.80	39.20	-1.00	-0.63	±5	2024/3/5
2450	22.6	1.853	38.394	1.80	39.20	2.94	-2.06	±5	2024/3/6
2450	22.7	1.803	39.063	1.80	39.20	0.17	-0.35	±5	2024/3/8
2450	22.6	1.783	38.380	1.80	39.20	-0.94	-2.09	±5	2024/3/21
2450	22.5	1.795	39.830	1.80	39.20	-0.28	1.61	±5	2024/3/30
2450	22.1	1.791	39.940	1.80	39.20	-0.50	1.89	±5	2024/4/1
2450	22.7	1.838	40.159	1.80	39.20	2.11	2.45	±5	2024/4/4
5250	22.7	4.753	36.686	4.71	35.95	0.91	2.05	±5	2024/3/29
5250	22.6	4.791	36.946	4.71	35.95	1.72	2.77	±5	2024/3/31
5600	22.2	5.129	36.185	5.07	35.50	1.16	1.93	±5	2024/3/2
5600	22.6	5.168	36.435	5.07	35.50	1.93	2.63	±5	2024/3/31
5600	22.2	4.963	36.367	5.07	35.50	-2.11	2.44	±5	2024/4/2
5750	22.7	5.295	35.992	5.22	35.35	1.44	1.82	±5	2024/3/29
5750	22.6	5.336	36.252	5.22	35.35	2.22	2.55	±5	2024/3/31
5750	22.7	5.308	36.073	5.22	35.35	1.69	2.05	±5	2024/4/5
6500	22.6	6.170	35.400	6.07	34.50	1.65	2.61	±5	2024/4/2
6500	22.5	6.160	34.600	6.07	34.50	1.48	0.29	±5	2024/4/3



**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.

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 (%)	Test Site
2024/2/6	750	50	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn661	0.412	8.540	8.24	-3.51	0.272	5.570	5.44	-2.33	SAR11
2024/2/9	750	50	D750V3-1012	EX3DV4 - SN3728	DAE4 Sn661	0.413	8.560	8.26	-3.50	0.273	5.560	5.46	-1.80	SAR11
2024/2/17	750	50	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn661	0.404	8.540	8.08	-5.39	0.264	5.570	5.28	-5.21	SAR11
2024/2/26	750	50	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn661	0.406	8.540	8.12	-4.92	0.265	5.570	5.3	-4.85	SAR11
2024/3/8	750	50	D750V3-1012	ES3DV3 - SN3184	DAE4 Sn1424	0.396	8.560	7.92	-7.48	0.263	5.560	5.26	-5.40	SAR04
2024/3/22	750	50	D750V3-1012	ES3DV3 - SN3184	DAE4 Sn1424	0.390	8.560	7.8	-8.88	0.259	5.560	5.18	-6.83	SAR04
2024/2/5	835	50	D835V2-4d060	EX3DV4 - SN3728	DAE4 Sn661	0.483	9.730	9.66	-0.72	0.315	6.390	6.3	-1.41	SAR11
2024/2/11	835	50	D835V2-4d060	EX3DV4 - SN3728	DAE4 Sn661	0.488	9.730	9.76	0.31	0.318	6.390	6.36	-0.47	SAR11
2024/2/16	835	50	D835V2-4d060	EX3DV4 - SN3728	DAE4 Sn661	0.490	9.730	9.8	0.72	0.320	6.390	6.4	0.16	SAR11
2024/2/29	835	50	D835V2-4d060	EX3DV4 - SN3728	DAE4 Sn661	0.493	9.730	9.86	1.34	0.322	6.390	6.44	0.78	SAR11
2024/3/9	835	50	D835V2-4d060	ES3DV3 - SN3184	DAE4 Sn1424	0.465	9.730	9.3	-4.42	0.306	6.390	6.12	-4.23	SAR04
2024/3/22	835	50	D835V2-499	ES3DV3 - SN3184	DAE4 Sn1424	0.476	9.680	9.52	-1.65	0.318	6.280	6.36	1.27	SAR04
2024/2/7	1750	50	D1750V2-1068	EX3DV4 - SN3728	DAE4 Sn661	1.750	36.700	35	-4.63	0.947	19.300	18.94	-1.87	SAR11
2024/2/12	1750	50	D1750V2-1068	EX3DV4 - SN3728	DAE4 Sn661	1.760	36.700	35.2	-4.09	0.931	19.300	18.62	-3.52	SAR11
2024/2/15	1750	50	D1750V2-1068	ES3DV3 - SN3124	DAE4 Sn661	1.660	36.700	33.2	-9.54	0.892	19.300	17.84	-7.56	SAR05
2024/3/3	1750	50	D1750V2-1068	EX3DV4 - SN7625	DAE4 Sn1694	1.700	36.700	34	-7.36	0.891	19.300	17.82	-7.67	SAR06
2024/3/10	1750	50	D1750V2-1068	ES3DV3 - SN3184	DAE4 Sn1424	1.670	36.700	33.4	-8.99	0.904	19.300	18.08	-6.32	SAR04
2024/3/20	1750	50	D1750V2-1068	ES3DV3 - SN3184	DAE4 Sn1424	1.690	36.700	33.8	-7.90	0.914	19.300	18.28	-5.28	SAR04
2024/3/25	1750	250	D1750V2-1068	EX3DV4 - SN7791	DAE4 Sn1424	8.980	36.700	35.92	-2.13	4.780	19.300	19.12	-0.93	SAR10
2024/3/27	1750	250	D1750V2-1068	EX3DV4 - SN7791	DAE4 Sn1424	8.930	36.700	35.72	-2.67	4.750	19.300	19	-1.55	SAR10
2024/2/1	1900	50	D1900V2-5d093	EX3DV4 - SN3728	DAE4 Sn661	1.960	39.900	39.2	-1.75	1.030	20.700	20.6	-0.48	SAR11
2024/2/10	1900	50	D1900V2-5d093	EX3DV4 - SN3728	DAE4 Sn661	1.930	39.900	38.6	-3.26	1.000	20.700	20	-3.38	SAR11
2024/2/21	1900	50	D1900V2-5d093	EX3DV4 - SN3728	DAE4 Sn661	1.900	39.900	38	-4.76	0.991	20.700	19.82	-4.25	SAR11
2024/2/27	1900	50	D1900V2-5d093	ES3DV3 - SN3124	DAE4 Sn661	1.940	39.900	38.8	-2.76	1.030	20.700	20.6	-0.48	SAR05
2024/3/11	1900	50	D1900V2-5d093	ES3DV3 - SN3184	DAE4 Sn1424	1.870	39.900	37.4	-6.27	0.984	20.700	19.68	-4.93	SAR04
2024/3/20	1900	50	D1900V2-5d093	ES3DV3 - SN3184	DAE4 Sn1424	1.960	39.900	39.2	-1.75	1.030	20.700	20.6	-0.48	SAR04
2024/3/25	1900	250	D1900V2-5d185	EX3DV4 - SN7791	DAE4 Sn1424	9.540	39.000	38.16	-2.15	4.980	20.400	19.92	-2.35	SAR10
2024/3/28	1900	250	D1900V2-5d185	EX3DV4 - SN7791	DAE4 Sn1424	9.410	39.000	37.64	-3.49	4.920	20.400	19.68	-3.53	SAR10
2024/2/4	2600	50	D2600V2-1008	EX3DV4 - SN3728	DAE4 Sn661	2.780	58.000	55.6	-4.14	1.300	25.800	26	0.78	SAR11
2024/2/8	2600	50	D2600V2-1008	EX3DV4 - SN3728	DAE4 Sn661	2.800	58.000	56	-3.45	1.250	25.800	25	-3.10	SAR11
2024/2/13	2600	50	D2600V2-1078	EX3DV4 - SN7813	DAE4 Sn1647	2.620	55.400	52.4	-5.42	1.180	24.900	23.6	-5.22	SAR08
2024/2/14	2600	50	D2600V2-1008	ES3DV3 - SN3124	DAE4 Sn661	2.990	58.000	59.8	3.10	1.400	25.800	28	8.53	SAR05
2024/2/18	2600	50	D2600V2-1008	EX3DV4 - SN3728	DAE4 Sn661	2.850	58.000	57	-1.72	1.270	25.800	25.4	-1.55	SAR11
2024/2/24	2600	50	D2600V2-1008	EX3DV4 - SN3728	DAE4 Sn661	2.740	58.000	54.8	-5.52	1.230	25.800	24.6	-4.65	SAR11
2024/2/25	2600	50	D2600V2-1008	EX3DV4 - SN3728	DAE4 Sn661	2.800	58.000	56	-3.45	1.250	25.800	25	-3.10	SAR11
2024/2/28	2600	50	D2600V2-1078	ES3DV3 - SN3124	DAE4 Sn661	2.810	55.400	56.2	1.44	1.290	24.900	25.8	3.61	SAR05
2024/3/2	2600	250	D2600V2-1078	EX3DV4 - SN7625	DAE4 Sn1694	13.900	55.400	55.6	0.36	6.410	24.900	25.64	2.97	SAR06
2024/3/12	2600	50	D2600V2-1008	ES3DV3 - SN3184	DAE4 Sn1424	2.850	58.000	57	-1.72	1.310	25.800	26.2	1.55	SAR04
2024/3/21	2600	50	D2600V2-1008	ES3DV3 - SN3184	DAE4 Sn1424	2.850	58.000	57	-1.72	1.320	25.800	26.4	2.33	SAR04
2024/3/26	2600	50	D2600V2-1078	EX3DV4 - SN7791	DAE4 Sn1424	2.670	55.400	53.4	-3.61	1.210	24.900	24.2	-2.81	SAR10
2024/2/2	3500	50	D3500V2-1014	EX3DV4 - SN3728	DAE4 Sn661	3.520	67.200	70.4	4.76	1.310	25.100	26.2	4.38	SAR11
2024/2/19	3500	50	D3500V2-1014	EX3DV4 - SN3728	DAE4 Sn661	3.500	67.200	70	4.17	1.350	25.100	27	7.57	SAR11
2024/2/22	3500	100	D3500V2-1014	EX3DV4 - SN7813	DAE4 Sn1647	6.260	67.200	62.6	-6.85	2.330	25.100	23.3	-7.17	SAR08
2024/2/23	3500	50	D3500V2-1036	EX3DV4 - SN7785	DAE4 Sn1707	3.090	67.400	61.8	-8.31	1.190	25.100	23.8	-5.18	SAR09
2024/3/1	3500	100	D3500V2-1014	EX3DV4 - SN7625	DAE4 Sn1694	6.620	67.200	66.2	-1.49	2.470	25.100	24.7	-1.59	SAR06
2024/3/4	3500	100	D3500V2-1014	EX3DV4 - SN7814	DAE4 Sn316	6.190	67.200	61.9	-7.89	2.300	25.100	23	-8.37	SAR12
2024/3/7	3500	50	D3500V2-1014	EX3DV4 - SN7700	DAE4 Sn1696	3.220	67.200	64.4	-4.17	1.220	25.100	24.4	-2.79	SAR13
2024/3/19	3500	100	D3500V2-1014	EX3DV4 - SN7813	DAE4 Sn1647	6.490	67.200	64.9	-3.42	2.420	25.100	24.2	-3.59	SAR08
2024/3/23	3500	100	D3500V2-1014	EX3DV4 - SN7814	DAE4 Sn316	7.010	67.200	70.1	4.32	2.620	25.100	26.2	4.38	SAR12

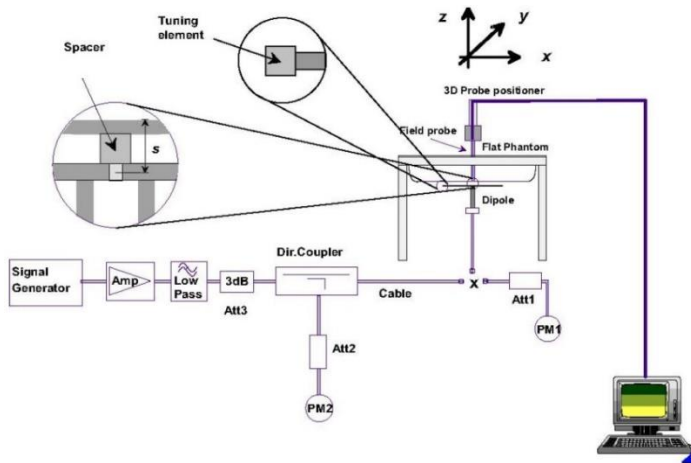




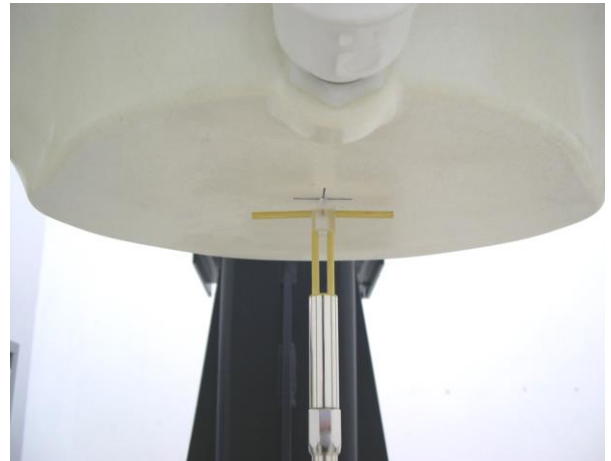
**FCC SAR TEST REPORT**

**Report No. : FA411108**

2024/3/24	3500	100	D3500V2-1014	EX3DV4 - SN7791	DAE4 Sn1424	6.380	67.200	63.8	-5.06	2.380	25.100	23.8	-5.18	SAR10
2024/2/22	3700	50	D3700V2-1006	EX3DV4 - SN7813	DAE4 Sn1647	3.590	65.600	71.8	9.45	1.290	23.700	25.8	8.86	SAR08
2024/2/23	3700	50	D3700V2-1006	EX3DV4 - SN7785	DAE4 Sn1707	3.110	65.600	62.2	-5.18	1.170	23.700	23.4	-1.27	SAR09
2024/3/1	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4 Sn1694	3.300	65.600	66	0.61	1.230	23.700	24.6	3.80	SAR06
2024/3/4	3700	50	D3700V2-1006	EX3DV4 - SN7814	DAE4 Sn316	3.570	65.600	71.4	8.84	1.280	23.700	25.6	8.02	SAR12
2024/3/7	3700	50	D3700V2-1006	EX3DV4 - SN7700	DAE4 Sn1696	3.400	65.600	68	3.66	1.250	23.700	25	5.49	SAR13
2024/3/19	3700	50	D3700V2-1006	EX3DV4 - SN7813	DAE4 Sn1647	3.590	65.600	71.8	9.45	1.290	23.700	25.8	8.86	SAR08
2024/3/23	3700	50	D3700V2-1006	EX3DV4 - SN7814	DAE4 Sn316	3.580	65.600	71.6	9.15	1.280	23.700	25.6	8.02	SAR12
2024/3/24	3700	50	D3700V2-1006	EX3DV4 - SN7791	DAE4 Sn1424	3.510	65.600	70.2	7.01	1.290	23.700	25.8	8.86	SAR10
2024/2/22	3900	100	D3900V2-1017-3900	EX3DV4 - SN7813	DAE4 Sn1647	6.470	68.700	64.7	-5.82	2.230	23.900	22.3	-6.69	SAR08
2024/2/23	3900	50	D3900V2-1017-3900	EX3DV4 - SN7785	DAE4 Sn1707	3.280	68.700	65.6	-4.51	1.160	23.900	23.2	-2.93	SAR09
2024/3/1	3900	100	D3900V2-1017-3900	EX3DV4 - SN7625	DAE4 Sn1694	7.030	68.700	70.3	2.33	2.420	23.900	24.2	1.26	SAR06
2024/3/4	3900	100	D3900V2-1017-3900	EX3DV4 - SN7814	DAE4 Sn316	6.420	68.700	64.2	-6.55	2.220	23.900	22.2	-7.11	SAR12
2024/3/7	3900	50	D3900V2-1017-3900	EX3DV4 - SN7700	DAE4 Sn1696	3.130	68.700	62.6	-8.88	1.080	23.900	21.6	-9.62	SAR13
2024/3/19	3900	100	D3900V2-1017-3900	EX3DV4 - SN7813	DAE4 Sn1647	6.430	68.700	64.3	-6.40	2.210	23.900	22.1	-7.53	SAR08
2024/3/23	3900	100	D3900V2-1092	EX3DV4 - SN7814	DAE4 Sn316	6.890	67.000	68.9	2.84	2.380	23.200	23.8	2.59	SAR12
2024/3/24	3900	100	D3900V2-1092	EX3DV4 - SN7791	DAE4 Sn1424	6.400	67.000	64	-4.48	2.210	23.200	22.1	-4.74	SAR10
2024/2/19	13	250	CLA-13	EX3DV4 - SN7306	DAE4 Sn853	0.129	0.555	0.516	-7.86	0.090	0.364	0.36	0.00	SAR14
2024/3/3	2450	50	D2450V2-806	EX3DV4 - SN3976	DAE4 Sn656	2.440	52.700	48.8	-7.40	1.130	24.400	22.6	-7.38	SAR15
2024/3/4	2450	50	D2450V2-806	EX3DV4 - SN3976	DAE4 Sn656	2.440	52.700	48.8	-7.40	1.130	24.400	22.6	-7.38	SAR15
2024/3/5	2450	50	D2450V2-806	EX3DV4 - SN3976	DAE4 Sn656	2.450	52.700	49	-7.02	1.130	24.400	22.6	-7.38	SAR15
2024/3/5	2450	50	D2450V2-736	EX3DV4 - SN7785	DAE4 Sn1707	2.490	54.200	49.8	-8.12	1.170	25.300	23.4	-7.51	SAR09
2024/3/6	2450	50	D2450V2-736	EX3DV4 - SN3728	DAE4 Sn656	2.620	54.200	52.4	-3.32	1.210	25.300	24.2	-4.35	SAR11
2024/3/8	2450	250	D2450V2-736	EX3DV4 - SN7814	DAE4 Sn316	14.700	54.200	58.8	8.49	6.940	25.300	27.76	9.72	SAR12
2024/3/21	2450	50	D2450V2-736	EX3DV4 - SN7695	DAE4 Sn1697	2.500	54.200	50	-7.75	1.170	25.300	23.4	-7.51	SAR18
2024/3/30	2450	50	D2450V2-929	EX3DV4 - SN7813	DAE4 Sn1647	2.430	52.400	48.6	-7.25	1.140	24.700	22.8	-7.69	SAR08
2024/4/1	2450	50	D2450V2-736	EX3DV4 - SN7695	DAE4 Sn1697	2.510	54.200	50.2	-7.38	1.180	25.300	23.6	-6.72	SAR18
2024/4/4	2450	50	D2450V2-929	EX3DV4 - SN7813	DAE4 Sn1424	2.480	52.400	49.6	-5.34	1.160	24.700	23.2	-6.07	SAR08
2024/3/29	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN7813	DAE4 Sn1647	3.680	81.200	73.6	-9.36	1.070	23.200	21.4	-7.76	SAR08
2024/3/31	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN7813	DAE4 Sn1647	3.710	81.200	74.2	-8.62	1.080	23.200	21.6	-6.90	SAR08
2024/3/2	5600	100	D5GHzV2-1171-5600	EX3DV4 - SN3976	DAE4 Sn656	8.640	83.400	86.4	3.60	2.470	23.700	24.7	4.22	SAR15
2024/3/31	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN7813	DAE4 Sn1647	4.110	84.700	82.2	-2.95	1.170	24.200	23.4	-3.31	SAR08
2024/4/2	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN7695	DAE4 Sn1697	3.880	84.700	77.6	-8.38	1.090	24.200	21.8	-9.92	SAR18
2024/3/29	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7813	DAE4 Sn1647	3.810	80.900	76.2	-5.81	1.100	22.900	22	-3.93	SAR08
2024/3/31	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7813	DAE4 Sn1647	3.840	80.900	76.8	-5.07	1.110	22.900	22.2	-3.06	SAR08
2024/4/5	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7813	DAE4 Sn1424	3.820	80.900	76.4	-5.56	1.100	22.900	22	-3.93	SAR08
2024/4/2	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3931	DAE4 Sn1805	31.500	292.000	315	7.88	5.860	54.000	58.6	8.52	SAR19
2024/4/3	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7791	DAE4ip Sn1800	28.400	292.000	284	-2.74	5.180	54.000	51.8	-4.07	SAR10



**Fig 8.3.1 System Performance Check Setup**



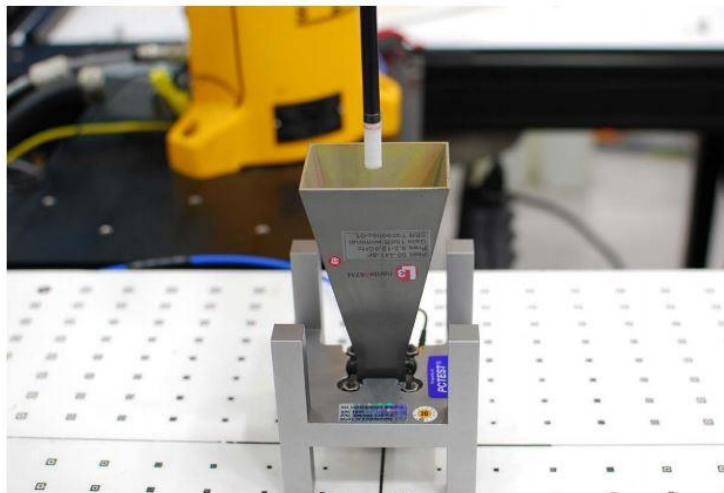
**Fig 8.3.2 Setup Photo**



**10.3 PD System Performance Check Results**

The system was verified to be within  $\pm 0.66$  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 Site	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm <sup>2</sup> (W/m <sup>2</sup> )	Targeted 4 cm <sup>2</sup> (W/m <sup>2</sup> )	Deviation (dB)	Date
SAR13	10G	10GHz_1020	9441	661	10mm	50	55.8	-0.48	2024/3/29



**Figure 4-3**  
System Verification Setup Photo

**System Performance Check Setup**

## 11. RF Exposure Positions

### 11.1 Ear and handset reference point

Figure 9.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M,” the left ear reference point (ERP) is marked “LE,” and the right ERP is marked “RE.” Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 9.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 9.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

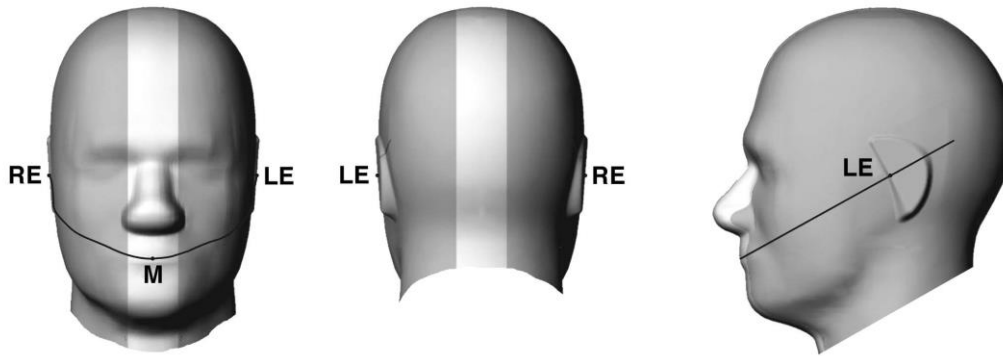


Fig 9.1.1 Front, back, and side views of SAM twin phantom

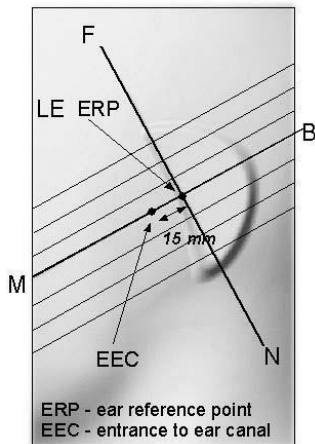


Fig 9.1.2 Close-up side view of phantom showing the ear region.

