

FCC SAR TEST REPORT

FCC ID : IHDT56AY2
Equipment : Mobile Cellular Phone
Brand Name : Motorola
Model Name : XT2701-3
Applicant : Motorola Mobility LLC
222 W. Merchandise Mart Plaza, Chicago, IL 60654, USA
Manufacturer : Motorola Mobility LLC
222 W. Merchandise Mart Plaza, Chicago, IL 60654, USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Aug. 17, 2026 and testing was started from Sep. 02, 2026 and completed on Oct. 08, 2026. 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



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History of this test report

Report No.	Version	Description	Issued Date
FA672113-02	01	Initial issue of report	Sep. 30, 2026
FA672113-02	02	Updated the Frequency Range of 5GNR n77 Part 270 and relevant data. This report is an updated version, replacing the report issued on Sep. 30, 2026.	Oct. 20, 2026

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for **Motorola Mobility LLC, Mobile Cellular Phone, XT2701-3**, 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 (Separation: 0 mm)	Hotspot (Separation: 5 mm)	Body worn (Separation: 5 mm)	Extremity (Separation: 0 mm)		
		1g SAR (W/kg)			10g SAR (W/kg)		
Licensed	GSM850	0.85	1.28	1.28	2.01	1.59	3.99
	GSM1900	0.10	1.09	0.84	1.18		
	WCDMA II	0.20	1.28	1.28	3.13		
	WCDMA IV	0.23	1.28	1.26	3.16		
	WCDMA V	1.06	1.28	1.22	2.21		
	LTE Band 7	1.22	1.27	1.27	3.14		
	LTE Band 12/17	0.63	1.15	1.15			
	LTE Band 13	0.77	1.27	1.27	1.26		
	LTE Band 14	0.76	1.16	1.18			
	LTE Band 25/2	1.28	1.28	1.28	3.20		
	LTE Band 26/5	0.67	1.18	1.19			
	LTE Band 30	1.23	1.09	0.95	2.45		
	LTE Band 66/4	1.28	1.28	1.27	3.15		
	LTE Band 71	0.62	1.06	0.80			
	LTE Band 41/38	1.07	1.28	1.28	3.18		
	LTE Band 42	1.22	1.27	1.27	3.05		
	LTE Band 48	1.25	1.12	1.12	2.63		
	FR1 n7	1.27	1.29	1.24	3.17		
	FR1 n12	0.40	0.71	0.60			
	FR1 n13	0.65	0.81	0.81			
	FR1 n14	1.21	1.15	1.15	2.13		
	FR1 n25/2	1.15	1.27	1.27	3.20		
	FR1 n26/5	0.85	1.28	1.28	2.30		
	FR1 n30	1.23	1.27	1.00	3.17		
	FR1 n66	1.27	1.29	1.28	3.16		
	FR1 n70	1.22	1.14	1.20	3.06		
	FR1 n71	0.78	1.15	0.83	0.81		
	FR1 n41/38	1.27	1.28	1.28	3.20		
	FR1 n48	1.29	1.19	1.28	3.15		
	FR1 n77/78	1.29	1.23	1.17	3.13		
DTS	2.4GHz WLAN	1.24	1.11	1.11	3.20	1.59	3.99
NII	5GHz WLAN	1.04	1.19	1.19	2.06	1.59	3.99
	UWB (802.15.4ab)	0.95	0.91	0.91	0.63	1.59	3.99
6XD	6GHz WLAN	0.39		0.89	0.45	1.59	3.99
DSS	Bluetooth	0.65	0.75	0.75		1.59	3.99
DXX	NFC				<0.01		3.99

Highest Total Exposure Ratio	Ratio ≤ 1.0
	1.00

Equipment Class	Frequency Band	Measured APD			Reported PD
		Head (W/m ²)	Body Worn (W/m ²)	Phablet (W/m ²)	psPD (W/m ²)
6XD	6GHz WLAN	1.58	4.44	7.30	4.78
Date of Testing:		2026/9/2 ~ 2026/10/08			