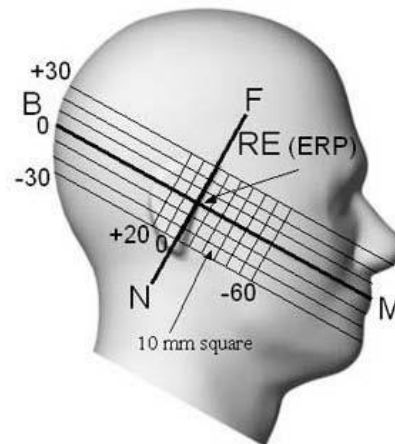


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

### 11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width  $w_t$  of the handset at the level of the acoustic output (point A in Figure 9.2.1 and Figure 9.2.2), and the midpoint of the width  $w_b$  of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 9.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 9.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 9.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 9.2.3. The actual rotation angles should be documented in the test report.

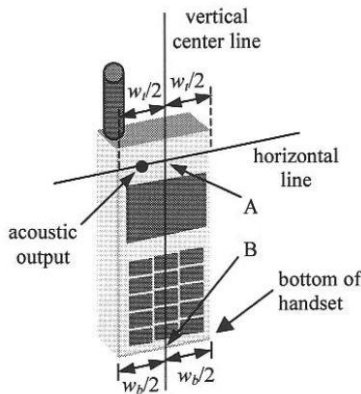


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

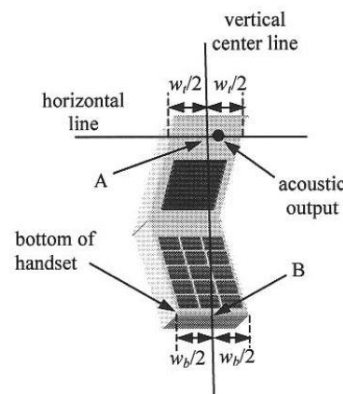


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

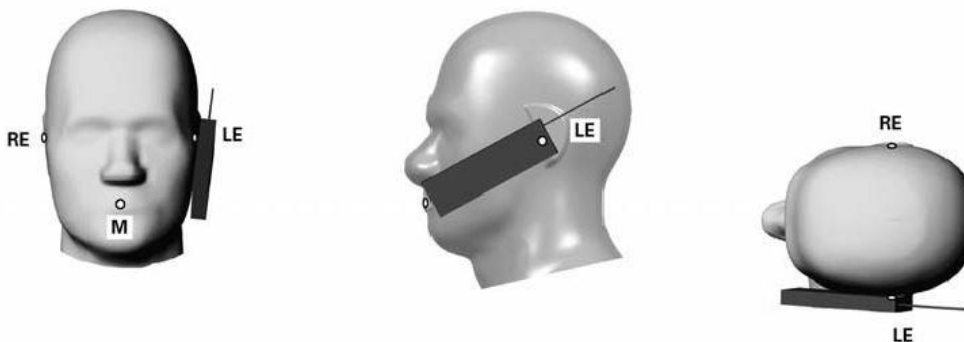
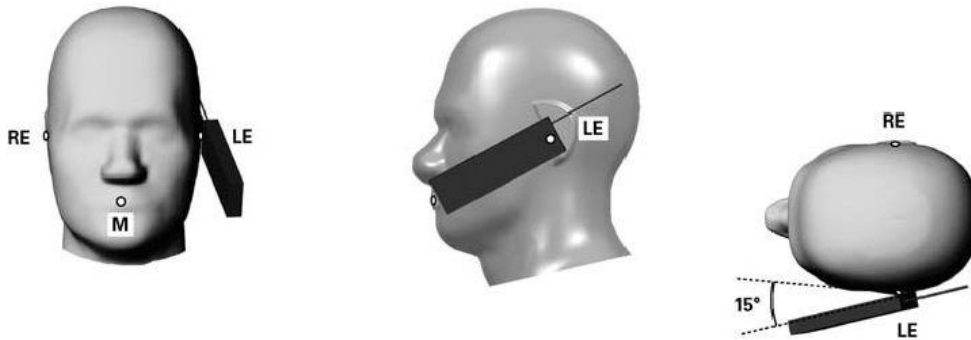


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

**11.3 Definition of the tilt position**

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 9.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

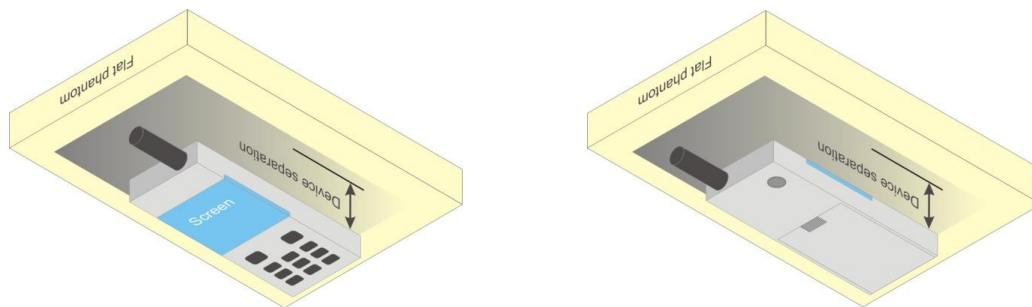


**Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.**

**11.4 Body Worn Accessory**

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 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 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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



**Fig 9.4 Body Worn Position**

**11.5 Product Specific Exposure**

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 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  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.6 The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.



### **11.6 Wireless Router**

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets ( $L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$ ) 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. DL/UL carrier aggregation

### <LTE Carrier Aggregation combinations>

**General Note:**

- This device supports Carrier Aggregation on downlink for inter and intra band, for the device supports combination bands and configurations are according to 3GPP.
- In applying the existing power measurement procedure of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of the frequency band and CCs in each row need consideration, and that configurations require power measurement should be highlighted in the below table.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation			4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2C	50	27	CA_41A-41C	48	47	CA_41A-41A-41C	48
2	CA_5B	61	28	CA_2A-5B	29	48	CA_41A-41D	
3	CA_7B	61	29	CA_2C-5A		49	CA_2A-2A-66B	50
4	CA_7C	61	30	CA_2A-7A-7A	45	50	CA_2A-2A-66C	
5	CA_38C	23	31	CA_4A-4A-5A	51	51	CA_4A-4A-5B	
6	CA_41C	48	32	CA_4A-4A-7A	45	52	CA_5A-5A-66A-66A	61
7	CA_66B	61	33	CA_4A-4A-71A		53	CA_5A-5A-66B	61
8	CA_66C	61	34	CA_4A-5B	51	54	CA_5A-5A-66C	61
9	CA_2A-2A	50	35	CA_4A-7A-7A	45	55	CA_5A-66A-66B	61
10	CA_4A-4A	51	36	CA_4A-7C	45	56	CA_5A-66A-66C	61
11	CA_5A-5A	61	37	CA_5A-5A-66A	61	57	CA_5B-66A-66A	61
12	CA_7A-7A	61	38	CA_5A-7A-7A	61	58	CA_5A-66D	61
13	CA_41A-41A	48	39	CA_5A-7C	61	59	CA_5B-66B	61
14	CA_66A-66A	61	40	CA_5A-66A-66A	61	60	CA_5B-66C	61
15	CA_2A-5A	29	41	CA_5A-66B	61	61	CA_5A-7C-66A	
16	CA_2A-7A	45	42	CA_5A-66C	61			
17	CA_2A-17A		43	CA_5B-66A	61			
18	CA_4A-5A	51	44	CA_7A-66A-66A	61			
19	CA_4A-7A	45	45	CA_2A-4A-7A				
20	CA_4A-17A		46	CA_5A-7A-66A	61			
21	CA_4A-71A	33						
22	CA_5A-7A	61						
23	CA_5A-38A							
24	CA_5A-41A							
25	CA_5A-66A	61						
26	CA_7A-66A	61						



**<Power verification when LTE Carrier Aggregation Active>**

**General Note:**

- i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.
- iii. The device supports downlink two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- vi. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

**<Two Carrier power verification>**

Configure	PCC							SCC				Power	
	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	2	10	1852.5	1862.5	QPSK	1	0	17	10	740	5790	23.85	24.04
	4	10	20350	1750	QPSK	1	0	17	10	740	5790	24.01	24.44
	5	10	20600	844	QPSK	1	0	38	20	2595	38000	24.30	24.59
	5	10	20600	844	QPSK	1	0	41	20	2593	40620	24.28	24.59

**<Three Carrier power verification>**

Configure	PCC							SCC1				SCC2				Power	
	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	Band 2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	23.75	24.04
	Band 2	20	1860	18700	QPSK	1	0	2	20	1960	900	5	10	881.5	2525	23.69	24.04
	Band 4	20	1745	20300	QPSK	1	0	4	20	2132.5	2175	71	20	634.5	68761	24.11	24.44

**<Four Carrier power verification>**

Configure	PCC							SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	Band 2	20	1860	18700	QPSK	1	0	Band 2	20	1960	900	Band 66	20	2145	66786	Band 66	1.4	2110.7	66443	23.68	24.04
	Band 4	20	1745	20300	QPSK	1	0	Band 4	20	2132.5	2175	Band 5	10	881.5	2525	Band 5	1.4	824.7	2407	24.11	24.44
	Band 5	10	20600	844	QPSK	1	0	Band 7	20	2655	3100	Band 7	5	2687.5	3425	Band 66	20	2145	66786	24.21	24.59
	Band 41	20	2593	40620	QPSK	1	0	Band 41	20	40620	2593	Band 41	5	39675	2498.5	Band 41	20	41490	2680	23.71	24.07



**<LTE Uplink carrier aggregation>**

2CC Uplink Carrier Aggregation	
Number	Combination
1	CA_2C
2	CA_5B
3	CA_7C
4	CA_38C
5	CA_41C
6	CA_66B
7	CA_66C

**<Intra-band>**

**General Note:**

- i. The device supports intra-band uplink carrier aggregation with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- ii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iii. Uplink CA is only operating with power class3, and additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.
- iv. For Intra-band, contiguous CA, the channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

CA_2C_Ant 1_DSI 0										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	23.98	25.2
18900	18702	QPSK	1	0	0	0	1	0	23.95	25.2
19100	18902	QPSK	1	0	0	0	1	0	23.95	25.2

CA_5B_Ant 1_DSI 0										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	23.57	25.2
20475	20574	QPSK	1	49	1	0	2	0	23.52	25.2
20600	20501	QPSK	1	0	1	49	2	0	23.55	25.2

CA_7C_Ant 5_DSI 0										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	24.1	25.2
21100	20902	QPSK	1	0	1	99	2	0	24.02	25.2
21350	21152	QPSK	1	0	1	99	2	0	23.98	25.2



CA_66B_Ant 1_DSI 0										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	24.21	25.2
132322	132229	QPSK	1	0	1	24	2	0	24.19	25.2
132597	132504	QPSK	1	0	1	24	2	0	24.11	25.2

CA_66C_Ant 1_DSI 0										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	24.37	25.2
132322	132124	QPSK	1	0	1	99	2	0	24.31	25.2
132572	132374	QPSK	1	0	1	99	2	0	24.33	25.2

CA_38C_Ant 5_DSI 0										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	23.85	25.2
37901	38099	QPSK	1	0	0	0	1	0	23.77	25.2
38150	37952	QPSK	1	0	1	99	2	0	23.79	25.2

CA_41C_Ant 5_DSI 0										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.87	25.2
40185	39987	QPSK	1	0	1	99	2	0	23.82	25.2
40620	40422	QPSK	1	0	1	99	2	0	23.77	25.2
41055	40857	QPSK	1	0	1	99	2	0	23.8	25.2
41490	41292	QPSK	1	0	1	99	2	0	23.75	25.2

CA_2C_Ant 1_DSI 1_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	23.98	24.4
18900	18702	QPSK	1	0	0	0	1	0	23.95	24.4
19100	18902	QPSK	1	0	0	0	1	0	23.95	24.4

CA_5B_Ant 1_DSI 1_Wlan Off										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	23.57	25.2
20475	20574	QPSK	1	49	1	0	2	0	23.52	25.2
20600	20501	QPSK	1	0	1	49	2	0	23.55	25.2



CA_7C_Ant 5_DSI 1_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	21.49	22.5
21100	20902	QPSK	1	0	1	99	2	0	21.33	22.5
21350	21152	QPSK	1	0	1	99	2	0	21.25	22.5

CA_66B_Ant 1_DSI 1_Wlan Off										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	23.53	24.3
132322	132229	QPSK	1	0	1	24	2	0	23.49	24.3
132597	132504	QPSK	1	0	1	24	2	0	23.38	24.3

CA_66C_Ant 1_DSI 1_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	23.65	24.3
132322	132124	QPSK	1	0	1	99	2	0	23.51	24.3
132572	132374	QPSK	1	0	1	99	2	0	23.47	24.3

CA_38C_Ant 5_DSI 1_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	23.85	24.5
37901	38099	QPSK	1	0	0	0	1	0	23.77	24.5
38150	37952	QPSK	1	0	1	99	2	0	23.79	24.5

CA_41C_Ant 5_DSI 1_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.87	24.5
40185	39987	QPSK	1	0	1	99	2	0	23.82	24.5
40620	40422	QPSK	1	0	1	99	2	0	23.77	24.5
41055	40857	QPSK	1	0	1	99	2	0	23.8	24.5
41490	41292	QPSK	1	0	1	99	2	0	23.75	24.5

CA_66B_Ant 1_DSI 1_Wlan On										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	21.86	22.6
132322	132229	QPSK	1	0	1	24	2	0	21.49	22.6
132597	132504	QPSK	1	0	1	24	2	0	21.38	22.6



CA_66C_Ant 1_DSI 1_Wlan On										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	21.95	22.6
132322	132124	QPSK	1	0	1	99	2	0	21.51	22.6
132572	132374	QPSK	1	0	1	99	2	0	21.47	22.6

CA_2C_Ant 1_DSI 2_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	23.98	25.2
18900	18702	QPSK	1	0	0	0	1	0	23.95	25.2
19100	18902	QPSK	1	0	0	0	1	0	23.95	25.2

CA_5B_Ant 1_DSI 2_Wlan Off										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	23.57	25.2
20475	20574	QPSK	1	49	1	0	2	0	23.52	25.2
20600	20501	QPSK	1	0	1	49	2	0	23.55	25.2

CA_7C_Ant 5_DSI 2_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	24.1	25.2
21100	20902	QPSK	1	0	1	99	2	0	24.02	25.2
21350	21152	QPSK	1	0	1	99	2	0	23.98	25.2

CA_66B_Ant 1_DSI 2_Wlan Off										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	24.21	25.2
132322	132229	QPSK	1	0	1	24	2	0	24.19	25.2
132597	132504	QPSK	1	0	1	24	2	0	24.11	25.2

CA_66C_Ant 1_DSI 2_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	24.37	25.2
132322	132124	QPSK	1	0	1	99	2	0	24.31	25.2
132572	132374	QPSK	1	0	1	99	2	0	24.33	25.2

CA_38C_Ant 5_DSI 2_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	23.85	25.2
37901	38099	QPSK	1	0	0	0	1	0	23.77	25.2
38150	37952	QPSK	1	0	1	99	2	0	23.79	25.2



CA_41C_Ant 5_DSI 2_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.87	25.2
40185	39987	QPSK	1	0	1	99	2	0	23.82	25.2
40620	40422	QPSK	1	0	1	99	2	0	23.77	25.2
41055	40857	QPSK	1	0	1	99	2	0	23.8	25.2
41490	41292	QPSK	1	0	1	99	2	0	23.75	25.2

CA_66B_Ant 1_DSI 2_Wlan On										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	24.21	24.7
132322	132229	QPSK	1	0	1	24	2	0	24.19	24.7
132597	132504	QPSK	1	0	1	24	2	0	24.11	24.7

CA_66C_Ant 1_DSI 2_Wlan On										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	24.37	24.7
132322	132124	QPSK	1	0	1	99	2	0	24.31	24.7
132572	132374	QPSK	1	0	1	99	2	0	24.33	24.7

CA_2C_Ant 1_DSI 3_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
18700	18898	QPSK	1	0	0	0	1	0	22.81	23.1
18900	18702	QPSK	1	0	0	0	1	0	22.73	23.1
19100	18902	QPSK	1	0	0	0	1	0	22.68	23.1

CA_5B_Ant 1_DSI 3_Wlan Off										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	0	0	0	1	0	23.57	25.2
20475	20574	QPSK	1	49	1	0	2	0	23.52	25.2
20600	20501	QPSK	1	0	1	49	2	0	23.55	25.2

CA_7C_Ant 5_DSI 3_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	22.97	23.9
21100	20902	QPSK	1	0	1	99	2	0	22.84	23.9
21350	21152	QPSK	1	0	1	99	2	0	22.81	23.9



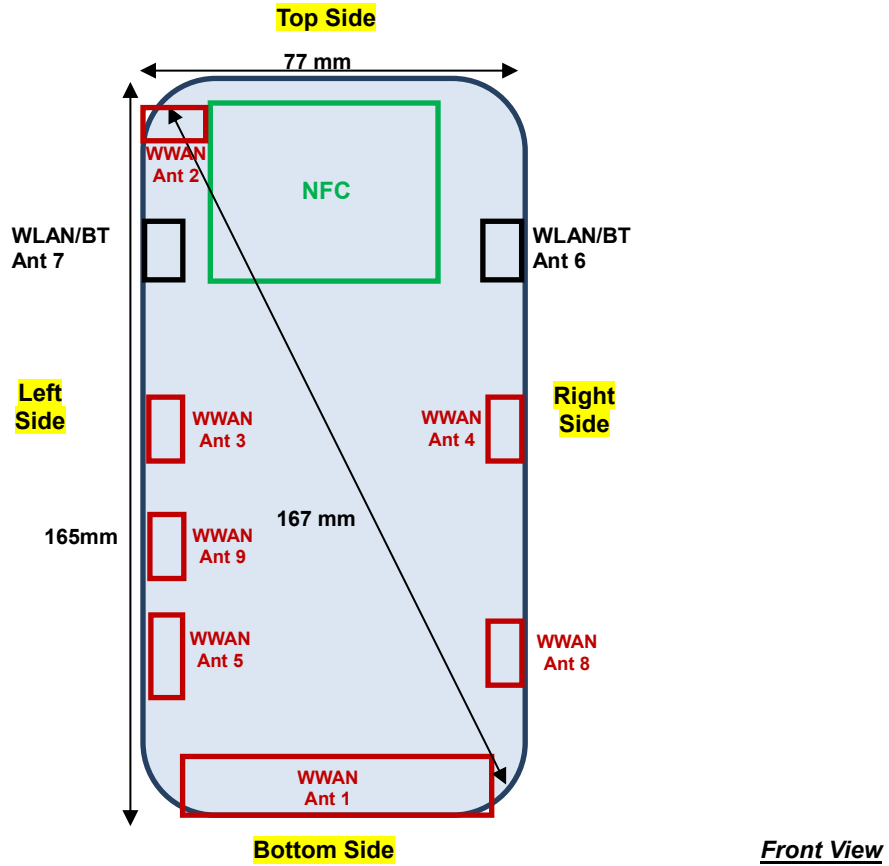
CA_66B_Ant 1_DSI 3_Wlan Off										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	0	0	0	1	0	21.37	21.7
132322	132229	QPSK	1	0	1	24	2	0	21.22	21.7
132597	132504	QPSK	1	0	1	24	2	0	21.21	21.7

CA_66C_Ant 1_DSI 3_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	0	0	0	1	0	21.45	21.7
132322	132124	QPSK	1	0	1	99	2	0	21.28	21.7
132572	132374	QPSK	1	0	1	99	2	0	21.32	21.7

CA_38C_Ant 5_DSI 3_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	22.75	23.4
37901	38099	QPSK	1	0	0	0	1	0	22.71	23.4
38150	37952	QPSK	1	0	1	99	2	0	22.73	23.4

CA_41C_Ant 5_DSI 3_Wlan Off										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	22.9	23.4
40185	39987	QPSK	1	0	1	99	2	0	22.85	23.4
40620	40422	QPSK	1	0	1	99	2	0	22.83	23.4
41055	40857	QPSK	1	0	1	99	2	0	22.74	23.4
41490	41292	QPSK	1	0	1	99	2	0	22.85	23.4

### 13. Antenna Location



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	Yes	Yes	Yes	Yes	Yes	Yes
WWAN Ant 2	Yes	Yes	Yes	No	No	Yes
WWAN Ant 3	Yes	Yes	No	Yes	No	Yes
WWAN Ant 4	Yes	Yes	No	Yes	Yes	No
WWAN Ant 5	Yes	Yes	No	Yes	No	Yes
WWAN Ant 8	Yes	Yes	No	Yes	Yes	No
WWAN Ant 9	Yes	Yes	No	Yes	No	Yes
BT&WLAN Ant 6	Yes	Yes	Yes	Yes	Yes	Yes
BT&WLAN Ant 7	Yes	Yes	Yes	Yes	Yes	Yes

**General Note:**

Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm\*5cm, 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.



## 14. SAR Test Results

### General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
  - c. For 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:
  - $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  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
  - $\leq 0.4$  W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ 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  $\leq 1.2$  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 product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR  $> 1.2$  W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold, for this device only bottom side SAR for WWAN transmitter scaled to maximum output power is higher than 1.2W/kg of GSM1900, WCDMA B4, LTE B4/66 and 5G NR n77, therefore product specific SAR is necessary.
6. For 5.3GHz / 5.5GHz / 6GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is  $> 16$ cm.
7. 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.
8. 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.
9. 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.

### GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode, SAR measurement is not required for the secondary mode.



**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  $\leq 1.2$  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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. The maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion.
  - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

**5G NR Note:**

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
  - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
  - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
  - 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  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
  - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
  - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

**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  $\leq 1.2$  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  $\leq 1.2$  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  $\leq 0.8$  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  $\leq 1.2$  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. The SISO operation only operate in 2.4GHz WLAN, the MIMO operation is support in 2.4GHz / 5GHz / 6GHz WLAN.
7. The WLAN was performed non DBS output power level first, due to it is higher power level and using the non DBS mode result to evaluated DBS mode Sim-Tx analysis, if Sim-Tx analysis is higher than 1.6W/kg, then additional DBS mode SAR result is required to evaluation Sim-Tx analysis and SPLSR calculation.
8. 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 15
6. Absorbed power density (APD) using a 4cm<sup>2</sup> 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<sub>inc</sub> 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<sub>n</sub> fulfill the criterion described below. Since iPD ratio between the two distances is  $\geq -1$ 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 mainly operate in hand-held extremity exposure conditions, therefore Standalone 10-g extremity SAR testing is required
2. NFC SAR is measured for all surface edges of the device with a transmitting antenna located within 25 mm.
3. 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.
4. NFC SAR test tissue-simulating liquid parameter: refer to IEC/IEEE 62209-1528 2020.

**14.1 Head SAR**

**<GSM SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.08	0.315	0.387
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.01	0.182	0.223
01	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	-0.01	0.358	0.439
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.03	0.198	0.243
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	-0.08	0.233	0.286
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	-0.08	0.207	0.254
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.1	0.140	0.172
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	-0.18	0.217	0.266
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.1	0.212	0.260
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	128	824.2	30.11	31.00	1.227	0.12	0.218	0.268
02	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.09	1.120	1.184
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	512	1850.2	27.06	27.70	1.159	0.08	0.703	0.815
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	661	1880	27.38	27.70	1.076	-0.17	0.957	1.030
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.14	0.447	0.472
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.11	0.281	0.297
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	-0.05	0.434	0.459
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.18	0.880	0.930
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.14	0.862	0.911
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	-0.17	0.758	0.801
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.17	1.030	1.089
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	-0.03	1.020	1.078
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	-0.05	0.971	1.026
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	810	1909.8	25.67	25.90	1.054	-0.12	0.674	0.711



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
03	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	-0.16	0.543	0.751
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	0.01	0.232	0.321
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	0.1	0.334	0.462
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	-0.17	0.175	0.242
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	0.04	0.490	0.678
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	-0.01	0.468	0.648
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	-0.08	0.459	0.635
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	0.05	0.473	0.654
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	0.06	0.307	0.425
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	9262	1852.4	23.79	25.20	1.384	-0.09	0.404	0.559
04	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.01	0.745	0.890
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1312	1712.4	24.18	25.20	1.265	-0.08	0.701	0.887
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1413	1732.6	24.33	25.20	1.222	0.13	0.719	0.878
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	-0.08	0.293	0.350
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.13	0.424	0.506
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.12	0.217	0.259
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.03	0.682	0.814
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.18	0.690	0.824
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.16	0.555	0.663
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	-0.1	0.651	0.777
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.07	0.397	0.474
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	1513	1752.6	24.43	25.20	1.194	0.18	0.489	0.584
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	1513	1752.6	24.43	24.70	1.064	0.01	0.745	0.793
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.1	0.364	0.400
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	0.01	0.235	0.258
05	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.01	0.443	0.487
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.15	0.280	0.308
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	0.19	0.426	0.468
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	0.07	0.428	0.470
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.18	0.252	0.277
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	0.03	0.411	0.452
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.15	0.332	0.365
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	4233	846.6	24.79	25.20	1.099	-0.15	0.360	0.396



<LTE SAR>

Table with columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB offset, Test Position, Gap (mm), Sample, Battery, Wlan On / Off, Power State, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Duty Cycle %, Duty Cycle Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg). Rows include LTE Band 7, 12, 25, and 2C with various test parameters and SAR values.







**FCC SAR TEST REPORT**

**Report No. : FA411108**

	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			0.17	0.300	0.360
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.49	24.20	1.178			0.18	0.235	0.277
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			-0.04	0.448	0.537
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.49	24.20	1.178			-0.08	0.367	0.432
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			-0.13	0.210	0.252
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.49	24.20	1.178			-0.13	0.172	0.203
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			0.06	0.675	0.810
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			-0.03	0.690	0.828
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			-0.03	0.558	0.669
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			0.08	0.635	0.762
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			-0.07	0.659	0.790
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	132572	1770	24.41	25.20	1.199			0.05	0.594	0.713
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	132572	1770	24.41	24.70	1.069			0.01	0.743	0.794
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132047+132140	1717.5	24.21	25.20	1.256			0.03	0.691	0.868
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132072+132270	1720	24.37	25.20	1.211			0.01	0.684	0.828
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	132047+132140	1717.5	24.21	24.70	1.119			0.03	0.691	0.774
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	132072+132270	1720	24.37	24.70	1.079			0.01	0.684	0.738
	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			-0.11	0.199	0.224
	LTE Band 66_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.73	24.20	1.114			-0.12	0.143	0.159
	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.03	0.130	0.146
	LTE Band 66_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.73	24.20	1.114			-0.16	0.102	0.114
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.13	0.270	0.304
	LTE Band 66_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.73	24.20	1.114			-0.02	0.201	0.224
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.15	0.134	0.151
	LTE Band 66_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	132572	1770	23.73	24.20	1.114			-0.09	0.104	0.116
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.11	0.222	0.250
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			-0.05	0.217	0.244
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			-0.08	0.227	0.255
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.16	0.261	0.294
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.05	0.264	0.297
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	132572	1770	24.69	25.20	1.125			0.05	0.267	0.300
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			-0.03	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	22.69	24.20	1.416			-0.15	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.02	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	22.69	24.20	1.416			0.07	0.001	0.001
13	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.14	0.034	0.049
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	22.69	24.20	1.416			0.16	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.13	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	133297	680.5	22.69	24.20	1.416			-0.18	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.02	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.16	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			-0.03	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.07	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	133297	680.5	23.64	25.20	1.432			0.01	0.001	0.001



**<5G NR SAR>**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Ant 5	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.55	25.20	1.161	0.08	0.306	0.355
	FR1 n7_Ant 5	40M	BPSK	108	54	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	0.01	0.325	0.393
	FR1 n7_Ant 5	40M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.55	25.20	1.161	0.03	0.147	0.171
	FR1 n7_Ant 5	40M	BPSK	108	54	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	-0.08	0.137	0.165
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.55	25.20	1.161	-0.08	0.588	0.683
14	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	-0.13	0.570	0.688
	FR1 n7_Ant 5	40M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.55	25.20	1.161	0.1	0.110	0.128
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	-0.18	0.104	0.126
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	0.1	0.514	0.621
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	0.12	0.503	0.608
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	0.08	0.428	0.517
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	-0.17	0.461	0.557
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	-0.03	0.300	0.362
	FR1 n7_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	507000	2535	24.38	25.20	1.208	0.14	0.362	0.437
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.11	0.147	0.164
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.38	25.20	1.208	-0.05	0.141	0.170
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.18	0.091	0.102
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.38	25.20	1.208	0.14	0.114	0.138
15	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	-0.04	0.172	0.192
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.38	25.20	1.208	-0.17	0.154	0.186
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.17	0.112	0.125
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	141500	707.5	24.38	25.20	1.208	-0.05	0.121	0.146
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.01	0.169	0.189
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.1	0.151	0.169
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	-0.17	0.050	0.056
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	0.04	0.054	0.060
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	-0.01	0.075	0.084
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	141500	707.5	24.72	25.20	1.117	-0.08	0.067	0.075
16	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.08	0.580	0.655
	FR1 n25_Ant 1	40M	BPSK	108	54	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.45	25.20	1.189	0.05	0.544	0.647
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.06	0.235	0.266
	FR1 n25_Ant 1	40M	BPSK	108	54	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.45	25.20	1.189	-0.09	0.256	0.304
	FR1 n25_Ant 1	40M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	-0.08	0.272	0.307
	FR1 n25_Ant 1	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.45	25.20	1.189	0.13	0.363	0.431
	FR1 n25_Ant 1	40M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.12	0.209	0.236
	FR1 n25_Ant 1	40M	BPSK	108	54	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.45	25.20	1.189	0.03	0.186	0.221
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.18	0.506	0.572
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.16	0.492	0.556
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	-0.1	0.275	0.311
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.07	0.403	0.455
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	0.18	0.299	0.338
	FR1 n25_Ant 1	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	376500	1882.5	24.67	25.20	1.130	-0.1	0.334	0.377
	FR1 n25_Ant 5	40M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.73	25.20	1.114	0.01	0.126	0.140
	FR1 n25_Ant 5	40M	BPSK	108	54	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.15	0.115	0.136
	FR1 n25_Ant 5	40M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.73	25.20	1.114	0.19	0.054	0.060
	FR1 n25_Ant 5	40M	BPSK	108	54	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	0.07	0.078	0.092
	FR1 n25_Ant 5	40M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.73	25.20	1.114	-0.18	0.195	0.217
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	0.12	0.192	0.228
	FR1 n25_Ant 5	40M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.73	25.20	1.114	0.03	0.045	0.050
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.15	0.056	0.066
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.15	0.190	0.225
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	0.11	0.189	0.224





# FCC SAR TEST REPORT

Report No. : FA411108

	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.08	0.166	0.197
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.17	0.177	0.210
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.08	0.120	0.142
	FR1 n25_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	374000	1870	24.46	25.20	1.186	-0.04	0.163	0.193
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.51	25.20	1.172	-0.08	0.232	0.272
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	0.17	0.235	0.284
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.51	25.20	1.172	0.18	0.189	0.222
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.04	0.191	0.231
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.51	25.20	1.172	-0.08	0.280	0.328
17	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.02	0.302	0.366
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.51	25.20	1.172	-0.13	0.161	0.189
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.13	0.187	0.226
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	0.06	0.300	0.363
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.03	0.300	0.363
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.03	0.186	0.225
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	0.08	0.163	0.197
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	-0.07	0.134	0.162
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	166300	831.5	24.37	25.20	1.211	0.05	0.148	0.179
	FR1 n66_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.11	0.579	0.696
18	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	-0.01	0.567	0.709
	FR1 n66_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.12	0.224	0.269
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	0.03	0.240	0.300
	FR1 n66_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.16	0.332	0.399
	FR1 n66_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	-0.02	0.297	0.371
	FR1 n66_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.15	0.172	0.207
	FR1 n66_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	-0.09	0.158	0.198
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	0.11	0.487	0.609
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	-0.05	0.492	0.615
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	-0.08	0.318	0.398
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	0.16	0.395	0.494
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	0.05	0.353	0.441
	FR1 n66_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	354000	1770	24.23	25.20	1.250	0.05	0.333	0.416
	FR1 n66_Ant 5	20M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.03	0.184	0.221
	FR1 n66_Ant 5	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.24	25.20	1.247	-0.15	0.139	0.173
	FR1 n66_Ant 5	20M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.02	0.175	0.210
	FR1 n66_Ant 5	20M	BPSK	50	28	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.24	25.20	1.247	0.07	0.134	0.167
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.08	0.240	0.289
	FR1 n66_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.24	25.20	1.247	0.16	0.220	0.274
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.13	0.163	0.196
	FR1 n66_Ant 5	20M	BPSK	50	28	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	354000	1770	24.24	25.20	1.247	-0.18	0.125	0.156
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.02	0.199	0.239
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.16	0.205	0.246
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	-0.03	0.180	0.216
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.07	0.200	0.240
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0	0.235	0.283
	FR1 n66_Ant 5	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	354000	1770	24.40	25.20	1.202	0.01	0.219	0.263
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.01	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.61	25.20	1.146	-0.06	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.04	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.61	25.20	1.146	-0.09	0.001	0.001
19	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.04	0.028	0.032
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.61	25.20	1.146	-0.17	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.1	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	134600	673	24.61	25.20	1.146	0.18	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.17	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.04	0.001	0.001



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	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.05	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	0	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.13	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	134600	673	24.66	25.20	1.132	-0.01	0.001	0.001
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	24.05	25.20	1.303	-0.09	0.238	0.310
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	0.05	0.240	0.329
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	24.05	25.20	1.303	0.02	0.121	0.158
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	-0.13	0.103	0.141
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	24.05	25.20	1.303	0.17	0.523	0.682
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	-0.06	0.529	0.725
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	24.05	25.20	1.303	0.06	0.080	0.104
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	0	0.098	0.134
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	-0.04	0.437	0.599
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	-0.15	0.510	0.699
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	0.11	0.441	0.605
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	-0.02	0.499	0.684
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	0.1	0.521	0.714
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	509202	2546.01	23.83	25.20	1.371	0.04	0.498	0.683
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	25.70	27.00	1.349	-0.14	0.368	0.496
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	0.13	0.291	0.308
	FR1 n41_Ant 2	100M	BPSK	135	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.91	21.00	1.021	-0.18	0.105	0.107
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	-0.09	0.311	0.329
	FR1 n41_Ant 2	100M	BPSK	135	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.91	21.00	1.021	-0.11	0.091	0.093
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	-0.16	0.136	0.144
	FR1 n41_Ant 2	100M	BPSK	135	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.91	21.00	1.021	-0.15	0.046	0.047
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	-0.06	0.145	0.153
	FR1 n41_Ant 2	100M	BPSK	135	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.91	21.00	1.021	-0.14	0.043	0.044
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	-0.19	0.265	0.280
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	0.01	0.236	0.249
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	0.06	0.271	0.286
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	0.02	0.282	0.298
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	0.12	0.272	0.287
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	518598	2592.99	21.76	22.00	1.057	-0.16	0.255	0.269
	FR1 n41_Ant 3	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	-0.12	0.446	0.504
	FR1 n41_Ant 3	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.38	22.00	1.153	0.07	0.185	0.213
	FR1 n41_Ant 3	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	-0.02	0.073	0.082
	FR1 n41_Ant 3	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.38	22.00	1.153	-0.05	0.045	0.052
20	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	0.14	0.653	0.738
	FR1 n41_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.38	22.00	1.153	-0.13	0.310	0.358
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	0.08	0.068	0.077
	FR1 n41_Ant 3	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.38	22.00	1.153	0.16	0.042	0.048
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	0.01	0.456	0.515
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	-0.16	0.539	0.609
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	0.1	0.454	0.513
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	-0.04	0.537	0.607
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	-0.01	0.558	0.630
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	518598	2592.99	21.47	22.00	1.130	0	0.541	0.611
	FR1 n41_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	518598	2592.99	19.89	20.10	1.050	0.07	0.568	0.596
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	-0.06	0.284	0.308
	FR1 n41_Ant 4	100M	BPSK	135	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.55	21.00	1.109	-0.11	0.170	0.189
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	-0.06	0.001	0.001
	FR1 n41_Ant 4	100M	BPSK	135	0	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.55	21.00	1.109	-0.15	0.001	0.001
	FR1 n41_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	0.03	0.145	0.157
	FR1 n41_Ant 4	100M	BPSK	135	0	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.55	21.00	1.109	-0.13	0.121	0.134
	FR1 n41_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	0.16	0.001	0.001
	FR1 n41_Ant 4	100M	BPSK	135	0	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	518598	2592.99	20.55	21.00	1.109	-0.15	0.001	0.001



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	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	-0.02	0.262	0.284
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	-0.09	0.278	0.301
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	0.14	0.190	0.206
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	0.1	0.269	0.292
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	-0.09	0.185	0.201
	FR1 n41_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	518598	2592.99	21.65	22.00	1.084	0.07	0.225	0.244
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.81	25.20	1.094	-0.09	0.885	0.968
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	650000	3750	24.52	25.20	1.169	-0.09	0.877	1.026
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	24.62	25.20	1.143	-0.09	0.881	1.007
21	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.15	1.030	1.172
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	650000	3750	24.25	25.20	1.245	-0.16	0.934	1.162
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	24.45	25.20	1.189	-0.16	0.945	1.123
	FR1 n77_Ant 8	100M	BPSK	270	0	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.70	24.70	1.000	-0.16	0.955	0.955
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.81	25.20	1.094	-0.18	0.179	0.196
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.07	0.183	0.208
	FR1 n77_Ant 8	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.81	25.20	1.094	0.11	0.334	0.365
	FR1 n77_Ant 8	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.08	0.363	0.413
	FR1 n77_Ant 8	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.81	25.20	1.094	-0.1	0.211	0.231
	FR1 n77_Ant 8	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.01	0.259	0.295
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.09	0.747	0.850
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.06	0.936	1.065
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.17	0.965	1.098
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.01	0.856	0.974
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.11	0.878	0.999
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	0.14	0.885	1.007
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	26.31	27.00	1.172	0.07	0.683	0.801
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	656000	3840	21.26	21.80	1.132	0.01	0.518	0.587
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	0.06	0.594	0.650
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.59	25.20	1.151	0.03	0.462	0.532
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	0.1	0.096	0.105
	FR1 n77_Ant 8	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.59	25.20	1.151	0.16	0.114	0.131
	FR1 n77_Ant 8	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	-0.06	0.275	0.301
	FR1 n77_Ant 8	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.59	25.20	1.151	0.02	0.221	0.254
	FR1 n77_Ant 8	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	-0.16	0.152	0.166
	FR1 n77_Ant 8	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.59	25.20	1.151	0.05	0.184	0.212
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	-0.03	0.584	0.639
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	0.17	0.586	0.641
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	-0.15	0.563	0.616
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	0.16	0.584	0.639
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	0.05	0.585	0.640
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	633332	3499.98	24.81	25.20	1.094	-0.06	0.568	0.621
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	26.25	27.00	1.189	0.08	0.379	0.450
	FR1 n77_Ant 8	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan On	DSI 2	633332	3499.98	21.38	21.80	1.102	0.02	0.227	0.250
	FR1 n77_Ant 9	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	-0.13	0.042	0.046
	FR1 n77_Ant 9	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.52	22.00	1.117	-0.01	0.062	0.069
	FR1 n77_Ant 9	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	-0.11	0.001	0.001
	FR1 n77_Ant 9	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.52	22.00	1.117	0.19	0.001	0.001
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	-0.14	0.124	0.137
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.52	22.00	1.117	-0.18	0.121	0.135
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	-0.06	0.030	0.033
	FR1 n77_Ant 9	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.52	22.00	1.117	0.02	0.001	0.001
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	0.16	0.122	0.135
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	0.01	0.103	0.114
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	-0.04	0.093	0.103
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	0.17	0.168	0.186
	FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	0.13	0.164	0.181



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FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	656000	3840	21.56	22.00	1.107	0.12	0.154	0.170
FR1 n77_Ant 9	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	0.07	0.026	0.029
FR1 n77_Ant 9	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.43	22.00	1.140	0.08	0.026	0.030
FR1 n77_Ant 9	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	0.19	0.001	0.001
FR1 n77_Ant 9	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.43	22.00	1.140	-0.06	0.001	0.001
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	-0.1	0.171	0.194
FR1 n77_Ant 9	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.43	22.00	1.140	0	0.142	0.162
FR1 n77_Ant 9	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	-0.03	0.001	0.001
FR1 n77_Ant 9	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.43	22.00	1.140	0.07	0.001	0.001
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	-0.12	0.144	0.163
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	-0.03	0.143	0.162
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	0.02	0.105	0.119
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	0.12	0.167	0.189
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	0.02	0.164	0.186
FR1 n77_Ant 9	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	633332	3499.98	21.46	22.00	1.132	-0.03	0.161	0.182
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	0	0.158	0.169
FR1 n77_Ant 4	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.67	22.00	1.079	-0.1	0.092	0.099
FR1 n77_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	0.05	0.028	0.030
FR1 n77_Ant 4	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.67	22.00	1.079	0	0.043	0.046
FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	0.07	0.094	0.100
FR1 n77_Ant 4	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.67	22.00	1.079	0.15	0.095	0.102
FR1 n77_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	-0.05	0.046	0.049
FR1 n77_Ant 4	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	662000	3930	21.67	22.00	1.079	-0.08	0.030	0.032
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	-0.08	0.125	0.133
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	-0.13	0.151	0.161
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	0.01	0.136	0.145
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	-0.07	0.269	0.287
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	-0.11	0.234	0.250
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	662000	3930	21.72	22.00	1.067	0.03	0.247	0.263
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.02	0.210	0.228
FR1 n77_Ant 4	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.60	22.00	1.096	-0.05	0.202	0.221
FR1 n77_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.14	0.050	0.054
FR1 n77_Ant 4	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.60	22.00	1.096	-0.01	0.040	0.044
FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	-0.12	0.166	0.180
FR1 n77_Ant 4	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.60	22.00	1.096	0.07	0.141	0.155
FR1 n77_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.09	0.054	0.059
FR1 n77_Ant 4	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.60	22.00	1.096	0.04	0.076	0.083
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.11	0.182	0.198
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	-0.13	0.192	0.209
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.12	0.128	0.139
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	-0.11	0.197	0.214
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	0.17	0.205	0.223
FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	633332	3499.98	21.64	22.00	1.086	-0.16	0.200	0.217
FR1 n77_Ant 3	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.14	0.111	0.120
FR1 n77_Ant 3	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.61	22.00	1.094	0.11	0.067	0.073
FR1 n77_Ant 3	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.05	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.61	22.00	1.094	-0.01	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	0.02	0.131	0.142
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.61	22.00	1.094	-0.15	0.101	0.110
FR1 n77_Ant 3	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.12	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	656000	3840	21.61	22.00	1.094	-0.17	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	0.08	0.096	0.104
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.17	0.109	0.118
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	0.01	0.113	0.122
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	0.02	0.091	0.098
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.11	0.093	0.101





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FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	656000	3840	21.66	22.00	1.081	-0.01	0.093	0.101
FR1 n77_Ant 3	100M	BPSK	1	1	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.61	22.00	1.094	0.09	0.289	0.316
FR1 n77_Ant 3	100M	BPSK	135	69	Right Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	0.1	0.285	0.314
FR1 n77_Ant 3	100M	BPSK	1	1	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.61	22.00	1.094	-0.04	0.071	0.078
FR1 n77_Ant 3	100M	BPSK	135	69	Right Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	0.15	0.134	0.148
FR1 n77_Ant 3	100M	BPSK	1	1	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.61	22.00	1.094	0.09	0.284	0.311
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	-0.03	0.290	0.319
FR1 n77_Ant 3	100M	BPSK	1	1	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.61	22.00	1.094	-0.16	0.095	0.104
FR1 n77_Ant 3	100M	BPSK	135	69	Left Tilted	0mm	Sample 1	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	0.05	0.063	0.069
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 3	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	0.08	0.225	0.248
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 5	Battery 1	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	-0.18	0.258	0.284
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 2	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	-0.03	0.280	0.308
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 3	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	-0.04	0.253	0.279
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 4	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	-0.09	0.265	0.292
FR1 n77_Ant 3	100M	BPSK	135	69	Left Cheek	0mm	Sample 1	Battery 5	Wlan Off	DSI 2	633332	3499.98	21.58	22.00	1.102	0.18	0.261	0.288

## <WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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	Right Cheek	0mm	Ant 6	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.08	0.143	0.180
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.01	0.170	0.213
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.08	0.298	0.374
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.03	0.172	0.216
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 3	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.08	0.279	0.350
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 5	Battery 1	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.08	0.294	0.369
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 2	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.1	0.176	0.221
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 3	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.18	0.226	0.284
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 4	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.1	0.235	0.295
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 5	Power table 1	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.12	0.250	0.314
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.01	0.198	0.237
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 7	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.18	0.060	0.072
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 7	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.14	0.047	0.056
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 7	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 3	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.17	0.144	0.173
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 5	Battery 1	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.05	0.128	0.154
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 2	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.05	0.109	0.131
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 3	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.01	0.163	0.195
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 4	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.1	0.179	0.215
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 5	Power table 1	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.17	0.147	0.176
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.09	0.189	0.247
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.08	0.201	0.263
22	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.11	0.414	0.542
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.13	0.289	0.378
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 3	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.12	0.397	0.520
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 5	Battery 1	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.12	0.397	0.520
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 2	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.18	0.408	0.534
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 3	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.16	0.400	0.524
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 4	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.1	0.377	0.494
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 5	Power table 1	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.07	0.388	0.508
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	DBS	1	2412	19.10	19.50	1.096	85.71	1.167	0.03	0.296	0.379
	WLAN5GHz	802.11n-HT20 MCS0	Right Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.07	0.250	0.318
	WLAN5GHz	802.11n-HT20 MCS0	Right Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.18	0.296	0.377
23	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.18	0.346	0.440
	WLAN5GHz	802.11n-HT20 MCS0	Left Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.15	0.333	0.424