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 / B38 / B42 (3550 MHz ~ 3600MHz)&B43 and B25 / B66 / B26 / B12 / B41 / B48. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 / B42 (3550 MHz ~ 3600MHz)&B43 falls completely within the support's frequency span for LTE B25 / B66 / B26 / B12 / B41 / B48, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41 / B48.
2. This device supports 5GNR n38/n5 /n78/n2 and n41/n26/n77/n25. Since the supported frequency span for 5GNR n38/n5 /n78/n2 falls completely within the support's frequency span for n41/n26/n77/n25, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n41/n26/n77/n25.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang

Report Producer: Carlie Tsai



2. Guidance Applied

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

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- IEC/IEEE 62209-1528:2020
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02
- IEC TR 63170:2018
- IEC 62479:2010
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)
- FCC KDB 484596 D01 Referencing Test Data v03

3. Data Reuse Approach

3.1 Introduction Section

This application re-uses data collected on a similar device, FCC ID: IHDT56AY1 (reference model) and FCC ID: IHDT56AY2 (variant model). Due to the same design are identical between parent model and variant model, SAR data reuse is requested and spot check data in this report is used to justify the SAR data reuse.

Per KDB 484596 D01 v03 Section 3.2.2, variants and parent models always satisfy Eq.(6), and the WWAN/WLAN max SAR summary always selects the higher SAR between the parent and variant models.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: IHDT56AY2.

3.2 Model Difference Information

The **main** difference between FCC ID: IHDT56AY1 and FCC ID: IHDT56AY2 is as below:

- Removed LTE Band B43 and 5G NR n89.
- Added LTE Band B30 and 5G NR n30, 5G NR n77/78(Part 27Q).
- 5G NR n14/71: changed from Power class 3 to Power class 2.
- Added LTE CA_5B/48B/48C and 5G NR CA_n77C

Other differences and all the details of similarity and difference can be found in the confidential documents (XT2701-3_Operational Description of Product Equality Declaration).



3.3 Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	FCC ID (Reference)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Test on the variant
Part 2.1093	PCE	GSM	GSM850/1900	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	Spot check for each equipment class and antenna
		WCDMA	B2/4/5	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	
		LTE	B2/4/5/7/12/13/14/17/25/26 /38/41/42/48/66/71	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	
		5GNR FR1	n2/5/7/12/13/25/26/30 /38/41/48/66/70	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	
		LTE	B30				IHDT56AY2	Full Test
		5GNR FR1	n2/25/66/70 for ANT6 /30/71/14/77/78				IHDT56AY2	Full Test
	DTS	BLE/ WiFi	2400~2483.5	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	Spot check for each equipment class and antenna
	NII	Wi-Fi / UWB (802.15.4ab)	5470 ~ 5725 5725 ~ 5850 5728.75 ~ 5848.75	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	
	6XD	Wi-Fi	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	Spot check (PD Full Test)
	DSS	Bluetooth	2400~2483.5	IHDT56AY1	Original Grant	FA672113	IHDT56AY2	Spot check
	DXX	NFC	13.56				IHDT56AY2	Full Test
	DCD	WPT	0.110 ~ 0.145				IHDT56AY2	Full Test



4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2701-3
FCC ID	IHDT56AY2
IMEI Code	350332830018910/350332830018928,350332830018779/350332830018787, 350332830018795/350332830018803,350332830018837/350332830018845
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3600 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n13: 777 MHz ~ 787 MHz 5G NR n14: 788 MHz ~ 798 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n30: 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n70: 1695 MHz ~ 1710 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN 6GHz U-NII 5: 5925 MHz ~ 6425 MHz WLAN 6GHz U-NII 6: 6425 MHz ~ 6525 MHz WLAN 6GHz U-NII 7: 6525 MHz ~ 6875 MHz WLAN 6GHz U-NII 8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPT: 110 KHz ~ 145 KHz UWB (802.15.4ab): 5728.75 MHz ~ 5848.75 MHz UWB: 6489.6 MHz & 7987.2 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA/HSUPA HSPA+ (16QAM uplink is not supported) LTE: QPSK, 16QAM, 64QAM, 256QAM