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	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.15	0.340	0.433
	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.11	0.336	0.428
	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.08	0.275	0.350
	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.17	0.308	0.392
	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.08	0.326	0.415
	WLAN5GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 1	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.04	0.319	0.406
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	DBS	58	5290	16.20	16.50	1.072	86.11	1.161	0.03	0.245	0.305
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.08	0.298	0.365
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.13	0.351	0.430
24	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.15	0.436	0.535
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	0.06	0.416	0.510
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.03	0.402	0.493
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.13	0.424	0.520
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	0.08	0.374	0.459
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.07	0.388	0.476
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	0.05	0.392	0.481
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 1	Non-DBS	110	5550	18.80	19.00	1.047	85.39	1.171	-0.11	0.395	0.484
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	DBS	138	5690	16.40	16.50	1.023	85.39	1.171	0.12	0.296	0.355
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.09	0.257	0.329
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	0.11	0.228	0.292
25	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.17	0.746	0.956
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	0.06	0.723	0.927
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.08	0.284	0.364
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	0.16	0.591	0.758
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.05	0.531	0.681
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	0.05	0.653	0.837
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.03	0.674	0.864
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	-0.15	0.697	0.893
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 1	Non-DBS	155	5775	20.60	21.00	1.096	85.51	1.169	0.02	0.687	0.881
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	DBS	155	5775	16.20	16.50	1.072	85.51	1.169	-0.17	0.271	0.339

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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	802.11a 6Mbps	Right Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.18	0.117	0.144	0.830	1.023
	WLAN6GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	0.02	0.065	0.080	0.460	0.567
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.15	0.177	0.218	1.260	1.553
	WLAN6GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.03	0.072	0.089	0.510	0.628
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	15	6025	16.67	17.00	1.079	85.77	1.166	0.13	0.148	0.186	1.060	1.334
26	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.77	1.166	-0.19	0.223	0.288	1.590	2.052
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	111	6505	12.29	12.50	1.050	85.77	1.166	0.13	0.064	0.078	0.460	0.563
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 1	Non-DBS	207	6985	12.50	13.00	1.122	85.77	1.166	-0.14	0.047	0.061	0.340	0.445
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 3	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.06	0.153	0.189	1.090	1.343
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 5	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.04	0.155	0.191	1.110	1.368
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 2	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.09	0.159	0.196	1.130	1.392
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 3	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.17	0.156	0.192	1.110	1.368
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 4	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	-0.1	0.152	0.187	1.080	1.331
	WLAN6GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6+7(6)	Sample 1	Battery 5	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	0.18	0.149	0.184	1.060	1.306



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	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	1Mbps	Right Cheek	0mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.04	0.001	0.001
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.05	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	0	0.001	0.001
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.13	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 3	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.01	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 5	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.09	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 2	0	2402	5.98	6.50	1.127	76.86	1.084	0.05	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 3	0	2402	5.98	6.50	1.127	76.86	1.084	0.02	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 4	0	2402	5.98	6.50	1.127	76.86	1.084	-0.13	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Sample 1	Battery 5	0	2402	5.98	6.50	1.127	76.86	1.084	0.17	0.001	0.001
27	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.04	0.009	0.010
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.11	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.02	0.001	0.001
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.1	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 3	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.04	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 5	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.13	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 2	39	2441	6.45	6.50	1.012	76.80	1.085	-0.18	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 3	39	2441	6.45	6.50	1.012	76.80	1.085	-0.11	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 4	39	2441	6.45	6.50	1.012	76.80	1.085	-0.16	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Sample 1	Battery 5	39	2441	6.45	6.50	1.012	76.80	1.085	-0.15	0.001	0.001



14.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.11	0.213	0.261
28	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.09	0.492	0.604
	GSM850_Ant 1	GPRS (4 Tx slots)	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	-0.03	0.243	0.298
	GSM850_Ant 1	GPRS (4 Tx slots)	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.09	0.140	0.172
	GSM850_Ant 1	GPRS (4 Tx slots)	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	-0.05	0.211	0.259
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	-0.03	0.422	0.518
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.17	0.211	0.259
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	-0.14	0.381	0.468
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.06	0.350	0.430
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	-0.06	0.383	0.470
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	128	824.2	30.11	31.00	1.227	0.07	0.458	0.562
	GSM1900_Ant 1	GPRS (4 Tx slots)	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	-0.15	0.209	0.254
29	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0.17	0.622	0.755
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	-0.03	0.039	0.047
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0.17	0.241	0.292
	GSM1900_Ant 1	GPRS (4 Tx slots)	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0	0.327	0.397
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	-0.11	0.404	0.490
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	-0.08	0.362	0.439
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	-0.14	0.314	0.381
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0.01	0.552	0.670
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0.18	0.453	0.550
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	810	1909.8	23.86	24.70	1.213	0.02	0.446	0.541



**<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.16	0.195	0.270
30	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0	0.479	0.664
	WCDMA II_Ant 1	RMC 12.2Kbps	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.07	0.054	0.075
	WCDMA II_Ant 1	RMC 12.2Kbps	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	-0.17	0.221	0.306
	WCDMA II_Ant 1	RMC 12.2Kbps	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.08	0.318	0.441
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	-0.07	0.389	0.539
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.01	0.343	0.476
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.11	0.291	0.404
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	-0.07	0.435	0.603
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.18	0.446	0.618
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	9262	1852.4	22.18	23.60	1.387	0.12	0.448	0.621
	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0.07	0.234	0.236
31	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	-0.08	0.752	0.759
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	-0.03	0.001	0.001
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	-0.14	0.293	0.296
	WCDMA IV_Ant 1	RMC 12.2Kbps	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0.11	0.401	0.405
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	-0.18	0.673	0.679
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0	0.683	0.689
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	-0.09	0.510	0.515
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0.05	0.663	0.669
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0.13	0.653	0.659
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	1513	1752.6	21.66	21.70	1.009	0	0.643	0.649
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.12	0.281	0.309
32	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	0.01	0.575	0.632
	WCDMA V_Ant 1	RMC 12.2Kbps	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	0.15	0.340	0.374
	WCDMA V_Ant 1	RMC 12.2Kbps	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.05	0.211	0.232
	WCDMA V_Ant 1	RMC 12.2Kbps	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	0.1	0.325	0.357
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.11	0.566	0.622
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.02	0.485	0.533
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.1	0.390	0.429
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	0.14	0.461	0.507
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	0.04	0.505	0.555
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	4233	846.6	24.79	25.20	1.099	-0.05	0.508	0.558



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 5	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			-0.04	0.234	0.283
	LTE Band 7_Ant 5	20M	QPSK	50	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	22.20	22.90	1.175			0.14	0.187	0.220
	LTE Band 7_Ant 5	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.03	0.485	0.586
	LTE Band 7_Ant 5	20M	QPSK	50	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	22.20	22.90	1.175			0.16	0.392	0.461
33	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.19	0.527	0.637
	LTE Band 7_Ant 5	20M	QPSK	50	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	22.20	22.90	1.175			0.14	0.399	0.469
	LTE Band 7_Ant 5	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			-0.19	0.111	0.134
	LTE Band 7_Ant 5	20M	QPSK	50	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	21100	2535	22.20	22.90	1.175			0.09	0.091	0.107
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.13	0.382	0.461
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			-0.08	0.358	0.432
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.08	0.467	0.564
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			-0.04	0.507	0.612
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.12	0.495	0.598
	LTE Band 7_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	21100	2535	23.08	23.90	1.208			0.09	0.461	0.557
	LTE Band 7C_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	20850+21048	2510	22.97	23.90	1.239			0.02	0.477	0.591
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			-0.02	0.145	0.201
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	22.88	24.20	1.355			-0.16	0.118	0.160
34	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			-0.05	0.285	0.395
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	22.88	24.20	1.355			-0.03	0.191	0.259
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			-0.06	0.184	0.255
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	22.88	24.20	1.355			0.08	0.152	0.206
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			-0.07	0.139	0.193
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	22.88	24.20	1.355			0.11	0.118	0.160
	LTE Band 12_Ant 1	10M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.17	0.078	0.108
	LTE Band 12_Ant 1	10M	QPSK	25	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	23095	707.5	22.88	24.20	1.355			-0.1	0.067	0.091
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.17	0.240	0.333
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			-0.15	0.237	0.329
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.18	0.218	0.302
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.05	0.223	0.309
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.04	0.232	0.322
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	23095	707.5	23.78	25.20	1.387			0.15	0.241	0.334
	LTE Band 25_Ant 1	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.03	0.343	0.355
	LTE Band 25_Ant 1	20M	QPSK	50	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	21.86	22.10	1.057			-0.1	0.274	0.290
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.07	0.704	0.729
	LTE Band 25_Ant 1	20M	QPSK	50	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	21.86	22.10	1.057			-0.02	0.552	0.583
	LTE Band 25_Ant 1	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.1	0.081	0.084
	LTE Band 25_Ant 1	20M	QPSK	50	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	21.86	22.10	1.057			-0.1	0.064	0.068
	LTE Band 25_Ant 1	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			-0.05	0.412	0.426
	LTE Band 25_Ant 1	20M	QPSK	50	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	21.86	22.10	1.057			-0.04	0.337	0.356
	LTE Band 25_Ant 1	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.03	0.576	0.596
	LTE Band 25_Ant 1	20M	QPSK	50	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	21.86	22.10	1.057			-0.11	0.473	0.500
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.15	0.567	0.587
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.15	0.576	0.596
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.17	0.473	0.490
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0.13	0.628	0.650
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			-0.02	0.644	0.667
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	26140	1860	22.95	23.10	1.035			0	0.682	0.706
	LTE Band 2C_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	18700+18898	1860	22.81	23.10	1.069			0.02	0.635	0.679
	LTE Band 25_Ant 5	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			0.1	0.246	0.262
	LTE Band 25_Ant 5	20M	QPSK	50	24	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	22.10	22.30	1.047			0.13	0.215	0.225
	LTE Band 25_Ant 5	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.04	0.342	0.365



**FCC SAR TEST REPORT**

**Report No. : FA411108**

Case No.	Freq	Mod	Power	Ant	Side	Dist	Sample	Battery	Wlan	DSI	Power	Power	Power	Power	Power	Power	Power	Power	Power		
35	LTE Band 25_Ant 5	20M	QPSK	50	24	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	22.10	22.30	1.047			-0.12	0.262	0.274
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.13	0.749	0.799
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26140	1860	22.98	23.30	1.076			0.11	0.711	0.765
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26340	1880	22.89	23.30	1.099			0.05	0.692	0.761
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.07	0.623	0.664
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.03	0.682	0.727
	LTE Band 25_Ant 5	20M	QPSK	50	24	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	22.10	22.30	1.047			-0.13	0.492	0.515
	LTE Band 25_Ant 5	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			0	0.150	0.160
	LTE Band 25_Ant 5	20M	QPSK	50	24	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26590	1905	22.10	22.30	1.047			-0.12	0.104	0.109
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			0.19	0.690	0.736
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.01	0.697	0.743
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.19	0.704	0.751
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.03	0.704	0.751
	LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			-0.08	0.690	0.736
LTE Band 25_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	26590	1905	23.02	23.30	1.067			0.1	0.681	0.726	
36	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			0.15	0.184	0.261
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	22.72	24.20	1.406			0.12	0.167	0.235
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.03	0.344	0.487
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	22.72	24.20	1.406			-0.15	0.266	0.374
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.19	0.208	0.294
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	22.72	24.20	1.406			-0.13	0.189	0.266
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.05	0.136	0.193
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	22.72	24.20	1.406			-0.12	0.115	0.162
	LTE Band 26_Ant 1	15M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			0.03	0.177	0.251
	LTE Band 26_Ant 1	15M	QPSK	36	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	26865	831.5	22.72	24.20	1.406			0.09	0.158	0.222
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.12	0.301	0.426
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.13	0.343	0.486
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.09	0.283	0.401
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			-0.18	0.285	0.404
LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			0.12	0.275	0.389	
LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	26865	831.5	23.69	25.20	1.416			0.11	0.314	0.445	
LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	20450+20549	829	23.57	25.20	1.455			0.01	0.288	0.419	
37	LTE Band 41_Ant 5	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	22.99	23.40	1.099	62.9	1.006	0.11	0.139	0.154
	LTE Band 41_Ant 5	20M	QPSK	50	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	21.99	22.40	1.099	62.9	1.006	-0.06	0.095	0.105
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	22.99	23.40	1.099	62.9	1.006	-0.02	0.259	0.286
	LTE Band 41_Ant 5	20M	QPSK	50	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	21.99	22.40	1.099	62.9	1.006	0.02	0.191	0.211
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	22.99	23.40	1.099	62.9	1.006	0.12	0.543	0.600
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	39750	2506	22.69	23.40	1.178	62.9	1.006	0.02	0.322	0.381
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40185	2549.5	22.62	23.40	1.197	62.9	1.006	-0.11	0.335	0.403
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	41055	2636.5	22.86	23.40	1.132	62.9	1.006	-0.11	0.503	0.573
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0	0.595	0.713
	LTE Band 41_Ant 5	20M	QPSK	50	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	21.99	22.40	1.099	62.9	1.006	-0.05	0.320	0.354
	LTE Band 41_Ant 5	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	22.99	23.40	1.099	62.9	1.006	0.03	0.081	0.090
	LTE Band 41_Ant 5	20M	QPSK	50	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	40620	2593	21.99	22.40	1.099	62.9	1.006	-0.17	0.060	0.066
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0.02	0.437	0.524
	LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	-0.11	0.454	0.544
LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0.18	0.471	0.564	
LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0.16	0.351	0.421	
LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0.19	0.508	0.609	
LTE Band 41_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	41490	2680	22.64	23.40	1.191	62.9	1.006	0.13	0.551	0.660	
LTE Band 38C_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	37850+38048	2580	22.75	23.40	1.161	62.9	1.006	0.05	0.514	0.601	
LTE Band 41C_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	39750+39948	2506	22.90	23.40	1.122	62.9	1.006	0.11	0.539	0.608	
LTE Band 42_Ant 8	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.03	0.145	0.197	
LTE Band 42_Ant 8	20M	QPSK	50	24	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	22.85	24.20	1.365	62.9	1.006	0.12	0.122	0.167	
LTE Band 42_Ant 8	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	0.19	0.300	0.408	
LTE Band 42_Ant 8	20M	QPSK	50	24	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	22.85	24.20	1.365	62.9	1.006	-0.09	0.295	0.405	



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38	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	0.06	0.552	0.751
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42190	3460	23.51	25.20	1.476	62.9	1.006	-0.18	0.502	0.745
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42590	3500	23.76	25.20	1.393	62.9	1.006	-0.06	0.524	0.734
	LTE Band 42_Ant 8	20M	QPSK	50	24	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	22.85	24.20	1.365	62.9	1.006	0.07	0.457	0.627
	LTE Band 42_Ant 8	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.08	0.114	0.155
	LTE Band 42_Ant 8	20M	QPSK	50	24	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	42990	3540	22.85	24.20	1.365	62.9	1.006	-0.04	0.109	0.150
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	0.02	0.422	0.574
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.07	0.480	0.653
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.08	0.454	0.618
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	0.12	0.468	0.637
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.07	0.538	0.732
	LTE Band 42_Ant 8	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.05	0.439	0.597
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.04	0.232	0.238
	LTE Band 66_Ant 1	20M	QPSK	50	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.57	20.70	1.030			0.13	0.174	0.179
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.19	0.661	0.680
	LTE Band 66_Ant 1	20M	QPSK	50	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.57	20.70	1.030			0.06	0.502	0.517
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.04	0.034	0.035
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.57	20.70	1.030			0.17	0.026	0.027
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			0.06	0.268	0.276
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.57	20.70	1.030			0.01	0.201	0.207
	LTE Band 66_Ant 1	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			0.09	0.368	0.378
	LTE Band 66_Ant 1	20M	QPSK	50	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.57	20.70	1.030			-0.02	0.275	0.283
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			0.15	0.515	0.529
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.08	0.533	0.548
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			0.06	0.419	0.431
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			0.15	0.511	0.525
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.08	0.560	0.576
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	132572	1770	21.58	21.70	1.028			-0.05	0.627	0.645
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132047+132140	1717.5	21.37	21.70	1.079			0.03	0.598	0.645
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132072+132270	1720	21.45	21.70	1.059			0.06	0.591	0.626
	LTE Band 66_Ant 5	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			-0.18	0.175	0.254
	LTE Band 66_Ant 5	20M	QPSK	50	24	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.95	22.60	1.462			-0.08	0.159	0.232
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			0.18	0.232	0.336
	LTE Band 66_Ant 5	20M	QPSK	50	24	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.95	22.60	1.462			0.1	0.180	0.263
39	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			-0.09	0.487	0.706
	LTE Band 66_Ant 5	20M	QPSK	50	24	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.95	22.60	1.462			-0.09	0.401	0.586
	LTE Band 66_Ant 5	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			0.02	0.154	0.223
	LTE Band 66_Ant 5	20M	QPSK	50	24	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	132572	1770	20.95	22.60	1.462			-0.03	0.126	0.184
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			-0.16	0.435	0.630
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			-0.02	0.440	0.637
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			0.08	0.470	0.681
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			0	0.461	0.668
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			-0.04	0.448	0.649
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	132572	1770	21.99	23.60	1.449			0.17	0.463	0.671
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			0.18	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	22.69	24.20	1.416			0.03	0.001	0.001
40	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			0.02	0.096	0.137
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	22.69	24.20	1.416			0.01	0.078	0.110
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			0.04	0.058	0.083
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	22.69	24.20	1.416			-0.16	0.048	0.068
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.12	0.047	0.067
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	22.69	24.20	1.416			-0.08	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.03	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	133297	680.5	22.69	24.20	1.416			0.02	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			0.02	0.083	0.119
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			0.11	0.090	0.129



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LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.17	0.078	0.112
LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.04	0.091	0.130
LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.17	0.078	0.112
LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	133297	680.5	23.64	25.20	1.432			-0.07	0.092	0.132

## <5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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 n7_Ant 5	40M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.04	0.249	0.263
	FR1 n7_Ant 5	40M	BPSK	108	54	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	23.91	24.30	1.094	0.01	0.257	0.281
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.04	0.387	0.409
	FR1 n7_Ant 5	40M	BPSK	108	54	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	23.91	24.30	1.094	-0.06	0.370	0.405
41	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	-0.18	0.559	0.591
	FR1 n7_Ant 5	40M	BPSK	108	54	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	23.91	24.30	1.094	0.16	0.507	0.555
	FR1 n7_Ant 5	40M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	-0.13	0.087	0.092
	FR1 n7_Ant 5	40M	BPSK	108	54	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	507000	2535	23.91	24.30	1.094	-0.17	0.089	0.097
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	-0.1	0.422	0.446
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.1	0.411	0.434
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.17	0.399	0.422
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	-0.06	0.343	0.362
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.07	0.347	0.367
	FR1 n7_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	507000	2535	24.06	24.30	1.057	0.11	0.323	0.341
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.18	0.152	0.170
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.38	25.20	1.208	0.11	0.163	0.197
42	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.03	0.283	0.316
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.38	25.20	1.208	-0.01	0.252	0.304
	FR1 n12_Ant 1	15M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.11	0.193	0.216
	FR1 n12_Ant 1	15M	BPSK	36	22	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.38	25.20	1.208	0.04	0.196	0.237
	FR1 n12_Ant 1	15M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	0.16	0.148	0.165
	FR1 n12_Ant 1	15M	BPSK	36	22	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.38	25.20	1.208	0.17	0.133	0.161
	FR1 n12_Ant 1	15M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	0.06	0.103	0.115
	FR1 n12_Ant 1	15M	BPSK	36	22	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	141500	707.5	24.38	25.20	1.208	0.18	0.111	0.134
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.19	0.256	0.286
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	0.17	0.271	0.303
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.16	0.257	0.287
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	-0.08	0.204	0.228
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	0.03	0.205	0.229
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	141500	707.5	24.72	25.20	1.117	0.12	0.215	0.240
	FR1 n25_Ant 1	40M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.17	0.229	0.272
	FR1 n25_Ant 1	40M	BPSK	108	54	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.17	0.247	0.293
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.02	0.514	0.609
	FR1 n25_Ant 1	40M	BPSK	108	54	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.02	0.485	0.575
	FR1 n25_Ant 1	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.07	0.054	0.064
	FR1 n25_Ant 1	40M	BPSK	108	54	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.03	0.069	0.082
	FR1 n25_Ant 1	40M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0	0.276	0.327
	FR1 n25_Ant 1	40M	BPSK	108	54	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.09	0.288	0.342
	FR1 n25_Ant 1	40M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.16	0.383	0.454
	FR1 n25_Ant 1	40M	BPSK	108	54	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.03	0.380	0.451
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.03	0.409	0.485
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.1	0.415	0.492
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.03	0.220	0.261
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.06	0.328	0.389
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	0.12	0.323	0.383
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	376500	1882.5	23.06	23.80	1.186	-0.03	0.321	0.381





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	FR1 n25_Ant 5	40M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.11	0.182	0.232
	FR1 n25_Ant 5	40M	BPSK	108	54	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.82	22.90	1.282	0.08	0.169	0.217
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.07	0.262	0.334
	FR1 n25_Ant 5	40M	BPSK	108	54	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.82	22.90	1.282	0.09	0.246	0.315
43	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.13	0.544	0.693
	FR1 n25_Ant 5	40M	BPSK	108	54	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.82	22.90	1.282	-0.12	0.503	0.645
	FR1 n25_Ant 5	40M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.12	0.139	0.177
	FR1 n25_Ant 5	40M	BPSK	108	54	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	374000	1870	21.82	22.90	1.282	-0.11	0.120	0.154
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	-0.12	0.430	0.548
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	-0.1	0.456	0.581
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.16	0.337	0.429
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	-0.09	0.371	0.472
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	-0.09	0.356	0.453
	FR1 n25_Ant 5	40M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	374000	1870	21.85	22.90	1.274	0.08	0.365	0.465
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.06	0.235	0.275
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.37	25.20	1.211	0.1	0.226	0.274
44	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	-0.03	0.385	0.451
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.37	25.20	1.211	0.1	0.372	0.450
	FR1 n26_Ant 1	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	-0.07	0.276	0.324
	FR1 n26_Ant 1	20M	BPSK	50	28	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.37	25.20	1.211	0.12	0.268	0.324
	FR1 n26_Ant 1	20M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.08	0.150	0.176
	FR1 n26_Ant 1	20M	BPSK	50	28	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.37	25.20	1.211	0.15	0.141	0.171
	FR1 n26_Ant 1	20M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.02	0.230	0.270
	FR1 n26_Ant 1	20M	BPSK	50	28	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	166300	831.5	24.37	25.20	1.211	-0.05	0.217	0.263
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	-0.11	0.360	0.422
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.03	0.327	0.383
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.05	0.230	0.270
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	-0.14	0.266	0.312
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	-0.17	0.252	0.295
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	166300	831.5	24.51	25.20	1.172	0.05	0.278	0.326
	FR1 n66_Ant 1	20M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.13	0.132	0.153
	FR1 n66_Ant 1	20M	BPSK	50	28	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.76	21.60	1.213	0.05	0.128	0.155
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.13	0.369	0.429
	FR1 n66_Ant 1	20M	BPSK	50	28	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.76	21.60	1.213	0	0.333	0.404
	FR1 n66_Ant 1	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	-0.05	0.023	0.027
	FR1 n66_Ant 1	20M	BPSK	50	28	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.76	21.60	1.213	-0.01	0.020	0.024
	FR1 n66_Ant 1	20M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.02	0.193	0.224
	FR1 n66_Ant 1	20M	BPSK	50	28	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.76	21.60	1.213	0.06	0.178	0.216
	FR1 n66_Ant 1	20M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.1	0.187	0.217
	FR1 n66_Ant 1	20M	BPSK	50	28	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	20.76	21.60	1.213	-0.05	0.177	0.215
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	-0.03	0.317	0.368
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.09	0.330	0.383
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	-0.02	0.188	0.218
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0.08	0.258	0.300
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	0	0.252	0.293
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	354000	1770	20.95	21.60	1.161	-0.12	0.259	0.301
	FR1 n66_Ant 5	20M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.08	0.183	0.213
	FR1 n66_Ant 5	20M	BPSK	50	28	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.90	23.60	1.175	-0.16	0.195	0.229
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	0.18	0.275	0.320
	FR1 n66_Ant 5	20M	BPSK	50	28	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.90	23.60	1.175	-0.08	0.262	0.308
45	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	0	0.612	0.712
	FR1 n66_Ant 5	20M	BPSK	50	28	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.90	23.60	1.175	0.13	0.588	0.691
	FR1 n66_Ant 5	20M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.02	0.149	0.173
	FR1 n66_Ant 5	20M	BPSK	50	28	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	354000	1770	22.90	23.60	1.175	0.04	0.138	0.162
	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.18	0.479	0.558
	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.07	0.458	0.533



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	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.14	0.410	0.477
	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	-0.07	0.397	0.462
	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	0.1	0.398	0.463
	FR1 n66_Ant 5	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	354000	1770	22.94	23.60	1.164	0.05	0.388	0.452
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.18	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.61	25.20	1.146	0.12	0.038	0.044
46	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	-0.04	0.093	0.105
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.61	25.20	1.146	0.02	0.069	0.079
	FR1 n71_Ant 1	20M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.04	0.043	0.049
	FR1 n71_Ant 1	20M	BPSK	50	28	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.61	25.20	1.146	-0.12	0.052	0.060
	FR1 n71_Ant 1	20M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.15	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.61	25.20	1.146	-0.07	0.035	0.040
	FR1 n71_Ant 1	20M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.1	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	134600	673	24.61	25.20	1.146	0.08	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.07	0.084	0.095
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.1	0.086	0.097
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	-0.09	0.088	0.100
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.02	0.074	0.084
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0	0.071	0.080
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	134600	673	24.66	25.20	1.132	0.02	0.078	0.088
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.08	0.304	0.308
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	23.83	24.10	1.064	-0.03	0.256	0.272
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.06	0.400	0.405
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	23.83	24.10	1.064	0.18	0.380	0.404
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	0.02	0.698	0.706
	FR1 n41_Ant 5	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	23.83	24.10	1.064	0.01	0.625	0.665
	FR1 n41_Ant 5	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.14	0.119	0.120
	FR1 n41_Ant 5	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	509202	2546.01	23.83	24.10	1.064	0.06	0.129	0.137
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.13	0.618	0.625
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.11	0.589	0.596
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.05	0.652	0.660
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	-0.15	0.657	0.665
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	0.04	0.646	0.653
	FR1 n41_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	509202	2546.01	24.05	24.10	1.012	0.08	0.566	0.573
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	25.70	27.00	1.349	0.18	0.513	0.692
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.02	0.142	0.150
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.92	21.00	1.019	-0.03	0.067	0.068
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.06	0.609	0.644
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.92	21.00	1.019	-0.06	0.283	0.288
	FR1 n41_Ant 2	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	0.08	0.258	0.273
	FR1 n41_Ant 2	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.92	21.00	1.019	-0.11	0.151	0.154
	FR1 n41_Ant 2	100M	BPSK	1	1	Top side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.17	0.401	0.424
	FR1 n41_Ant 2	100M	BPSK	135	69	Top side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.92	21.00	1.019	-0.02	0.234	0.238
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	0.12	0.386	0.408
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.11	0.370	0.391
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.01	0.292	0.309
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	0.14	0.605	0.639
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	0.12	0.578	0.611
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	518598	2592.99	21.76	22.00	1.057	-0.03	0.551	0.582
	FR1 n41_Ant 3	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.01	0.203	0.229
	FR1 n41_Ant 3	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.38	22.00	1.153	-0.06	0.102	0.118
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.1	0.529	0.598
	FR1 n41_Ant 3	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.38	22.00	1.153	0.12	0.187	0.216
47	FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	0.18	0.645	0.729
	FR1 n41_Ant 3	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.38	22.00	1.153	0.02	0.286	0.330
	FR1 n41_Ant 3	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.09	0.001	0.001



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FR1 n41_Ant 3	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.38	22.00	1.153	-0.17	0.001	0.001
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.09	0.624	0.705
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	0.18	0.569	0.643
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.07	0.528	0.597
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	0.06	0.444	0.502
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.05	0.626	0.707
FR1 n41_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	518598	2592.99	21.47	22.00	1.130	-0.05	0.616	0.696
FR1 n41_Ant 4	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.07	0.090	0.098
FR1 n41_Ant 4	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.56	21.00	1.107	-0.11	0.082	0.091
FR1 n41_Ant 4	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.11	0.102	0.111
FR1 n41_Ant 4	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.56	21.00	1.107	-0.03	0.098	0.108
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	0.09	0.177	0.192
FR1 n41_Ant 4	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.56	21.00	1.107	0.07	0.155	0.172
FR1 n41_Ant 4	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.16	0.001	0.001
FR1 n41_Ant 4	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	518598	2592.99	20.56	21.00	1.107	-0.17	0.001	0.001
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.13	0.145	0.157
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.1	0.140	0.152
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.04	0.142	0.154
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	0.03	0.166	0.180
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	-0.08	0.163	0.177
FR1 n41_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	518598	2592.99	21.65	22.00	1.084	0.13	0.175	0.190
FR1 n77_Ant 8	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.66	21.50	1.213	0.15	0.202	0.245
FR1 n77_Ant 8	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.01	0.238	0.302
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.66	21.50	1.213	-0.04	0.280	0.340
FR1 n77_Ant 8	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	-0.19	0.251	0.318
FR1 n77_Ant 8	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.66	21.50	1.213	0.06	0.327	0.397
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.19	0.339	0.430
FR1 n77_Ant 8	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.66	21.50	1.213	-0.1	0.181	0.220
FR1 n77_Ant 8	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.14	0.143	0.181
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	-0.14	0.341	0.432
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.03	0.317	0.402
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.04	0.325	0.412
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.04	0.311	0.394
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.07	0.381	0.483
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	656000	3840	20.47	21.50	1.268	0.13	0.353	0.447
FR1 n77_HPUE_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	23.02	24.50	1.406	-0.03	0.332	0.467
FR1 n77_Ant 8	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	-0.04	0.113	0.146
FR1 n77_Ant 8	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.26	21.50	1.330	0.12	0.095	0.126
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	-0.09	0.437	0.563
FR1 n77_Ant 8	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.26	21.50	1.330	0.07	0.348	0.463
FR1 n77_Ant 8	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	-0.03	0.333	0.429
FR1 n77_Ant 8	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.26	21.50	1.330	0.13	0.319	0.424
FR1 n77_Ant 8	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.15	0.094	0.121
FR1 n77_Ant 8	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.26	21.50	1.330	-0.11	0.045	0.060
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.18	0.290	0.374
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.18	0.233	0.300
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.14	0.300	0.386
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.01	0.308	0.397
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	0.06	0.335	0.432
FR1 n77_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	633332	3499.98	20.40	21.50	1.288	-0.02	0.325	0.419
FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	23.46	24.50	1.271	-0.13	0.411	0.522
FR1 n77_Ant 9	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.05	0.053	0.061
FR1 n77_Ant 9	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.17	17.90	1.183	0.04	0.048	0.057
FR1 n77_Ant 9	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.13	0.217	0.251
FR1 n77_Ant 9	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.17	17.90	1.183	-0.05	0.211	0.250
FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	-0.11	0.360	0.416





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	FR1 n77_Ant 9	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.17	17.90	1.183	-0.17	0.340	0.402
	FR1 n77_Ant 9	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	-0.08	0.031	0.036
	FR1 n77_Ant 9	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	17.17	17.90	1.183	0.18	0.001	0.001
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	-0.19	0.313	0.362
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.06	0.260	0.301
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.04	0.286	0.331
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.01	0.343	0.397
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	-0.18	0.333	0.385
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	656000	3840	17.27	17.90	1.156	0.08	0.357	0.413
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	-0.07	0.020	0.024
	FR1 n77_Ant 9	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	16.99	17.90	1.233	0.18	0.019	0.023
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	-0.08	0.079	0.094
	FR1 n77_Ant 9	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	16.99	17.90	1.233	-0.05	0.074	0.091
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	-0.07	0.122	0.145
	FR1 n77_Ant 9	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	16.99	17.90	1.233	-0.06	0.113	0.139
	FR1 n77_Ant 9	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	0.03	0.000	0.000
	FR1 n77_Ant 9	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	16.99	17.90	1.233	0.03	0.000	0.000
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	0.19	0.120	0.143
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	0.16	0.150	0.179
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	-0.1	0.136	0.162
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	-0.16	0.153	0.182
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	0.12	0.149	0.177
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	633332	3499.98	17.14	17.90	1.191	0.1	0.139	0.166
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	-0.04	0.044	0.056
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.26	19.50	1.330	0.05	0.042	0.056
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	0	0.153	0.194
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.26	19.50	1.330	0	0.149	0.198
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	-0.15	0.345	0.436
	FR1 n77_Ant 4	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.26	19.50	1.330	-0.12	0.316	0.420
	FR1 n77_Ant 4	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	-0.15	0.001	0.001
	FR1 n77_Ant 4	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	662000	3930	18.26	19.50	1.330	0.06	0.001	0.001
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	0.09	0.295	0.373
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	0.11	0.267	0.338
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	-0.03	0.339	0.429
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	-0.16	0.323	0.409
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	0	0.305	0.386
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	662000	3930	18.48	19.50	1.265	0.03	0.322	0.407
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.17	0.045	0.059
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.22	19.50	1.343	-0.03	0.042	0.056
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.15	0.214	0.278
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.22	19.50	1.343	-0.13	0.187	0.251
48	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.15	0.565	0.735
	FR1 n77_Ant 4	100M	BPSK	135	69	Right side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.22	19.50	1.343	-0.09	0.344	0.462
	FR1 n77_Ant 4	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.17	0.001	0.001
	FR1 n77_Ant 4	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.22	19.50	1.343	-0.02	0.001	0.001
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.02	0.409	0.532
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	0.17	0.418	0.543
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.09	0.417	0.542
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.12	0.432	0.562
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	0	0.391	0.508
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	633332	3499.98	18.36	19.50	1.300	-0.06	0.393	0.511
	FR1 n77_Ant 3	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	0	0.065	0.083
	FR1 n77_Ant 3	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.22	20.30	1.282	-0.04	0.097	0.124
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.09	0.320	0.408
	FR1 n77_Ant 3	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.22	20.30	1.282	-0.16	0.248	0.318
	FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	0.06	0.416	0.530



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**Report No. : FA411108**

FR1 n77_Ant 3	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.22	20.30	1.282	0.05	0.401	0.514
FR1 n77_Ant 3	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	0.04	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	656000	3840	19.22	20.30	1.282	-0.05	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.17	0.346	0.441
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.15	0.212	0.270
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.13	0.371	0.472
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.13	0.343	0.437
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	0.1	0.405	0.516
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	656000	3840	19.25	20.30	1.274	-0.09	0.414	0.527
FR1 n77_Ant 3	100M	BPSK	1	1	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.14	0.084	0.105
FR1 n77_Ant 3	100M	BPSK	135	69	Front	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.25	20.30	1.274	-0.17	0.073	0.093
FR1 n77_Ant 3	100M	BPSK	1	1	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	0.07	0.162	0.203
FR1 n77_Ant 3	100M	BPSK	135	69	Back	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.25	20.30	1.274	0.13	0.134	0.171
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	0.01	0.268	0.336
FR1 n77_Ant 3	100M	BPSK	135	69	Left side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.25	20.30	1.274	0.11	0.219	0.279
FR1 n77_Ant 3	100M	BPSK	1	1	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.06	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	135	69	Bottom side	10mm	Sample 1	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.25	20.30	1.274	-0.08	0.001	0.001
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 3	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	0.07	0.209	0.262
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 5	Battery 1	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.04	0.147	0.184
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 2	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.04	0.231	0.289
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 3	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.11	0.256	0.321
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 4	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	0.14	0.234	0.293
FR1 n77_Ant 3	100M	BPSK	1	1	Left side	10mm	Sample 1	Battery 5	Wlan Off	DSI 3	633332	3499.98	19.32	20.30	1.253	-0.13	0.232	0.291

**<WLAN SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.19	0.093	0.117
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.15	0.548	0.688
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 6	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.12	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.16	0.374	0.470
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 6	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.12	0.140	0.176
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	10mm	Ant 6	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.07	0.040	0.050
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 3	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.02	0.436	0.548
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 5	Battery 1	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.05	0.476	0.598
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 2	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.13	0.467	0.586
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 3	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.08	0.447	0.561
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 4	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.16	0.437	0.549
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 5	Power table 2	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.01	0.456	0.573
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6	Sample 1	Battery 1	Power table 2	DBS	1	2412	15.60	16.00	1.096	85.60	1.168	-0.12	0.278	0.355
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0	0.046	0.055
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.11	0.108	0.130
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.03	0.323	0.387
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.13	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.16	0.078	0.094
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	10mm	Ant 7	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 3	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.02	0.277	0.332
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 5	Battery 1	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.06	0.275	0.330
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 2	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.09	0.253	0.303
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 3	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.14	0.298	0.357
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 4	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.1	0.291	0.349
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 5	Power table 2	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.09	0.285	0.342



**FCC SAR TEST REPORT**

**Report No. : FA411108**

	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 1	Power table 2	DBS	1	2412	15.80	16.00	1.047	85.60	1.168	0.01	0.088	0.107
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.07	0.203	0.260
49	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.13	0.921	1.179
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	6	2437	20.00	21.00	1.259	85.71	1.167	0.11	0.786	1.155
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	11	2462	20.20	21.00	1.202	85.71	1.167	-0.08	0.695	0.975
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.1	0.157	0.201
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.01	0.364	0.466
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.09	0.287	0.367
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.06	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 3	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.17	0.716	0.916
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 5	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.01	0.796	1.019
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 2	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.11	0.608	0.778
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 3	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	0.14	0.652	0.834
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 4	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	0.03	0.656	0.839
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 5	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	0.1	0.664	0.850
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	DBS	1	2412	15.30	16.00	1.175	85.84	1.165	0.06	0.275	0.376
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.16	0.087	0.112
50	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.08	0.617	0.792
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.03	0.451	0.579
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.17	0.406	0.521
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.15	0.547	0.702
	WLAN5GHz	802.11n-HT40 MCS0	Bottom Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.16	0.437	0.561
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.05	0.451	0.579
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.06	0.259	0.333
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.13	0.593	0.761
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.01	0.592	0.760
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	-0.11	0.559	0.718
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 2	Non-DBS	46	5230	17.60	18.00	1.096	85.39	1.171	0.19	0.565	0.725
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	DBS	42	5210	13.70	14.00	1.072	86.15	1.161	-0.06	0.288	0.358
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	-0.18	0.105	0.132
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	-0.06	0.293	0.367
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.02	0.344	0.431
51	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.13	0.563	0.705
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	151	5755	15.50	16.00	1.122	85.51	1.169	0.01	0.531	0.696
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	159	5795	15.60	16.00	1.096	85.51	1.169	0.11	0.487	0.624
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.13	0.063	0.079
	WLAN5GHz	802.11ac-VHT80 MCS0	Bottom Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.12	0.015	0.019
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.07	0.490	0.614
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.08	0.365	0.457
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0.19	0.327	0.410
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	-0.06	0.384	0.481
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	0	0.403	0.505
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 2	Non-DBS	155	5775	15.70	16.00	1.072	85.51	1.169	-0.03	0.407	0.510
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 2	DBS	155	5775	10.50	11.00	1.122	86.03	1.162	0.13	0.275	0.359

**<Bluetooth SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	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	1Mbps	Front	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.12	<0.001	<0.001
52	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.12	0.020	0.024
	Bluetooth	1Mbps	Left Side	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	0.02	<0.001	<0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	0.12	<0.001	<0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	0.02	<0.001	<0.001
	Bluetooth	1Mbps	Bottom Side	10mm	Ant 6	Sample 1	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.03	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 3	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	0	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 5	Battery 1	0	2402	5.98	6.50	1.127	76.86	1.084	-0.1	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 1	Battery 2	0	2402	5.98	6.50	1.127	76.86	1.084	0.05	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 1	Battery 3	0	2402	5.98	6.50	1.127	76.86	1.084	0	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 1	Battery 4	0	2402	5.98	6.50	1.127	76.86	1.084	0.07	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 6	Sample 1	Battery 5	0	2402	5.98	6.50	1.127	76.86	1.084	0.15	<0.001	<0.001
	Bluetooth	1Mbps	Front	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.13	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.01	<0.001	<0.001
	Bluetooth	1Mbps	Left Side	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.11	<0.001	<0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.03	<0.001	<0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.05	<0.001	<0.001
	Bluetooth	1Mbps	Bottom Side	10mm	Ant 7	Sample 1	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	0.14	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 3	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.01	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 5	Battery 1	39	2441	6.45	6.50	1.012	76.80	1.085	-0.12	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 1	Battery 2	39	2441	6.45	6.50	1.012	76.80	1.085	0.07	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 1	Battery 3	39	2441	6.45	6.50	1.012	76.80	1.085	0.09	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 1	Battery 4	39	2441	6.45	6.50	1.012	76.80	1.085	0.04	<0.001	<0.001
	Bluetooth	1Mbps	Back	10mm	Ant 7	Sample 1	Battery 5	39	2441	6.45	6.50	1.012	76.80	1.085	0.11	<0.001	<0.001



14.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Accessories	Wlan On / Off	Power State	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)
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	-0.04	0.088	0.108
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	0.04	0.124	0.152
53	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	-0.14	0.310	0.381
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	0.02	0.214	0.263
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	0.09	0.275	0.338
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	-0.14	0.295	0.362
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	-0.07	0.296	0.363
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	-0.19	0.285	0.350
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	128	824.2	30.11	31.00	1.227	0.11	0.292	0.358
	GSM1900_Ant 1	GPRS (4 Tx slots)	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.16	0.224	0.242
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	-0.08	0.421	0.455
54	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	-0.06	0.620	0.670
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	-0.05	0.582	0.629
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	-0.07	0.597	0.646
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.18	0.606	0.655
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.03	0.576	0.623
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.01	0.594	0.642
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	-0.14	0.606	0.655
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.15	0.618	0.668



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Accessories	Wlan On / Off	Power State	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	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	-0.18	0.123	0.159
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	0.11	0.242	0.312
55	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	-0.07	0.396	0.511
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	0.08	0.394	0.509
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	-0.1	0.390	0.504
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	0.17	0.382	0.493
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	-0.01	0.383	0.495
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	0.09	0.387	0.500
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	9262	1852.4	23.79	24.90	1.291	-0.04	0.390	0.504
	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.1	0.172	0.196
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.04	0.472	0.538
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.02	0.702	0.800
56	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	1312	1712.4	24.18	25.00	1.208	-0.15	0.719	0.868
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	1413	1732.6	24.33	25.00	1.167	-0.01	0.717	0.837
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.06	0.699	0.797
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.1	0.695	0.792
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.17	0.704	0.803
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.13	0.706	0.805
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.15	0.696	0.794
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.17	0.697	0.795
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan On	DSI 1	1312	1712.4	22.49	23.20	1.178	-0.04	0.462	0.544
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	0.02	0.205	0.225
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	0.17	0.274	0.301
57	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	-0.03	0.408	0.448
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	-0.1	0.385	0.423
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	-0.06	0.384	0.422
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	0.15	0.394	0.433
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	-0.01	0.398	0.437
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	-0.1	0.400	0.440
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	4233	846.6	24.79	25.20	1.099	0.13	0.394	0.433





<LTE SAR>

Table with columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB offset, Test Position, Gap (mm), Sample, Battery, Accessories, Wlan On / Off, Power State, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Duty Cycle %, Duty Cycle Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg). Rows include various LTE bands (7, 12, 25, 26) and configurations.



**FCC SAR TEST REPORT**

**Report No. : FA411108**

	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0	0.261	0.370
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	26865	831.5	22.72	24.20	1.406			0.15	0.230	0.323
61	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0.03	0.379	0.537
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0.03	0.332	0.470
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			-0.03	0.378	0.535
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0.12	0.312	0.442
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0.09	0.314	0.445
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			0.15	0.303	0.429
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	26865	831.5	23.69	25.20	1.416			-0.13	0.346	0.490
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	20450+20549	874	23.57	25.20	1.455			0.06	0.336	0.489
	LTE Band 41_Ant 5	20M	QPSK	1	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.1	0.087	0.097
	LTE Band 41_Ant 5	20M	QPSK	50	24	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	40620	2593	23.10	23.50	1.096	62.9	1.006	0.06	0.060	0.066
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.16	0.162	0.180
	LTE Band 41_Ant 5	20M	QPSK	50	24	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	40620	2593	23.10	23.50	1.096	62.9	1.006	0.13	0.120	0.132
62	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	-0.09	0.230	0.255
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.11	0.187	0.208
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.11	0.184	0.204
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	-0.01	0.205	0.228
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.09	0.228	0.253
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	0.02	0.216	0.240
	LTE Band 41_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	40620	2593	24.07	24.50	1.104	62.9	1.006	-0.13	0.212	0.235
	LTE Band 38C_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	37850+38048	2580	23.85	24.50	1.161	62.9	1.006	0.05	0.185	0.216
	LTE Band 41C_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	39750+39948	2506	23.87	24.50	1.156	62.9	1.006	0.01	0.175	0.204
	LTE Band 42_Ant 8	20M	QPSK	1	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.07	0.065	0.088
	LTE Band 42_Ant 8	20M	QPSK	50	24	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	42990	3540	22.85	24.20	1.365	62.9	1.006	-0.01	0.054	0.074
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	0.15	0.178	0.242
	LTE Band 42_Ant 8	20M	QPSK	50	24	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	42990	3540	22.85	24.20	1.365	62.9	1.006	0.14	0.135	0.185
63	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.1	0.218	0.297
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.04	0.208	0.283
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	0.18	0.190	0.258
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	0	0.160	0.218
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	0.18	0.211	0.287
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	-0.02	0.195	0.265
	LTE Band 42_Ant 8	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	42990	3540	23.89	25.20	1.352	62.9	1.006	0.11	0.161	0.219
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	23.70	24.30	1.148			-0.07	0.189	0.217
	LTE Band 66_Ant 1	20M	QPSK	50	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	22.46	23.30	1.213			-0.16	0.134	0.163
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	23.70	24.30	1.148			0.14	0.551	0.633
	LTE Band 66_Ant 1	20M	QPSK	50	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	22.46	23.30	1.213			0.12	0.443	0.538
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132572	1770	23.70	24.30	1.148			0.12	0.980	1.125
64	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			0.05	1.010	1.181
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225			-0.17	0.902	1.105
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			-0.1	0.714	0.835
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			-0.09	0.742	0.868
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			-0.17	0.576	0.674
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			0.15	0.708	0.828
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			0.19	0.780	0.912
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169			-0.09	0.879	1.028
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan On	DSI 1	132322	1745	21.90	22.60	1.175			0.1	0.497	0.584
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132047+132140	1717.5	23.53	24.30	1.194			0.05	0.899	1.073
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132072+132270	1720	23.65	24.30	1.161			0.06	0.897	1.042
	LTE Band 66_Ant 5	20M	QPSK	1	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			0.02	0.154	0.204
	LTE Band 66_Ant 5	20M	QPSK	50	24	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	22.22	23.50	1.343			-0.06	0.140	0.188
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			0	0.246	0.326
	LTE Band 66_Ant 5	20M	QPSK	50	24	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	132572	1770	22.22	23.50	1.343			-0.11	0.159	0.213
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			-0.04	0.201	0.266
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back																