	5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax/be HE20/HE40/EHT20/EHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 5GHz 802.11be EHT20/EHT40/EHT80/EHT160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11be EHT20/EHT40/EHT80/EHT160/EHT320 Bluetooth BR/EDR/LE / CS GFSK/ CS ASK NFC: ASK WPT: ASK UWB (802.15.4ab): O-QPSK UWB: BPM-BPSK
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: - This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5G NR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation. - This device WLAN 2.4GHz support hotspot operation and Bluetooth support tethering applications. - This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only). WLAN 6GHz has no hotspot function. - This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). - This device does not support DTM operation and support GRPS/EGPRS mode up to multi-slot class 12. - The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO mode. - Bluetooth and Bluetooth LE/CS modes support TX beamforming mode. - The device implements the power management, proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E. - This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the LTE and 5G NR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information on original report. - This device supports HPUE mode for LTE Band 41 and 5G NR n41/n77/n78 with higher power. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same. Therefore, power class 3 was chosen to perform full SAR testing and power class 2 verified the worst case of power class 3 SAR. - The UWB (6489.6 MHz & 7987.2 MHz) output power is -10.5 dBm and it is less than 1mW and exempt from power density testing. - For 5G NR n41/n77/n78 HPUE, 5G NR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing. - This device supports HPUE mode for 5G NR n5/n26/n41/n71 with higher power. Therefore, HPUE mode was chosen to perform full SAR testing and HPUE SAR can represent power class 3 level SAR. 5G NR n2/n7/n25/n30/n41/n48/n66/n77 support UL MIMO mode; among them, n2/n7/n25/n41/n66/n77 support HPUE mode under MIMO operation. - The device supports HPUE (power class 2) under SISO mode and HPUE (power class 1.5) under UL MIMO mode for 5G NR n41/n77. - The RF exposure report for WPC (Wireless Power Charging) will be submitted separately. - This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.	

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n71	FDD	15	5, 10, 15, 20, 25, 30, 35
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 15, 20, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n12	FDD	15	5, 10, 15
	n13	FDD	15	5, 10
	n14	FDD	15	5, 10
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n26	FDD	15	5, 10, 15, 20
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n70	FDD	15	5, 10, 15
	n71	FDD	15	5, 10, 15, 20, 25, 30, 35
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 15, 20, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																							
FCC ID	IHDT56AY2																																																																						
Equipment Name	Mobile Cellular Phone																																																																						
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																						
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 30: 5MHz, 10MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 43: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																						
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																						
LTE Voice / Data requirements	Voice and Data																																																																						
LTE Release Version	R17																																																																						
CA Support	Supported, Uplink and Downlink																																																																						
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3																																																																							
Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)																																																																
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																																																	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																																
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																																
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																																
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																																
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																																
256 QAM	≥ 1						≤ 5																																																																
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																						
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																						
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism, head/body -worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 14.																																																																						
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.																																																																						



LTE Carrier Aggregation Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 2 carriers in the uplink.
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Transmission (H, M, L) channel numbers and frequencies in each LTE band														
LTE Band 2														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860		
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880		
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900		
LTE Band 4														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720		
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5		
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745		
LTE Band 5														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20407	824.7	20415	825.5	20425	826.5	20450	829						
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5						
H	20643	848.3	20635	847.5	20625	846.5	20600	844						
LTE Band 7														
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510						
M	21100	2535	21100	2535	21100	2535	21100	2535						
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560						
LTE Band 12														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	23017	699.7	23025	700.5	23035	701.5	23060	704						
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5						
H	23173	715.3	23165	714.5	23155	713.5	23130	711						
LTE Band 13														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)							
L	23205		779.5		23230		782							
M	23230		782											
H	23255		784.5											
LTE Band 14														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Channel #		Channel #		Freq.(MHz)							
L	23305		790.5		23330		793							
M	23330		793											
H	23355		795.5											
LTE Band 17														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)							
L	23755		706.5		23780		709							
M	23790		710		23790		710							
H	23825		713.5		23800		711							
LTE Band 25														
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860		
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880		