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	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			-0.14	0.184	0.244
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			0.04	0.195	0.258
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			0.03	0.165	0.219
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			0.14	0.194	0.257
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	132572	1770	23.28	24.50	1.324			-0.16	0.182	0.241
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			-0.11	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	133297	680.5	22.69	24.20	1.416			0.05	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			0.04	0.078	0.112
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	133297	680.5	22.69	24.20	1.416			-0.02	0.054	0.076
65	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			-0.02	0.215	0.308
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			-0.08	0.185	0.265
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			0.13	0.203	0.291
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			-0.07	0.173	0.248
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			0.18	0.205	0.294
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			-0.04	0.175	0.251
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	133297	680.5	23.64	25.20	1.432			0.11	0.208	0.298



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Accessories	Wlan On / Off	Power State	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 n7_Ant 5	40M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	0.12	0.172	0.230
	FR1 n7_Ant 5	40M	BPSK	108	54	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	507000	2535	22.23	23.60	1.371	0.04	0.146	0.200
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	-0.01	0.311	0.417
	FR1 n7_Ant 5	40M	BPSK	108	54	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	507000	2535	22.23	23.60	1.371	-0.01	0.215	0.295
66	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	-0.02	0.334	0.447
	FR1 n7_Ant 5	40M	BPSK	108	54	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	507000	2535	22.23	23.60	1.371	-0.05	0.284	0.389
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	0.03	0.294	0.394
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	0.06	0.287	0.384
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	0.03	0.303	0.406
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	-0.17	0.296	0.397
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	0.13	0.308	0.413
	FR1 n7_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	507000	2535	22.33	23.60	1.340	-0.17	0.300	0.402
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	141500	707.5	24.72	25.20	1.117	-0.07	0.135	0.151
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.02	0.147	0.178
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	141500	707.5	24.72	25.20	1.117	-0.03	0.213	0.238
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	0.14	0.225	0.272
67	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.11	0.275	0.332
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.17	0.261	0.315
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	0.15	0.237	0.286
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.1	0.242	0.292
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.17	0.268	0.324
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	0.11	0.269	0.325
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	141500	707.5	24.38	25.20	1.208	-0.18	0.270	0.326
	FR1 n25_Ant 1	40M	BPSK	1	1	Front	15mm	Sample 1	Battery 1		Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.14	0.159	0.180
	FR1 n25_Ant 1	40M	BPSK	108	54	Front	15mm	Sample 1	Battery 1		Wlan Off	DSI 1	376500	1882.5	24.45	25.20	1.189	0.06	0.154	0.183
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	15mm	Sample 1	Battery 1		Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.09	0.300	0.339
	FR1 n25_Ant 1	40M	BPSK	108	54	Back	15mm	Sample 1	Battery 1		Wlan Off	DSI 1	376500	1882.5	24.45	25.20	1.189	0.13	0.273	0.324
68	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.03	0.490	0.554
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.11	0.474	0.536
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.1	0.471	0.532
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	0	0.474	0.536
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	0.05	0.482	0.545
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	0.04	0.462	0.522
	FR1 n25_Ant 1	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	376500	1882.5	24.67	25.20	1.130	-0.15	0.470	0.531
	FR1 n25_Ant 5	40M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0.17	0.132	0.147
	FR1 n25_Ant 5	40M	BPSK	108	54	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	374000	1870	24.46	25.20	1.186	-0.04	0.129	0.153
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	-0.06	0.250	0.279
	FR1 n25_Ant 5	40M	BPSK	108	54	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	374000	1870	24.46	25.20	1.186	-0.17	0.228	0.270
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0.04	0.409	0.456
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0.15	0.395	0.440
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0	0.393	0.438
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	-0.04	0.395	0.440
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0.16	0.403	0.449
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	-0.09	0.386	0.430
	FR1 n25_Ant 5	40M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	374000	1870	24.73	25.20	1.114	0.02	0.392	0.437
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	166300	831.5	24.51	25.20	1.172	-0.17	0.137	0.161
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	0.12	0.142	0.172
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	166300	831.5	24.51	25.20	1.172	-0.01	0.185	0.217
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	0.02	0.199	0.241
69	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.04	0.310	0.375
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.05	0.294	0.356
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.13	0.284	0.344



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	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	0.09	0.300	0.363
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.11	0.292	0.353
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.11	0.284	0.344
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	166300	831.5	24.37	25.20	1.211	-0.07	0.290	0.351
	FR1 n66_Ant 1	20M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	-0.03	0.182	0.211
	FR1 n66_Ant 1	20M	BPSK	50	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	349000	1745	23.28	23.50	1.052	0.09	0.170	0.179
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	-0.14	0.530	0.616
	FR1 n66_Ant 1	20M	BPSK	50	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	349000	1745	23.28	23.50	1.052	-0.02	0.497	0.523
70	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	0.02	0.760	0.883
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	344000	1720	23.16	24.00	1.213	0.02	0.721	0.875
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	354000	1770	23.31	24.00	1.172	0.03	0.734	0.860
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	0.1	0.738	0.857
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	-0.08	0.728	0.846
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	-0.16	0.655	0.761
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	0.05	0.673	0.782
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	0	0.691	0.803
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	349000	1745	23.35	24.00	1.161	0.07	0.677	0.786
	FR1 n66_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan On	DSI 1	349000	1745	21.67	22.30	1.156	-0.04	0.383	0.443
	FR1 n66_Ant 5	20M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.06	0.103	0.124
	FR1 n66_Ant 5	20M	BPSK	50	28	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	354000	1770	24.24	25.20	1.247	0.05	0.111	0.138
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.13	0.180	0.216
	FR1 n66_Ant 5	20M	BPSK	50	28	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	354000	1770	24.24	25.20	1.247	0.15	0.165	0.206
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.11	0.264	0.317
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.05	0.201	0.242
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	0.12	0.218	0.262
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.13	0.228	0.274
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	0	0.252	0.303
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	-0.18	0.244	0.293
	FR1 n66_Ant 5	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	354000	1770	24.40	25.20	1.202	0.09	0.229	0.275
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	0.08	0.001	0.001
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	134600	673	24.61	25.20	1.146	0.01	0.027	0.031
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	-0.03	0.070	0.079
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	134600	673	24.61	25.20	1.146	0.03	0.049	0.056
71	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	0	0.262	0.297
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	-0.08	0.246	0.279
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	-0.08	0.252	0.285
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	0.1	0.255	0.289
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	-0.18	0.216	0.245
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	0.1	0.210	0.238
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	134600	673	24.66	25.20	1.132	0.12	0.226	0.256
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.08	0.185	0.241
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	23.83	25.20	1.371	-0.17	0.157	0.215
72	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	-0.04	0.358	0.467
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	23.83	25.20	1.371	-0.03	0.317	0.435
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.12	0.330	0.430
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.14	0.337	0.439
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.11	0.336	0.438
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	-0.05	0.266	0.347
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.18	0.339	0.442
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	0.14	0.334	0.435
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	509202	2546.01	24.05	25.20	1.303	-0.17	0.346	0.451
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	25.70	27.00	1.349	-0.16	0.285	0.384
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.05	0.068	0.072
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	20.91	21.00	1.021	0.01	0.032	0.033
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.04	0.292	0.309
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	20.91	21.00	1.021	0.1	0.112	0.114



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	FR1 n41_Ant 2	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.09	0.240	0.254
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.17	0.186	0.197
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	0.04	0.177	0.187
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.01	0.140	0.148
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	-0.08	0.290	0.306
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	0.05	0.277	0.293
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	518598	2592.99	21.76	22.00	1.057	0.06	0.265	0.280
	FR1 n41_Ant 3	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	-0.08	0.052	0.059
	FR1 n41_Ant 3	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.38	22.00	1.153	0.13	0.026	0.030
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	-0.11	0.136	0.154
	FR1 n41_Ant 3	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	20.38	22.00	1.452	0.12	0.048	0.070
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	-0.1	0.125	0.141
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	0.03	0.089	0.101
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	0.18	0.105	0.119
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	0.16	0.070	0.079
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	-0.1	0.099	0.112
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	0.07	0.101	0.114
	FR1 n41_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	518598	2592.99	21.47	22.00	1.130	0.18	0.096	0.108
	FR1 n41_Ant 4	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	0.01	0.038	0.041
	FR1 n41_Ant 4	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	20.56	21.00	1.107	-0.15	0.035	0.039
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	0.19	0.049	0.053
	FR1 n41_Ant 4	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	518598	2592.99	20.56	21.00	1.107	0.07	0.041	0.045
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	-0.13	0.058	0.063
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	-0.18	0.044	0.048
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	0.03	0.042	0.046
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	-0.15	0.057	0.062
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	-0.15	0.055	0.060
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	0.11	0.055	0.060
	FR1 n41_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	518598	2592.99	21.65	22.00	1.084	-0.08	0.052	0.056
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.17	0.098	0.105
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	22.40	22.90	1.122	-0.08	0.115	0.129
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.04	0.136	0.145
	FR1 n77_Ant 8	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	22.40	22.90	1.122	-0.08	0.122	0.137
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	0.17	0.268	0.287
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	0.18	0.114	0.122
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.04	0.203	0.217
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.08	0.134	0.143
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.13	0.196	0.210
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	-0.13	0.193	0.206
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	656000	3840	22.61	22.90	1.069	0.06	0.222	0.237
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	25.48	25.90	1.102	-0.03	0.248	0.273
	FR1 n77_Ant 8	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.03	0.059	0.064
	FR1 n77_Ant 8	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	22.28	22.90	1.153	0.08	0.049	0.057
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.07	0.226	0.247
	FR1 n77_Ant 8	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	22.28	22.90	1.153	0.05	0.180	0.208
73	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	0.16	0.410	0.447
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.12	0.322	0.351
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	0.03	0.269	0.294
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.16	0.282	0.308
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.02	0.289	0.315
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	0.15	0.315	0.344
	FR1 n77_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	633332	3499.98	22.52	22.90	1.091	-0.09	0.305	0.333
	FR1 n77_HPUE_Ant 8	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	25.38	25.90	1.127	-0.15	0.360	0.406
	FR1 n77_Ant 9	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.05	0.046	0.051
	FR1 n77_Ant 9	100M	BPSK	135	0	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.26	20.80	1.132	-0.08	0.042	0.048
	FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.07	0.200	0.220



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FR1 n77_Ant 9	100M	BPSK	135	0	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.26	20.80	1.132	0.05	0.182	0.206
FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.05	0.134	0.147
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.03	0.080	0.088
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.15	0.106	0.116
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.02	0.098	0.108
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.07	0.130	0.143
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.16	0.144	0.158
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.13	0.184	0.202
FR1 n77_Ant 9	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.18	0.046	0.052
FR1 n77_Ant 9	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.18	20.80	1.153	0.02	0.042	0.048
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0.16	0.188	0.212
FR1 n77_Ant 9	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.18	20.80	1.153	-0.03	0.182	0.210
FR1 n77_Ant 9	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0.07	0.134	0.151
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0	0.080	0.090
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0.01	0.106	0.120
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.01	0.098	0.111
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.06	0.130	0.147
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.04	0.144	0.163
FR1 n77_Ant 9	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.09	0.184	0.208
FR1 n77_Ant 4	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.17	0.034	0.036
FR1 n77_Ant 4	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	662000	3930	21.67	22.00	1.079	-0.1	0.031	0.033
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0.18	0.117	0.125
FR1 n77_Ant 4	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	662000	3930	21.67	22.00	1.079	-0.17	0.114	0.123
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0.19	0.138	0.147
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.09	0.132	0.141
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.04	0.118	0.126
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.05	0.126	0.134
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0	0.113	0.121
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.13	0.051	0.054
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.01	0.131	0.140
FR1 n77_Ant 4	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0.05	0.038	0.041
FR1 n77_Ant 4	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.60	22.00	1.096	0.02	0.036	0.039
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.13	0.231	0.251
FR1 n77_Ant 4	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.60	22.00	1.096	0.17	0.161	0.177
FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0.1	0.171	0.186
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0.06	0.058	0.063
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0	0.151	0.164
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.04	0.183	0.199
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.15	0.229	0.249
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0.11	0.197	0.214
FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.02	0.141	0.153
FR1 n77_Ant 3	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	0.04	0.025	0.027
FR1 n77_Ant 3	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	21.61	22.00	1.094	0.13	0.036	0.039
FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.18	0.119	0.129
FR1 n77_Ant 3	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	656000	3840	21.61	22.00	1.094	-0.11	0.092	0.101
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	0.16	0.142	0.154
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 3	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.16	0.064	0.069
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 5	Battery 1	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.15	0.061	0.066
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 2	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.06	0.047	0.051
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 3	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.14	0.113	0.122
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 4	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	-0.19	0.138	0.149
FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 5	Holster	Wlan Off	DSI 1	656000	3840	21.66	22.00	1.081	0.01	0.138	0.149
FR1 n77_Ant 3	100M	BPSK	1	1	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	0.06	0.050	0.055
FR1 n77_Ant 3	100M	BPSK	135	69	Front	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.58	22.00	1.102	0.02	0.044	0.048
FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	0.12	0.097	0.106
FR1 n77_Ant 3	100M	BPSK	135	69	Back	15mm	Sample 1	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.58	22.00	1.102	-0.16	0.081	0.089





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	FR1 n77_Ant 3	100M	BPSK	1	1	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	0.16	0.063	0.069
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 3	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	-0.12	0.086	0.094
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 5	Battery 1	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	0.07	0.071	0.078
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 2	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	-0.02	0.074	0.081
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 3	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	-0.05	0.086	0.094
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 4	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	-0.13	0.094	0.103
	FR1 n77_Ant 3	100M	BPSK	1	1	Back	15mm	Sample 1	Battery 5	-	Wlan Off	DSI 1	633332	3499.98	21.61	22.00	1.094	0.08	0.094	0.103

## <WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Accessories	Power Status	Non-DBS / DBS	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	15mm	Ant 6	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.11	0.131	0.165
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.09	0.536	0.673
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	0.11	0.324	0.407
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 3	Battery 1		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.05	0.243	0.305
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 5	Battery 1		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.01	0.513	0.644
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 2		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.14	0.412	0.517
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 3		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.15	0.478	0.600
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 4		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.12	0.455	0.571
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 5		Power table 3	Non-DBS	1	2412	20.70	21.00	1.072	85.32	1.172	-0.17	0.470	0.590
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6	Sample 1	Battery 1		Power table 3	DBS	11	2462	16.60	17.00	1.096	85.60	1.168	0.05	0.266	0.340
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 7	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.01	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.01	0.051	0.061
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 7	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.15	0.029	0.035
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 3	Battery 1		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.09	0.022	0.026
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 5	Battery 1		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.16	0.048	0.058
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 2		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.05	0.024	0.029
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 3		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	0.08	0.041	0.049
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 4		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.18	0.035	0.042
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 5		Power table 3	Non-DBS	1	2412	20.90	21.00	1.023	85.32	1.172	-0.03	0.032	0.038
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 7	Sample 1	Battery 1		Power table 3	DBS	11	2462	16.70	17.00	1.072	85.60	1.168	0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 6+7(6)	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.07	0.127	0.166
74	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 1		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.08	0.601	0.787
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6+7(6)	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.05	0.304	0.398
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 3	Battery 1		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.03	0.574	0.752
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 5	Battery 1		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.03	0.584	0.765
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 2		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.14	0.479	0.627
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 3		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	0.06	0.591	0.774
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 4		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.06	0.568	0.744
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 5		Power table 3	Non-DBS	1	2412	20.50	21.00	1.122	85.71	1.167	-0.15	0.549	0.719
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 6+7(6)	Sample 1	Battery 1		Power table 3	DBS	11	2462	16.30	17.00	1.175	85.84	1.165	0.17	0.240	0.328
	WLAN5GHz	802.11n-HT20 MCS0	Front	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.18	0.070	0.089
75	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.11	0.447	0.569
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.08	0.312	0.397
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 3	Battery 1		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.17	0.406	0.517
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 5	Battery 1		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.1	0.392	0.499
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 2		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.08	0.325	0.414
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 3		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0	0.397	0.505
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 4		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.13	0.386	0.491
	WLAN5GHz	802.11n-HT20 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 5		Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.1	0.400	0.509
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	DBS	58	5290	15.00	15.50	1.122	86.15	1.161	-0.11	0.287	0.374
	WLAN5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	0.11	0.101	0.124
76	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	-0.14	0.523	0.641



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	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	-0.14	0.329	0.403
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 3	Battery 1		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	0.07	0.403	0.494
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 5	Battery 1		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	0.15	0.483	0.592
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 2		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	0.14	0.474	0.581
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 3		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	-0.03	0.466	0.571
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 4		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	-0.14	0.472	0.579
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 5		Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	85.39	1.171	0.17	0.436	0.534
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	DBS	106	5530	16.70	17.50	1.202	86.15	1.161	-0.14	0.221	0.308
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	0.07	0.140	0.180
77	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	0.14	0.434	0.557
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Holster	Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	-0.19	0.264	0.339
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 3	Battery 1		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	0	0.417	0.535
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 5	Battery 1		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	-0.04	0.404	0.519
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 2		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	-0.15	0.278	0.357
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 3		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	-0.09	0.379	0.487
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 4		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	0.05	0.375	0.481
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 5		Power table 3	Non-DBS	155	5775	18.60	19.00	1.096	85.40	1.171	0.13	0.385	0.494
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1		Power table 3	DBS	155	5775	15.00	15.50	1.122	86.15	1.161	0.14	0.241	0.314

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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	15mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.12	0.034	0.043	0.299	0.382
78	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.11	0.094	0.120	0.827	1.057
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 3	Non-DBS	15	6025	9.10	9.50	1.096	85.76	1.166	-0.12	0.068	0.087	0.598	0.765
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	-0.19	0.053	0.081	0.466	0.708
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	143	6665	9.90	10.00	1.023	85.76	1.166	0.12	0.064	0.076	0.563	0.672
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	207	6985	9.90	11.00	1.288	85.76	1.166	-0.16	0.061	0.092	0.537	0.807
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.13	0.065	0.083	0.572	0.731
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.1	0.067	0.086	0.589	0.753
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.14	0.055	0.070	0.484	0.619
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.04	0.054	0.069	0.475	0.607
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.05	0.055	0.070	0.484	0.619
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.04	0.062	0.079	0.545	0.697
	WLAN6GHz	802.11ax-HE160 MCS0	Back	15mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.14	0.078	0.100	0.686	0.877





<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Accessories	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	1Mbps	Front	15mm	Ant 6	Sample 1	Battery 1		0	2402	5.98	6.50	1.127	76.86	1.084	0.16	0.001	0.001
79	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 1	Battery 1		0	2402	5.98	6.50	1.127	76.86	1.084	0	0.001	0.001
	Bluetooth	1Mbps	Back	0mm	Ant 6	Sample 1	Battery 1	Holster	0	2402	5.98	6.50	1.127	76.86	1.084	-0.06	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 3	Battery 1		0	2402	5.98	6.50	1.127	76.86	1.084	0.14	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 5	Battery 1		0	2402	5.98	6.50	1.127	76.86	1.084	-0.09	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 1	Battery 2		0	2402	5.98	6.50	1.127	76.86	1.084	-0.09	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 1	Battery 3		0	2402	5.98	6.50	1.127	76.86	1.084	-0.12	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 1	Battery 4		0	2402	5.98	6.50	1.127	76.86	1.084	-0.06	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 6	Sample 1	Battery 5		0	2402	5.98	6.50	1.127	76.86	1.084	-0.19	0.001	0.001
	Bluetooth	1Mbps	Front	15mm	Ant 7	Sample 1	Battery 1		39	2441	6.45	6.50	1.012	76.80	1.085	0.08	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 1	Battery 1		39	2441	6.45	6.50	1.012	76.80	1.085	-0.04	0.001	0.001
	Bluetooth	1Mbps	Back	0mm	Ant 7	Sample 1	Battery 1	Holster	39	2441	6.45	6.50	1.012	76.80	1.085	0.12	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 3	Battery 1		39	2441	6.45	6.50	1.012	76.80	1.085	0.09	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 5	Battery 1		39	2441	6.45	6.50	1.012	76.80	1.085	-0.02	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 1	Battery 2		39	2441	6.45	6.50	1.012	76.80	1.085	-0.16	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 1	Battery 3		39	2441	6.45	6.50	1.012	76.80	1.085	-0.03	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 1	Battery 4		39	2441	6.45	6.50	1.012	76.80	1.085	-0.06	0.001	0.001
	Bluetooth	1Mbps	Back	15mm	Ant 7	Sample 1	Battery 5		39	2441	6.45	6.50	1.012	76.80	1.085	0.08	0.001	0.001

**14.4 Product Specific SAR**

**<GSM SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	512	1850.2	27.06	27.80	1.186	-0.16	2.580	3.059
80	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.11	2.800	3.084
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	810	1909.8	27.46	27.80	1.081	0.1	2.560	2.768
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.06	2.350	2.589
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.15	2.040	2.247
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	0.03	1.690	1.862
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.13	1.930	2.126
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	0.16	1.990	2.192
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.15	2.450	2.699

**<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
81	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.03	2.170	2.474
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	1312	1712.4	24.18	25.00	1.208	-0.09	2.000	2.416
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	1413	1732.6	24.33	25.00	1.167	0.14	2.110	2.462
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.08	1.750	1.995
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.1	1.690	1.927
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.01	1.350	1.539
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.09	1.400	1.596
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.06	1.690	1.927
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	-0.17	1.850	2.109
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan On	DSI 1	1513	1752.6	22.69	23.20	1.125	0.1	1.290	1.451

**<LTE SAR>**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132572	1770	23.70	24.30	1.148	-0.18	1.990	2.285
82	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	0.01	1.910	2.339
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169	0.02	1.930	2.257
	LTE Band 66_Ant 1	20M	QPSK	50	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132572	1770	22.46	23.30	1.213	0.16	1.560	1.893
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	0	1.440	1.763
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	-0.03	1.440	1.763
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	0.07	1.360	1.665
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	-0.12	1.760	2.155
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	-0.03	1.680	2.057
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	132072	1720	23.42	24.30	1.225	0.02	1.740	2.131
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan On	DSI 1	132072	1720	21.78	22.60	1.208	0.08	0.986	1.191
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132047+132140	1717.5	23.53	24.30	1.194	0.05	1.790	2.137
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	132072+132270	1720	23.65	24.30	1.161	0.06	1.760	2.044
	LTE Band 66B_Ant 1	15M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan On	DSI 1	132047+132140	1717.5	21.86	22.60	1.186	0.05	1.790	2.123
	LTE Band 66C_Ant 1	20M	QPSK	1	0	Back	0mm	Sample 1	Battery 1	Wlan On	DSI 1	132072+132270	1720	21.95	22.60	1.161	0.06	1.760	2.044



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	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)
83	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.15	1.970	2.165
	FR1 n77_Ant 9	100M	BPSK	135	0	Left side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	656000	3840	20.26	20.80	1.132	0.05	1.810	2.050
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.13	1.530	1.681
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.01	1.050	1.154
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.11	1.960	2.154
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.03	1.760	1.934
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	-0.05	1.810	1.989
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	656000	3840	20.39	20.80	1.099	0.14	1.880	2.066
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0.04	1.790	2.022
	FR1 n77_Ant 9	100M	BPSK	135	69	Left side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	633332	3499.98	20.18	20.80	1.153	0.11	1.660	1.915
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	0.11	1.270	1.435
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.05	1.360	1.537
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.01	1.590	1.796
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.14	1.420	1.604
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.15	1.330	1.503
	FR1 n77_Ant 9	100M	BPSK	1	1	Left side	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	633332	3499.98	20.27	20.80	1.130	-0.12	1.680	1.898
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0.09	1.040	1.109
	FR1 n77_Ant 4	100M	BPSK	135	69	Right side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	662000	3930	21.67	22.00	1.079	0.1	0.995	1.074
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0.05	0.818	0.872
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	0.08	0.745	0.795
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.18	0.959	1.023
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.03	1.020	1.088
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.04	0.922	0.983
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	662000	3930	21.72	22.00	1.067	-0.09	0.892	0.951
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.16	1.380	1.499
	FR1 n77_Ant 4	100M	BPSK	135	69	Right side	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	633332	3499.98	21.60	22.00	1.096	-0.05	1.220	1.338
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 3	Battery 1	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.06	0.916	0.995
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 5	Battery 1	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.15	0.940	1.021
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 2	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.12	1.300	1.412
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 3	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.16	1.310	1.423
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 4	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	-0.03	1.250	1.358
	FR1 n77_Ant 4	100M	BPSK	1	1	Right side	0mm	Sample 1	Battery 5	Wlan Off	DSI 1	633332	3499.98	21.64	22.00	1.086	0.17	1.130	1.228



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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)
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.07	0.132	0.168
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0	0.711	0.905
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.12	0.795	1.012
84	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.18	1.580	2.011
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.05	1.510	1.922
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	52	5260	17.80	18.00	1.047	86.11	1.161	-0.01	1.380	1.678
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	56	5280	18.70	19.00	1.072	86.11	1.161	-0.01	1.450	1.804
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	64	5320	18.20	18.50	1.072	86.11	1.161	-0.01	1.500	1.866
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.08	0.189	0.241
	WLAN5GHz	802.11n-HT20 MCS0	Bottom Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.1	0.010	0.013
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.15	1.490	1.897
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	0.12	1.470	1.871
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.12	1.480	1.884
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.15	1.390	1.769
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.19	1.360	1.731
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 3	Non-DBS	60	5300	18.60	19.00	1.096	86.11	1.161	-0.13	1.410	1.795
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	-0.05	0.188	0.229
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	-0.12	0.741	0.901
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.18	0.693	0.842
85	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.07	1.930	2.346
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.05	1.840	2.237
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	102	5510	17.80	18.00	1.047	86.11	1.161	0.03	1.480	1.799
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	126	5630	18.10	18.50	1.096	86.11	1.161	0.09	1.430	1.820
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	134	5670	18.20	18.50	1.072	86.11	1.161	-0.13	1.330	1.655
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	142	5710	18.30	18.50	1.047	86.11	1.161	-0.09	1.450	1.763
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.12	0.241	0.293
	WLAN5GHz	802.11n-HT40 MCS0	Bottom Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.11	0.016	0.019
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.11	1.720	2.091
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.11	1.860	2.261
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.02	1.650	2.006
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.12	1.670	2.030
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	0.02	1.600	1.945
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 3	Non-DBS	110	5550	18.30	18.50	1.047	86.11	1.161	-0.11	1.710	2.079



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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 <sup>2</sup> )	Reported APD (W/m <sup>2</sup> )
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.03	0.025	0.032	0.603	0.771
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.12	0.085	0.109	2.040	2.608
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.19	0.164	0.210	3.950	5.050
86	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.1	0.290	0.371	6.990	8.937
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 3	Non-DBS	15	6025	9.10	9.50	1.096	85.76	1.166	-0.11	0.231	0.295	5.560	7.108
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	-0.12	0.171	0.260	4.120	6.260
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	143	6665	9.90	10.00	1.023	85.76	1.166	-0.16	0.197	0.235	4.740	5.656
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	207	6985	9.90	11.00	1.288	85.76	1.166	-0.14	0.133	0.200	3.200	4.807
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.12	0.021	0.027	0.506	0.647
	WLAN6GHz	802.11ax-HE160 MCS0	Bottom Side	0mm	Ant 6+7(7)	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.03	0.004	0.005	0.097	0.124
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 3	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.15	0.256	0.327	6.170	7.888
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 5	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.15	0.256	0.327	6.170	7.888
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 2	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.08	0.233	0.298	5.610	7.172
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 3	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.04	0.243	0.311	5.850	7.479
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 4	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.02	0.227	0.290	5.470	6.993
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 6+7(7)	Sample 1	Battery 5	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	-0.07	0.230	0.294	5.540	7.083

**<NFC SAR>**

Plot No.	Band	Test Position	Gap (mm)	Sample	Battery	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)
87	NFC	Front	0mm	Sample 1	Battery 1	13.56	0	< 0.001
	NFC	Back	0mm	Sample 1	Battery 1	13.56	0	< 0.001
	NFC	Right Side	0mm	Sample 1	Battery 1	13.56	0	< 0.001
	NFC	Left Side	0mm	Sample 1	Battery 1	13.56	0	< 0.001
	NFC	Top Side	0mm	Sample 1	Battery 1	13.56	0	< 0.001
	NFC	Front	0mm	Sample 3	Battery 1	13.56	0	< 0.001
	NFC	Front	0mm	Sample 5	Battery 1	13.56	0	< 0.001
	NFC	Front	0mm	Sample 1	Battery 2	13.56	0	< 0.001
	NFC	Front	0mm	Sample 1	Battery 3	13.56	0	< 0.001
	NFC	Front	0mm	Sample 1	Battery 4	13.56	0	< 0.001
	NFC	Front	0mm	Sample 1	Battery 5	13.56	0	< 0.001



14.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS /DBS	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (A)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m <sup>2</sup> )	Total psPD (W/m <sup>2</sup> )
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	15	6025	16.67	0.0625	3.53	-0.25096897	1.990	2.250
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	15	6025	16.67	0.25	3.74		1.170	1.250
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	207	6985	12.50	0.0625	1.47	-2.73591747	0.691	0.719
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	207	6985	12.50	0.25	2.76		0.477	0.496

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS /DBS	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grid Step (A)	Scaling Factor for Measurement Uncertainty	Power Drift (dB)	Normal psPD (W/m <sup>2</sup> )	Scaled Normal psPD (W/m <sup>2</sup> )	Total psPD (W/m <sup>2</sup> )	Scaled Total psPD (W/m <sup>2</sup> )
	WLAN6GHz	802.11a 6Mbps	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	173	6815	18.26	18.50	1.057	85.77	1.166	0.0625	1.5535	-0.05	1.500	2.871	1.630	3.120
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	15	6025	16.67	17.00	1.079	85.71	1.167	0.0625	1.5535	-0.08	1.990	3.893	2.250	4.401
01	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	0.09	2.120	4.253	2.410	4.835
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	111	6505	12.29	12.50	1.050	85.71	1.167	0.0625	1.5535	-0.09	0.840	1.598	0.958	1.823
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 1	Non-DBS	207	6985	12.50	13.00	1.122	85.71	1.167	0.0625	1.5535	-0.15	0.691	1.406	0.719	1.463
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 2	Battery 1	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	-0.05	1.970	3.952	1.990	3.992
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 3	Battery 1	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	-0.01	1.880	3.772	1.890	3.792
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 2	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	0.15	1.910	3.832	1.940	3.892
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 3	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	0.12	2.010	4.033	2.030	4.073
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 4	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	-0.06	1.940	3.892	1.860	3.732
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 5	Power table 1	Non-DBS	47	6185	16.56	17.00	1.107	85.71	1.167	0.0625	1.5535	0.07	1.880	3.772	1.870	3.752
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.0625	1.5535	-0.01	0.120	0.238	0.160	0.318
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.0625	1.5535	-0.1	0.500	0.993	0.650	1.291
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.0625	1.5535	0.05	0.560	1.112	0.710	1.410
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	15	6025	9.10	9.50	1.096	85.76	1.166	0.0625	1.5535	0	2.050	4.072	2.420	4.806
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	0.05	1.520	3.588	1.790	4.225
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.0625	1.5535	-0.13	2.110	4.191	2.360	4.687
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	143	6665	9.90	10.00	1.023	85.76	1.166	0.0625	1.5535	0.06	0.950	1.761	1.090	2.020
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	207	6985	9.90	11.00	1.288	85.76	1.166	0.0625	1.5535	-0.04	0.620	1.447	0.680	1.587
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	2mm	Ant 6+7	Sample 1	Battery 1	Power table 3	Non-DBS	111	6505	11.10	11.50	1.096	85.76	1.166	0.0625	1.5535	0	0.110	0.218	0.190	0.377
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 2	Battery 1	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	-0.11	1.560	3.682	1.690	3.989
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 3	Battery 1	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	-0.01	1.600	3.777	1.730	4.084
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 2	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	0.16	1.580	3.730	1.720	4.060
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 3	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	-0.16	1.650	3.895	1.780	4.202
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 4	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	0.01	1.490	3.517	1.610	3.800
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	2mm	Ant 6+7	Sample 1	Battery 5	Power table 3	Non-DBS	47	6185	8.35	9.50	1.303	85.76	1.166	0.0625	1.5535	-0.17	1.550	3.659	1.680	3.966



**14.6 Repeated SAR Measurement**

No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Accessories	Wlan On / Off	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1		Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.09	1.120	-	1.184
2nd	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Sample 1	Battery 1		Wlan Off	DSI 2	810	1909.8	27.46	27.70	1.057	0.05	1.050	1.07	1.110
1st	FR1 n77_Ant 8	100M_BPSK_135_69_	Right Cheek	0mm	Sample 1	Battery 1		Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	-0.15	1.030	-	1.172
2nd	FR1 n77_Ant 8	100M_BPSK_135_69_	Right Cheek	0mm	Sample 1	Battery 1		Wlan Off	DSI 2	656000	3840	24.64	25.20	1.138	0.05	0.981	1.05	1.116
1st	LTE Band 66_Ant 1	20M_QPSK_1_0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169	0.05	1.010	-	1.181
2nd	LTE Band 66_Ant 1	20M_QPSK_1_0	Back	0mm	Sample 1	Battery 1	Holster	Wlan Off	DSI 1	132322	1745	23.62	24.30	1.169	0.03	0.968	1.04	1.132

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sample	Battery	Power Status	Non-DBS / DBS	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	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	-0.13	0.921	-	1.179
2nd	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 6+7(6)	Sample 1	Battery 1	Power table 2	Non-DBS	1	2412	20.60	21.00	1.096	85.71	1.167	0.01	0.891	1.03	1.140

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Battery	Wlan On / Off	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	-0.11	2.800	-	3.084
2nd	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	661	1880	27.38	27.80	1.102	0.1	2.690	1.04	2.963
1st	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.03	2.170	-	2.474
2nd	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Sample 1	Battery 1	Wlan Off	DSI 1	1513	1752.6	24.43	25.00	1.140	0.02	2.060	1.05	2.349

**General Note:**

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8W/kg$ .
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45W/kg$ , only one repeated measurement is required.
3. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.





**14.7 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%

**<Head>**

	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	0.725	0.496
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	331.13	250.59
Linearity SAR(W/kg)	0.55	
% deviation from expected linearity		-9.60%

	FR1 n78_Ant 8 (Power Class 3)	FR1 n78_Ant 8 (Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	1.172	0.801
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	331.13	250.59
Linearity SAR(W/kg)	0.89	
% deviation from expected linearity		-9.69%

**<Hotspot>**

	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	24.1	27
Reported 1g SAR (W/kg)	0.706	0.692
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	257.04	250.59
Linearity SAR(W/kg)	0.69	
% deviation from expected linearity		0.54%

	FR1 n77_Ant 8 (Power Class 3)	FR1 n77_Ant 8 (Power Class 2)
Maximum Tune up Power (dBm)	21.5	24.5
Reported 1g SAR (W/kg)	0.563	0.522
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR(W/kg)	0.56	
% deviation from expected linearity		-7.06%



<Body-worn>

	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	0.467	0.384
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	331.13	250.59
Linearity SAR(W/kg)	0.35	
% deviation from expected linearity		8.65%

	FR1 n77_Ant 8 (Power Class 3)	FR1 n77_Ant 8 (Power Class 2)
Maximum Tune up Power (dBm)	22.9	25.9
Reported 1g SAR (W/kg)	0.447	0.406
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	194.98	194.52
Linearity SAR(W/kg)	0.45	
% deviation from expected linearity		-8.96%

### 15. Simultaneous Transmission Analysis

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

**General Note:**

1. 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.
2. The Scaled SAR summation is calculated based on the same configuration and test position.
3. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - i) Scalar SAR summation < 1.6W/kg.
  - ii)  $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - iii) If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
  - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
  - v) The SPLSR calculated results please refer to section 15.5.



15.1 Head Exposure Conditions

Non-DBS

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+2+7	1+3+6	1+4	1+5+6	1+5+7	Case No.	SPLSR
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 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)		
WWAN Ant 1	Right Cheek	1.184	0.180	0.237	0.247	0.365	0.001	0.010	1.374	1.422	1.431	1.550	1.559		
	Right Tilted	0.472	0.213	0.072	0.263	0.493	0.001	0.001	0.686	0.545	0.735	0.966	0.966		
	Left Cheek	0.537	0.374	0.056	0.542	0.956	0.001	0.001	0.912	0.594	1.079	1.494	1.494		
	Left Tilted	0.459	0.216	0.001	0.378	0.510	0.001	0.001	0.676	0.461	0.837	0.970	0.970		
WWAN Ant 5	Right Cheek	0.393	0.180	0.237	0.247	0.365	0.001	0.010	0.583	0.631	0.640	0.759	0.768		
	Right Tilted	0.210	0.213	0.072	0.263	0.493	0.001	0.001	0.424	0.283	0.473	0.704	0.704		
	Left Cheek	0.749	0.374	0.056	0.542	0.956	0.001	0.001	1.124	0.806	1.291	1.706	1.706	Case 1	0.02
	Left Tilted	0.196	0.216	0.001	0.378	0.510	0.001	0.001	0.413	0.198	0.574	0.707	0.707		
WWAN Ant 8	Right Cheek	1.172	0.180	0.237	0.247	0.365	0.001	0.010	1.362	1.410	1.419	1.538	1.547		
	Right Tilted	0.208	0.213	0.072	0.263	0.493	0.001	0.001	0.422	0.281	0.471	0.702	0.702		
	Left Cheek	0.413	0.374	0.056	0.542	0.956	0.001	0.001	0.788	0.470	0.955	1.370	1.370		
	Left Tilted	0.295	0.216	0.001	0.378	0.510	0.001	0.001	0.512	0.297	0.673	0.806	0.806		
WWAN Ant 9	Right Cheek	0.069	0.180	0.237	0.247	0.365	0.001	0.010	0.259	0.307	0.316	0.435	0.444		
	Right Tilted	0.001	0.213	0.072	0.263	0.493	0.001	0.001	0.215	0.074	0.264	0.495	0.495		
	Left Cheek	0.194	0.374	0.056	0.542	0.956	0.001	0.001	0.569	0.251	0.736	1.151	1.151		
	Left Tilted	0.033	0.216	0.001	0.378	0.510	0.001	0.001	0.250	0.035	0.411	0.544	0.544		
WWAN Ant 4	Right Cheek	0.308	0.180	0.237	0.247	0.365	0.001	0.010	0.498	0.546	0.555	0.674	0.683		
	Right Tilted	0.054	0.213	0.072	0.263	0.493	0.001	0.001	0.268	0.127	0.317	0.548	0.548		
	Left Cheek	0.180	0.374	0.056	0.542	0.956	0.001	0.001	0.555	0.237	0.722	1.137	1.137		
	Left Tilted	0.083	0.216	0.001	0.378	0.510	0.001	0.001	0.300	0.085	0.461	0.594	0.594		
WWAN Ant 3	Right Cheek	0.504	0.180	0.237	0.247	0.365	0.001	0.010	0.694	0.742	0.751	0.870	0.879		
	Right Tilted	0.148	0.213	0.072	0.263	0.493	0.001	0.001	0.362	0.221	0.411	0.642	0.642		
	Left Cheek	0.738	0.374	0.056	0.542	0.956	0.001	0.001	1.113	0.795	1.280	1.695	1.695	Case 2	0.02
	Left Tilted	0.104	0.216	0.001	0.378	0.510	0.001	0.001	0.321	0.106	0.482	0.615	0.615		
WWAN Ant 2	Right Cheek	0.308	0.180	0.237	0.247	0.365	0.001	0.010	0.498	0.546	0.555	0.674	0.683		
	Right Tilted	0.329	0.213	0.072	0.263	0.493	0.001	0.001	0.543	0.402	0.592	0.823	0.823		
	Left Cheek	0.144	0.374	0.056	0.542	0.956	0.001	0.001	0.519	0.201	0.686	1.101	1.101		
	Left Tilted	0.153	0.216	0.001	0.378	0.510	0.001	0.001	0.370	0.155	0.531	0.664	0.664		



**DBS**

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+4+5 Summed 1g SAR (W/kg)	1+2+5+7 Summed 1g SAR (W/kg)	1+3+5+6 Summed 1g SAR (W/kg)
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)			
Maximum WWAN Ant 1	Right Cheek	0.794	0.180	0.237	0.247	0.365	0.001	0.010	<b>1.406</b>	<b>1.349</b>	<b>1.397</b>
	Right Tilted	0.472	0.213	0.072	0.263	0.493	0.001	0.001	<b>1.228</b>	<b>1.179</b>	<b>1.038</b>
	Left Cheek	0.537	0.374	0.056	0.379	0.355	0.001	0.001	<b>1.271</b>	<b>1.267</b>	<b>0.949</b>
	Left Tilted	0.459	0.216	0.001	0.378	0.510	0.001	0.001	<b>1.347</b>	<b>1.186</b>	<b>0.971</b>
Maximum WWAN Ant 5	Right Cheek	0.393	0.180	0.237	0.247	0.365	0.001	0.010	<b>1.005</b>	<b>0.948</b>	<b>0.996</b>
	Right Tilted	0.210	0.213	0.072	0.263	0.493	0.001	0.001	<b>0.966</b>	<b>0.917</b>	<b>0.776</b>
	Left Cheek	0.749	0.374	0.056	0.379	0.355	0.001	0.001	<b>1.483</b>	<b>1.479</b>	<b>1.161</b>
	Left Tilted	0.196	0.216	0.001	0.378	0.510	0.001	0.001	<b>1.084</b>	<b>0.923</b>	<b>0.708</b>
Maximum WWAN Ant 8	Right Cheek	0.587	0.180	0.237	0.247	0.365	0.001	0.010	<b>1.199</b>	<b>1.142</b>	<b>1.190</b>
	Right Tilted	0.208	0.213	0.072	0.263	0.493	0.001	0.001	<b>0.964</b>	<b>0.915</b>	<b>0.774</b>
	Left Cheek	0.413	0.374	0.056	0.379	0.355	0.001	0.001	<b>1.147</b>	<b>1.143</b>	<b>0.825</b>
	Left Tilted	0.295	0.216	0.001	0.378	0.510	0.001	0.001	<b>1.183</b>	<b>1.022</b>	<b>0.807</b>
Maximum WWAN Ant 9	Right Cheek	0.069	0.180	0.237	0.247	0.365	0.001	0.010	<b>0.681</b>	<b>0.624</b>	<b>0.672</b>
	Right Tilted	0.001	0.213	0.072	0.263	0.493	0.001	0.001	<b>0.757</b>	<b>0.708</b>	<b>0.567</b>
	Left Cheek	0.194	0.374	0.056	0.379	0.355	0.001	0.001	<b>0.928</b>	<b>0.924</b>	<b>0.606</b>
	Left Tilted	0.033	0.216	0.001	0.378	0.510	0.001	0.001	<b>0.921</b>	<b>0.760</b>	<b>0.545</b>
Maximum WWAN Ant 4	Right Cheek	0.308	0.180	0.237	0.247	0.365	0.001	0.010	<b>0.920</b>	<b>0.863</b>	<b>0.911</b>
	Right Tilted	0.054	0.213	0.072	0.263	0.493	0.001	0.001	<b>0.810</b>	<b>0.761</b>	<b>0.620</b>
	Left Cheek	0.180	0.374	0.056	0.379	0.355	0.001	0.001	<b>0.914</b>	<b>0.910</b>	<b>0.592</b>
	Left Tilted	0.083	0.216	0.001	0.378	0.510	0.001	0.001	<b>0.971</b>	<b>0.810</b>	<b>0.595</b>
Maximum WWAN Ant 3	Right Cheek	0.504	0.180	0.237	0.247	0.365	0.001	0.010	<b>1.116</b>	<b>1.059</b>	<b>1.107</b>
	Right Tilted	0.148	0.213	0.072	0.263	0.493	0.001	0.001	<b>0.904</b>	<b>0.855</b>	<b>0.714</b>
	Left Cheek	0.596	0.374	0.056	0.379	0.355	0.001	0.001	<b>1.330</b>	<b>1.326</b>	<b>1.008</b>
	Left Tilted	0.104	0.216	0.001	0.378	0.510	0.001	0.001	<b>0.992</b>	<b>0.831</b>	<b>0.616</b>
Maximum WWAN Ant 2	Right Cheek	0.308	0.180	0.237	0.247	0.365	0.001	0.010	<b>0.920</b>	<b>0.863</b>	<b>0.911</b>
	Right Tilted	0.329	0.213	0.072	0.263	0.493	0.001	0.001	<b>1.085</b>	<b>1.036</b>	<b>0.895</b>
	Left Cheek	0.144	0.374	0.056	0.379	0.355	0.001	0.001	<b>0.878</b>	<b>0.874</b>	<b>0.556</b>
	Left Tilted	0.153	0.216	0.001	0.378	0.510	0.001	0.001	<b>1.041</b>	<b>0.880</b>	<b>0.665</b>