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H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
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LTE Band 30				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	27685	2307.5	27710	2310
M	27710	2310		
H	27735	2312.5		

LTE Band 26										
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5

LTE Band 38								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

LTE Band 41								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

LTE Band 42								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540

LTE Band 42								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	43115	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 43								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	43615	3602.5	43640	3605	43665	3607.5	43690	3610
M	44090	3650	44090	3650	44090	3650	44090	3650
H	44565	3697.5	44540	3695	44515	3692.5	44490	3690

LTE Band 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
LM	55810	3607	55815	3607.5	55820	3608	55830	3609



MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

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

<For LTE Overlap Bands Description>

1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes
LTE Band 42			Yes	Yes	Yes	Yes
LTE Band 43			Yes	Yes	Yes	Yes
LTE Band 48			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Full Power Tune-up Limit	DSI2	DSI3	DSI7	DSI6	DSI4
			Head Tune-up Limit	Body-worn Tune-up Limit	Hotspot Tune-up Limit	Extremity Tune-up Limit	Sensor off Tune-up Limit
LTE Band 5	Ant 0	24	24	24	24	24	24
LTE Band 26	Ant 0	24	24	24	24	24	24
LTE Band 5	Ant 1	24	24	23.5	23.5	24	24
LTE Band 26	Ant 1	24	24	23.5	23.5	24	24
LTE Band 12	Ant 0	24	24	24	24	24	24
LTE Band 17	Ant 0	24	24	24	24	24	24
LTE Band 12	Ant 1	24	24	24	24	24	24
LTE Band 17	Ant 1	24	24	24	24	24	24
LTE Band 2	Ant 1	24	18.1	16.4	16.4	21.8	24
LTE Band 25	Ant 1	24	18.1	16.4	16.4	21.8	24
LTE Band 2	Ant 2	24	24	22.7	20.7	23.7	24
LTE Band 25	Ant 2	24	24	22.7	20.7	23.7	24
LTE Band 2	Ant 6	20.5	20.5	20.5	19.9	20.5	20.5
LTE Band 25	Ant 6	22.5	21.6	22.5	19.9	21.5	22.5
LTE Band 4	Ant 1	24	17.6	18.2	18.2	22.1	24
LTE Band 66	Ant 1	24	17.6	18.2	18.2	22.1	24
LTE Band 4	Ant 2	24	24	22.2	20.2	24	24
LTE Band 66	Ant 2	24	24	22.2	20.2	24	24
LTE Band 4	Ant 6	22.5	22.5	22.5	19.9	22.4	22.5
LTE Band 66	Ant 6	22.5	22.5	22.5	19.9	22.4	22.5
LTE Band 38	Ant 1	24	22.4	21.8	21.8	24	24
LTE Band 41	Ant 1	24	22.4	21.8	21.8	24	24



LTE Band 41_HPUE	Ant 1	27	24	23.4	23.4	25.8	27
LTE Band 38	Ant 2	24	24	23	21.3	24	24
LTE Band 41	Ant 2	24	24	23	21.3	24	24
LTE Band 41_HPUE	Ant 2	27	27	24.6	22.9	26.2	27
LTE Band 38	Ant 6	22.5	22.5	22.5	21.2	22.5	22.5
LTE Band 41	Ant 6	22.5	22.5	22.5	21.2	22.5	22.5
LTE Band 41_HPUE	Ant 6	25	25	24.8	22.8	25	25
LTE Band 42	Ant 5	24	24	21.6	21.6	24	24
LTE Band 43	Ant 5	24	24	21.6	21.6	24	24
LTE Band 48	Ant 5	24	24	21.6	21.6	24	24
LTE Band 42	Ant 7	24	24	22.5	22.5	24	24
LTE Band 43	Ant 7	24	24	22.5	22.5	24	24
LTE Band 48	Ant 7	24	24	22.5	22.5	24	24