15.2 Hotspot Exposure Conditions

Non-DBS

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+2+7	1+3+6	1+4	1+5+6	1+5+7	Case No.	SPLSR
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 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)		
WWAN Ant 1	Front	0.355	0.117	0.055	0.260	0.132	0.001	0.001	0.473	0.411	0.615	0.488	0.488		
	Back	0.759	0.688	0.130	1.179	0.792	0.024	0.001	1.448	0.913	1.938	1.575	1.552	Case 3	0.04
	Left side	0.374	0.001	0.387	0.201	0.579	0.001	0.001	0.376	0.762	0.575	0.954	0.954		
	Right side	0.426	0.470	0.001	0.466	0.705	0.001	0.001	0.897	0.428	0.892	1.132	1.132		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.596	0.050	0.001	0.001	0.561	0.001	0.001	0.647	0.598	0.597	1.158	1.158		
WWAN Ant 5	Front	0.308	0.117	0.055	0.260	0.132	0.001	0.001	0.426	0.364	0.568	0.441	0.441		
	Back	0.586	0.688	0.130	1.179	0.792	0.024	0.001	1.275	0.740	1.765	1.402	1.379	Case 4	0.02
	Left side	0.799	0.001	0.387	0.201	0.579	0.001	0.001	0.801	1.187	1.000	1.379	1.379		
	Right side		0.470	0.001	0.466	0.705	0.001	0.001	0.471	0.002	0.466	0.706	0.706		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.223	0.050	0.001	0.001	0.561	0.001	0.001	0.274	0.225	0.224	0.785	0.785		
WWAN Ant 8	Front	0.302	0.117	0.055	0.260	0.132	0.001	0.001	0.420	0.358	0.562	0.435	0.435		
	Back	0.563	0.688	0.130	1.179	0.792	0.024	0.001	1.252	0.717	1.742	1.379	1.356	Case 5	0.02
	Left side		0.001	0.387	0.201	0.579	0.001	0.001	0.002	0.388	0.201	0.580	0.580		
	Right side	0.751	0.470	0.001	0.466	0.705	0.001	0.001	1.222	0.753	1.217	1.457	1.457		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.220	0.050	0.001	0.001	0.561	0.001	0.001	0.271	0.222	0.221	0.782	0.782		
WWAN Ant 9	Front	0.061	0.117	0.055	0.260	0.132	0.001	0.001	0.179	0.117	0.321	0.194	0.194		
	Back	0.251	0.688	0.130	1.179	0.792	0.024	0.001	0.940	0.405	1.430	1.067	1.044		
	Left side	0.416	0.001	0.387	0.201	0.579	0.001	0.001	0.418	0.804	0.617	0.996	0.996		
	Right side		0.470	0.001	0.466	0.705	0.001	0.001	0.471	0.002	0.466	0.706	0.706		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.036	0.050	0.001	0.001	0.561	0.001	0.001	0.087	0.038	0.037	0.598	0.598		
WWAN Ant 4	Front	0.098	0.117	0.055	0.260	0.132	0.001	0.001	0.216	0.154	0.358	0.231	0.231		
	Back	0.278	0.688	0.130	1.179	0.792	0.024	0.001	0.967	0.432	1.457	1.094	1.071		
	Left side		0.001	0.387	0.201	0.579	0.001	0.001	0.002	0.388	0.201	0.580	0.580		
	Right side	0.735	0.470	0.001	0.466	0.705	0.001	0.001	1.206	0.737	1.201	1.441	1.441		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.001	0.050	0.001	0.001	0.561	0.001	0.001	0.052	0.003	0.002	0.563	0.563		
WWAN Ant 3	Front	0.229	0.117	0.055	0.260	0.132	0.001	0.001	0.347	0.285	0.489	0.362	0.362		
	Back	0.598	0.688	0.130	1.179	0.792	0.024	0.001	1.287	0.752	1.777	1.414	1.391	Case 6	0.03
	Left side	0.729	0.001	0.387	0.201	0.579	0.001	0.001	0.731	1.117	0.930	1.309	1.309		
	Right side		0.470	0.001	0.466	0.705	0.001	0.001	0.471	0.002	0.466	0.706	0.706		
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	0.177	0.095	0.367	0.703	0.703		
	Bottom side	0.001	0.050	0.001	0.001	0.561	0.001	0.001	0.052	0.003	0.002	0.563	0.563		
WWAN Ant 2	Front	0.150	0.117	0.055	0.260	0.132	0.001	0.001	0.268	0.206	0.410	0.283	0.283		
	Back	0.644	0.688	0.130	1.179	0.792	0.024	0.001	1.333	0.798	1.823	1.460	1.437	Case 7	0.04
	Left side	0.273	0.001	0.387	0.201	0.579	0.001	0.001	0.275	0.661	0.474	0.853	0.853		
	Right side		0.470	0.001	0.466	0.705	0.001	0.001	0.471	0.002	0.466	0.706	0.706		
	Top side	0.424	0.176	0.094	0.367	0.702	0.001	0.001	0.601	0.519	0.791	1.127	1.127		
	Bottom side		0.050	0.001	0.001	0.561	0.001	0.001	0.051	0.002	0.001	0.562	0.562		



**DBS**

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+4+5 Summed 1g SAR (W/kg)	1+2+5+7 Summed 1g SAR (W/kg)	1+3+5+6 Summed 1g SAR (W/kg)
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)			
Maximum WWAN Ant 1	Front	0.355	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.747</b>	<b>0.605</b>	<b>0.543</b>
	Back	0.759	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.493</b>	<b>1.473</b>	<b>1.271</b>
	Left side	0.374	0.001	0.107	0.201	0.579	0.001	0.001	<b>1.154</b>	<b>0.955</b>	<b>1.061</b>
	Right side	0.426	0.470	0.001	0.466	0.359	0.001	0.001	<b>1.251</b>	<b>1.256</b>	<b>0.787</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.596	0.050	0.001	0.001	0.561	0.001	0.001	<b>1.158</b>	<b>1.208</b>	<b>1.159</b>
Maximum WWAN Ant 5	Front	0.308	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.700</b>	<b>0.558</b>	<b>0.496</b>
	Back	0.586	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.320</b>	<b>1.300</b>	<b>1.098</b>
	Left side	0.799	0.001	0.107	0.201	0.579	0.001	0.001	<b>1.579</b>	<b>1.380</b>	<b>1.486</b>
	Right side		0.470	0.001	0.466	0.359	0.001	0.001	<b>0.825</b>	<b>0.830</b>	<b>0.361</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.223	0.050	0.001	0.001	0.561	0.001	0.001	<b>0.785</b>	<b>0.835</b>	<b>0.786</b>
Maximum WWAN Ant 8	Front	0.302	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.694</b>	<b>0.552</b>	<b>0.490</b>
	Back	0.563	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.297</b>	<b>1.277</b>	<b>1.075</b>
	Left side		0.001	0.107	0.201	0.579	0.001	0.001	<b>0.780</b>	<b>0.581</b>	<b>0.687</b>
	Right side	0.751	0.470	0.001	0.466	0.359	0.001	0.001	<b>1.576</b>	<b>1.581</b>	<b>1.112</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.220	0.050	0.001	0.001	0.561	0.001	0.001	<b>0.782</b>	<b>0.832</b>	<b>0.783</b>
Maximum WWAN Ant 9	Front	0.061	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.453</b>	<b>0.311</b>	<b>0.249</b>
	Back	0.251	0.355	0.130	0.376	0.358	0.024	0.001	<b>0.985</b>	<b>0.965</b>	<b>0.763</b>
	Left side	0.416	0.001	0.107	0.201	0.579	0.001	0.001	<b>1.196</b>	<b>0.997</b>	<b>1.103</b>
	Right side		0.470	0.001	0.466	0.359	0.001	0.001	<b>0.825</b>	<b>0.830</b>	<b>0.361</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.036	0.050	0.001	0.001	0.561	0.001	0.001	<b>0.598</b>	<b>0.648</b>	<b>0.599</b>
Maximum WWAN Ant 4	Front	0.098	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.490</b>	<b>0.348</b>	<b>0.286</b>
	Back	0.278	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.012</b>	<b>0.992</b>	<b>0.790</b>
	Left side		0.001	0.107	0.201	0.579	0.001	0.001	<b>0.780</b>	<b>0.581</b>	<b>0.687</b>
	Right side	0.735	0.470	0.001	0.466	0.359	0.001	0.001	<b>1.560</b>	<b>1.565</b>	<b>1.096</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.001	0.050	0.001	0.001	0.561	0.001	0.001	<b>0.563</b>	<b>0.613</b>	<b>0.564</b>
Maximum WWAN Ant 3	Front	0.229	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.621</b>	<b>0.479</b>	<b>0.417</b>
	Back	0.598	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.332</b>	<b>1.312</b>	<b>1.110</b>
	Left side	0.729	0.001	0.107	0.201	0.579	0.001	0.001	<b>1.509</b>	<b>1.310</b>	<b>1.416</b>
	Right side		0.470	0.001	0.466	0.359	0.001	0.001	<b>0.825</b>	<b>0.830</b>	<b>0.361</b>
	Top side		0.176	0.094	0.367	0.702	0.001	0.001	<b>1.069</b>	<b>0.879</b>	<b>0.797</b>
	Bottom side	0.001	0.050	0.001	0.001	0.561	0.001	0.001	<b>0.563</b>	<b>0.613</b>	<b>0.564</b>
Maximum WWAN Ant 2	Front	0.150	0.117	0.055	0.260	0.132	0.001	0.001	<b>0.542</b>	<b>0.400</b>	<b>0.338</b>
	Back	0.644	0.355	0.130	0.376	0.358	0.024	0.001	<b>1.378</b>	<b>1.358</b>	<b>1.156</b>
	Left side	0.273	0.001	0.107	0.201	0.579	0.001	0.001	<b>1.053</b>	<b>0.854</b>	<b>0.960</b>
	Right side		0.470	0.001	0.466	0.359	0.001	0.001	<b>0.825</b>	<b>0.830</b>	<b>0.361</b>
	Top side	0.424	0.176	0.094	0.367	0.702	0.001	0.001	<b>1.493</b>	<b>1.303</b>	<b>1.221</b>
	Bottom side		0.050	0.001	0.001	0.561	0.001	0.001	<b>0.562</b>	<b>0.612</b>	<b>0.563</b>





**15.3 Body-Worn Accessory Exposure Conditions**

**Non-DBS**

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+2+7 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)					
WWAN Ant 1	Front	0.327	0.165	0.001	0.166	0.180	0.001	0.001	0.493	0.329	0.493	0.508	0.508
	Back	0.707	0.673	0.061	0.787	0.641	0.001	0.001	1.381	0.769	1.494	1.349	1.349
	Back with Holster	1.181	0.407	0.035	0.398	0.403	0.001	0.001	1.589	1.217	1.579	1.585	1.585
WWAN Ant 5	Front	0.249	0.165	0.001	0.166	0.180	0.001	0.001	0.415	0.251	0.415	0.430	0.430
	Back	0.467	0.673	0.061	0.787	0.641	0.001	0.001	1.141	0.529	1.254	1.109	1.109
	Back with Holster	0.456	0.407	0.035	0.398	0.403	0.001	0.001	0.864	0.492	0.854	0.860	0.860
WWAN Ant 8	Front	0.129	0.165	0.001	0.166	0.180	0.001	0.001	0.295	0.131	0.295	0.310	0.310
	Back	0.247	0.673	0.061	0.787	0.641	0.001	0.001	0.921	0.309	1.034	0.889	0.889
	Back with Holster	0.447	0.407	0.035	0.398	0.403	0.001	0.001	0.855	0.483	0.845	0.851	0.851
WWAN Ant 9	Front	0.052	0.165	0.001	0.166	0.180	0.001	0.001	0.218	0.054	0.218	0.233	0.233
	Back	0.220	0.673	0.061	0.787	0.641	0.001	0.001	0.894	0.282	1.007	0.862	0.862
	Back with Holster	0.151	0.407	0.035	0.398	0.403	0.001	0.001	0.559	0.187	0.549	0.555	0.555
WWAN Ant 4	Front	0.041	0.165	0.001	0.166	0.180	0.001	0.001	0.207	0.043	0.207	0.222	0.222
	Back	0.251	0.673	0.061	0.787	0.641	0.001	0.001	0.925	0.313	1.038	0.893	0.893
	Back with Holster	0.186	0.407	0.035	0.398	0.403	0.001	0.001	0.594	0.222	0.584	0.590	0.590
WWAN Ant 3	Front	0.059	0.165	0.001	0.166	0.180	0.001	0.001	0.225	0.061	0.225	0.240	0.240
	Back	0.154	0.673	0.061	0.787	0.641	0.001	0.001	0.828	0.216	0.941	0.796	0.796
	Back with Holster	0.154	0.407	0.035	0.398	0.403	0.001	0.001	0.562	0.190	0.552	0.558	0.558
WWAN Ant 2	Front	0.072	0.165	0.001	0.166	0.180	0.001	0.001	0.238	0.074	0.238	0.253	0.253
	Back	0.309	0.673	0.061	0.787	0.641	0.001	0.001	0.983	0.371	1.096	0.951	0.951
	Back with Headset	0.254	0.407	0.035	0.398	0.403	0.001	0.001	0.662	0.290	0.652	0.658	0.658



**DBS**

WWAN Ant	Exposure Position	1	2	3	4	5	6	7	1+4+5 Summed 1g SAR (W/kg)	1+2+5+7 Summed 1g SAR (W/kg)	1+3+5+6 Summed 1g SAR (W/kg)
		Maximum WWAN 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)	WLAN5/6GHz Ant 6+7 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Bluetooth Ant 7 1g SAR (W/kg)			
Maximum WWAN Ant 1	Front	0.327	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.673</b>	<b>0.673</b>	<b>0.509</b>
	Back	0.707	0.340	0.001	0.328	0.374	0.001	0.001	<b>1.409</b>	<b>1.422</b>	<b>1.083</b>
	Back with Holster	0.670	0.407	0.035	0.398	0.403	0.001	0.001	<b>1.471</b>	<b>1.481</b>	<b>1.109</b>
Maximum WWAN Ant 5	Front	0.249	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.595</b>	<b>0.595</b>	<b>0.431</b>
	Back	0.467	0.340	0.001	0.328	0.374	0.001	0.001	<b>1.169</b>	<b>1.182</b>	<b>0.843</b>
	Back with Holster	0.456	0.407	0.035	0.398	0.403	0.001	0.001	<b>1.257</b>	<b>1.267</b>	<b>0.895</b>
Maximum WWAN Ant 8	Front	0.129	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.475</b>	<b>0.475</b>	<b>0.311</b>
	Back	0.247	0.340	0.001	0.328	0.374	0.001	0.001	<b>0.949</b>	<b>0.962</b>	<b>0.623</b>
	Back with Holster	0.447	0.407	0.035	0.398	0.403	0.001	0.001	<b>1.248</b>	<b>1.258</b>	<b>0.886</b>
Maximum WWAN Ant 9	Front	0.052	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.398</b>	<b>0.398</b>	<b>0.234</b>
	Back	0.220	0.340	0.001	0.328	0.374	0.001	0.001	<b>0.922</b>	<b>0.935</b>	<b>0.596</b>
	Back with Holster	0.151	0.407	0.035	0.398	0.403	0.001	0.001	<b>0.952</b>	<b>0.962</b>	<b>0.590</b>
Maximum WWAN Ant 4	Front	0.041	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.387</b>	<b>0.387</b>	<b>0.223</b>
	Back	0.251	0.340	0.001	0.328	0.374	0.001	0.001	<b>0.953</b>	<b>0.966</b>	<b>0.627</b>
	Back with Holster	0.186	0.407	0.035	0.398	0.403	0.001	0.001	<b>0.987</b>	<b>0.997</b>	<b>0.625</b>
Maximum WWAN Ant 3	Front	0.059	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.405</b>	<b>0.405</b>	<b>0.241</b>
	Back	0.154	0.340	0.001	0.328	0.374	0.001	0.001	<b>0.856</b>	<b>0.869</b>	<b>0.530</b>
	Back with Holster	0.154	0.407	0.035	0.398	0.403	0.001	0.001	<b>0.955</b>	<b>0.965</b>	<b>0.593</b>
Maximum WWAN Ant 2	Front	0.072	0.165	0.001	0.166	0.180	0.001	0.001	<b>0.418</b>	<b>0.418</b>	<b>0.254</b>
	Back	0.309	0.340	0.001	0.328	0.374	0.001	0.001	<b>1.011</b>	<b>1.024</b>	<b>0.685</b>
	Back with Headset	0.254	0.407	0.035	0.398	0.403	0.001	0.001	<b>1.055</b>	<b>1.065</b>	<b>0.693</b>

**15.4 Product Specific Exposure Conditions**

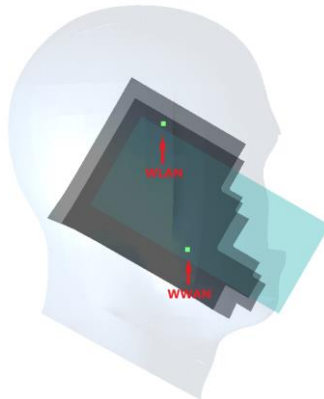
WWAN Ant	Exposure Position	1	2	3	1+2+3 Summed 10g SAR (W/kg)
		Maximum WWAN 10g SAR (W/kg)	WLAN5/6GHz Ant 6+7 10g SAR (W/kg)	NFC 10g SAR (W/kg)	
WWAN Ant 1	Front		0.229	0.001	<b>0.230</b>
	Back	3.084	0.905	0.001	<b>3.990</b>
	Left side		1.012	0.001	<b>1.013</b>
	Right side		2.346	0.001	<b>2.347</b>
	Top side		0.293	0.001	<b>0.294</b>
	Bottom side		0.019		<b>0.019</b>
WWAN Ant 9	Front		0.229	0.001	<b>0.230</b>
	Back		0.905	0.001	<b>0.906</b>
	Left side	2.165	1.012	0.001	<b>3.178</b>
	Right side		2.346	0.001	<b>2.347</b>
	Top side		0.293	0.001	<b>0.294</b>
	Bottom side		0.019		<b>0.019</b>
WWAN Ant 4	Front		0.229	0.001	<b>0.230</b>
	Back		0.905	0.001	<b>0.906</b>
	Left side		1.012	0.001	<b>1.013</b>
	Right side	1.499	2.346	0.001	<b>3.846</b>
	Top side		0.293	0.001	<b>0.294</b>
	Bottom side		0.019		<b>0.019</b>

**15.5 SPLSR Evaluation and Analysis**

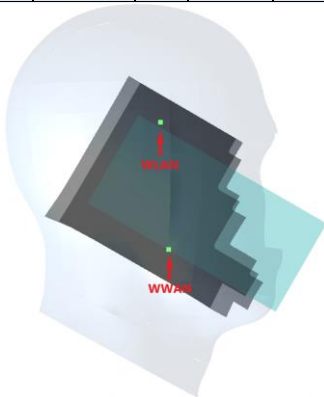
**General Note:**

1. Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneously transmitting antenna. When the sum of 1-g or 10-g SAR of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration. Therefore, the adjacent transmit antennas will be summed first, and then the SPLSR calculation will be evaluated with the farther transmitted antennas.
2.  $SPLSR = (SAR_1 + SAR_2)^{1.5} / (min. \text{ separation distance, mm})$ . If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary
3. The detail hotspot point for each transmitter in each exposure condition are showing as below figure and the minimum 3D distance for each sum combination is used for SPLSR analysis.

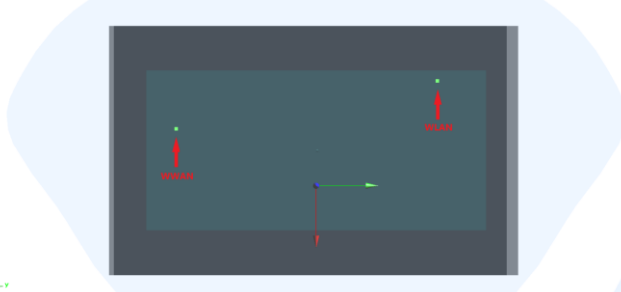
Case 1	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 1	LTE Band 7_Ant 5	Left Cheek	0.749	0	47.47	-62.4	-1.18	95.2	1.71	0.02	Not required
	WLAN5/6GHz Ant 6+7 + Bluetooth Ant 6		0.957	0	34.03	31.84	-1.34				
	LTE Band 7_Ant 5	Left Cheek	0.749	0	47.47	-62.4	-1.18	95.2	1.71	0.02	Not required
	WLAN5/6GHz Ant 6+7 + Bluetooth Ant 7		0.957	0	34.03	31.84	-1.34				



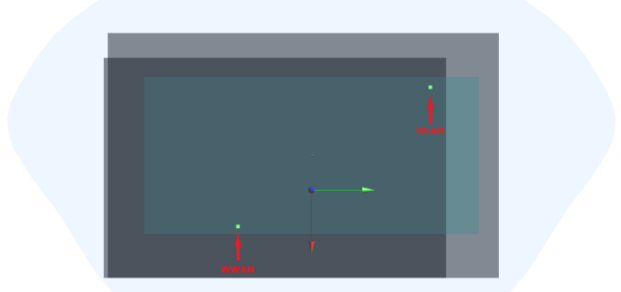
Case 2	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 2	FR1 n41_Ant 3	Left Cheek	0.738	0	33.32	-62.99	-1.47	94.8	1.70	0.02	Not required
	WLAN5/6GHz Ant 6+7 + Bluetooth Ant 6		0.957	0	34.03	31.84	-1.34				
	FR1 n41_Ant 3	Left Cheek	0.738	0	33.32	-62.99	-1.47	94.8	1.70	0.02	Not required
	WLAN5/6GHz Ant 6+7 + Bluetooth Ant 7		0.957	0	34.03	31.84	-1.34				



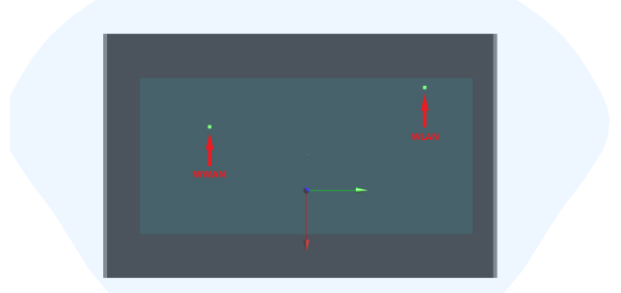
Case 3	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA IV_Ant 1				X	Y	Z				
	WCDMA IV_Ant 1	Back	0.759	10	15.5	23.1	-2.15	60.5	1.93	0.04	Not required
	WLAN2.4GHz Ant 6+7		1.17	10	-33.6	58.4	-1.89				



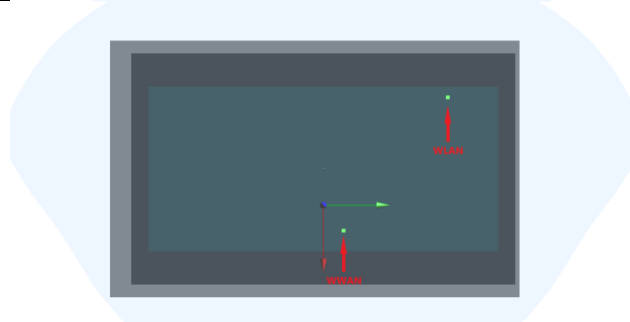
Case 4	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7_Ant 5				X	Y	Z				
	LTE Band 7_Ant 5	Back	0.586	10	34.6	-34.8	-2.16	115.5	1.76	0.02	Not required
	WLAN2.4GHz Ant 6+7		1.17	10	-33.6	58.4	-1.89				



Case 5	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n77_Ant 8				X	Y	Z				
	FR1 n77_Ant 8	Back	0.563	10	-7.4	-47.6	-2.01	109.2	1.73	0.02	Not required
	WLAN2.4GHz Ant 6+7		1.17	10	-33.6	58.4	-1.89				



Case 6	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	FR1 n41_Ant 3	Back	0.598	10	32.8	10.6	-1.95	81.8	1.77	0.03	Not required
	WLAN2.4GHz Ant 6+7		1.17	10	-33.6	58.4	-1.89				



Case 7	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	FR1 n41_Ant 2	Back	0.644	10	25.2	78	-1.51	62.0	1.81	0.04	Not required
	WLAN2.4GHz Ant 6+7		1.17	10	-33.6	58.4	-1.89				



**Test Engineer :** Teddy Chang, Jefferson Lin, Teddy Chang and Lu Chen



## **16. Uncertainty Assessment**

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

Declaration of Conformity:

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

Comments and Explanations:

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

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

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

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

<b>Uncertainty Distributions</b>	<b>Normal</b>	<b>Rectangular</b>	<b>Triangular</b>	<b>U-Shape</b>
Multi-plying Factor <sup>(a)</sup>	1/k <sup>(b)</sup>	1/√3	1/√6	1/√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	(C1) 1g	(C1) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
<b>Measurement System</b>							
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
<b>Test Sample Related</b>							
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
<b>Phantom and Setup</b>							
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
<b>Combined Std. Uncertainty</b>						14.5%	14.2%
<b>Coverage Factor for 95 %</b>						K=2	K=2
<b>Expanded STD Uncertainty</b>						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
<b>Uncertainty terms dep endent on the DUT and environmental factors</b>					
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	
<b>Combined Std. Uncertainty</b>					<b>1.34</b>
<b>Expanded STD Uncertainty (95%)</b>					<b>2.68</b>



## **17. References**

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- [2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992
- [3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013
- [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
- [7] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015
- [9] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015
- [10] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015
- [11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [12] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015
- [13] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [14] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.
- [15] 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
- [16] SPEAG DASY6 System Handbook
- [17] SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)