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
FCC ID	IHDT56AY2
Equipment Name	Mobile Cellular Phone
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n13: 777 MHz ~ 787 MHz 5G NR n14: 788 MHz ~ 798 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n70: 1695 MHz ~ 1710 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/7/5/66/12/13/14/30/48/71
LTE Anchor Bands for n5	LTE B2/48/66/7/30/4
LTE Anchor Bands for n7	LTE B2/4/5/12/66
LTE Anchor Bands for n25	LTE B12/7/26/66
LTE Anchor Bands for n26	LTE B7
LTE Anchor Bands for n38	LTE B2/4/5/66/12
LTE Anchor Bands for n41	LTE B2/4/5/12/71/66/25/26
LTE Anchor Bands for n48	LTE B71
LTE Anchor Bands for n66	LTE B2/5/7/14/30/48/71/13/12
LTE Anchor Bands for n71	LTE B2/48/66/7
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/41/66/71/25/30
LTE Anchor Bands for n78	LTE B2/4/5/7/12/13/25/26/38/41/66/71

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band																
NR Band 2																
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	



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L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890

NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	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 35MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	503500	2517.5	504000	2520	505000	2525
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510500	2552.5	510000	2550	509000	2545

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

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

NR Band 14				
Bandwidth 5MHz			Bandwidth 10MHz	
	Ch. #	Freq. (MHz)		Freq. (MHz)
L	158100	790.5	158600	793
M	158600	793		
H	159100	795.5		

NR Band 25																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376500	1882.5	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	379500	1897.5	379000	1895

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

NR Band 30 SCS15KHz				
Bandwidth 5MHz			Bandwidth 10MHz	
	Ch. #	Freq. (MHz)		Freq. (MHz)
L	461500	2307.5	462000	2310
M	462000	2310		
H	462500	2312.5		

NR Band 66																		
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	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	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760	351500	1757.5



NR Band 70						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	339500	1697.5	340000	1700	340500	1702.5
M	340500	1702.5	340500	1702.5		
H	341500	1707.5	341000	1705		

NR Band 71														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	134100	670.5	134600	673	135100	675.5	135600	678		
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5
H	139100	695.5	138600	693	138100	690.5	137600	688	137100	685.5	136600	683		

NR Band 38												
	Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515004	2575.02	515502	2577.51	516000	2580	516504	2582.52	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610	521496	2607.48	520998	2604.99	519996	2599.98

NR Band 41																												
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	502704	2513.52	503202	2516.01	503700	2518.5	504204	2521.02	505200	2526	500202	2501.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534498	2672.49	534000	2670	533496	2667.48	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 77																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
LM	654168	3812.52	654250	3813.75	654334	3815.01	654418	3816.27	654500	3817.5	654668	3820.02	654834	3822.51	655000	3825	655168	3827.52	655334	3830.01	655500	3832.5	655668	3835.02
MH	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01	661334	3920.01
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.5	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78 SCS30KHz																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750.00	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

NR Band 48										
	Bandwidth 10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98

NR Band 77 SCS30KHz																									
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495			
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99			



NR Band 78 SCS30KHz																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

<For NR Overlap Bands Description>

1) NR Bands BW

Band	5 MHz	10 MHz	15 MHz	20 MHz	25 MHz	30 MHz	35 MHz	40 MHz	45 MHz	50 MHz	60 MHz	70 MHz	80 MHz	90 MHz	100 MHz
FR1 n5	Yes	Yes	Yes	Yes	Yes										
FR1 n26	Yes	Yes	Yes	Yes	Yes										
FR1 n2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
FR1 n25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
FR1 n38		Yes	Yes	Yes	Yes	Yes		Yes							
FR1 n41		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n77		Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes
FR1 n78		Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes

2) NR Bands Tune up:

Band	Antenna	Full Power Tune-up Limit	ECI1	ECI3	ECI4	ECI5	DSI4
			Head Tune-up Limit	Extremity Tune-up Limit	Body-worn Tune-up Limit	Hotspot Tune-up Limit	Sensor off Tune-up Limit
FR1 n5	Ant 0	24	24	24	24	24	24
FR1 n5_HPUE	Ant 0	27	27	27	26.8	27	27
FR1 n26	Ant 0	24	24	24	24	24	24
FR1 n26_HPUE	Ant 0	27	27	27	26.8	27	27
FR1 n5	Ant 1	24	24	24	24	24	24
FR1 n5_HPUE	Ant 1	27	24.5	25	25	27	27
FR1 n26	Ant 1	24	24	24	24	24	24
FR1 n26_HPUE	Ant 1	27	24.5	25	25	27	27
FR1 n2	Ant 1	24	18.9	17.4	17.4	22.4	24
FR1 n25	Ant 1	24	18.9	17.4	17.4	22.4	24
FR1 n2	Ant 2	24	24	22.1	20.1	24	24
FR1 n25	Ant 2	24	24	22.1	20.1	24	24
FR1 n38	Ant 0	24	24	24	23.7	24	24
FR1 n41	Ant 0	24	24	24	23.7	24	24
FR1 n41_HPUE	Ant 0	27	27	27	26.7	27	27
FR1 n38	Ant 1	24	21.1	19.2	19.2	22.8	24
FR1 n41	Ant 1	24	21.1	19.2	19.2	22.8	24
FR1 n41_HPUE	Ant 1	27	24.1	22.2	22.2	25.8	27
FR1 n38	Ant 2	24	24	22.3	21	23.3	24
FR1 n41	Ant 2	24	24	22.3	21	23.3	24
FR1 n41_HPUE	Ant 2	27	27	25.3	24	26.3	27
FR1 n38	Ant 6	23	20.8	20	19	21.5	23
FR1 n41	Ant 6	24	20.8	20	19	21.5	24
FR1 n41_HPUE	Ant 6	27	23.8	23	22	24.5	27
FR1 n77	Ant 4	24	17.7	18.6	18.1	21.4	24
FR1 n77_HPUE	Ant 4	27	20.7	21.6	21.1	24.4	27
FR1 n78	Ant 4	24	17.7	18.6	18.1	21.4	24
FR1 n78_HPUE	Ant 4	27	20.7	21.6	21.1	24.4	27
FR1 n77	Ant 5	24	21.5	21	20.4	24	24
FR1 n77_HPUE	Ant 5	27	24.5	24	23.4	27	27
FR1 n78	Ant 5	24	21.5	21	20.4	24	24
FR1 n78_HPUE	Ant 5	27	24.5	24	23.4	27	27
FR1 n77	Ant 7	24	21.5	20.8	20.8	24	24
FR1 n77_HPUE	Ant 7	27	24.5	23.8	23.8	27	27
FR1 n78	Ant 7	24	21.5	20.8	20.8	24	24
FR1 n78_HPUE	Ant 7	27	24.5	23.8	23.8	27	27
FR1 n77	Ant 8	24	24	23.5	20.2	20.5	20.5
FR1 n77_HPUE	Ant 8	27	27	26.5	23.2	23.5	23.5
FR1 n78	Ant 8	24	24	23.5	20.2	20.5	20.5
FR1 n78_HPUE	Ant 8	27	27	26.5	23.2	23.5	23.5

5. Smart Transmit feature for RF Exposure compliance

The Qualcomm® Smart Transmit™ Plus2.0 of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature. The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN and WLAN/BT / UWB (802.15.4ab) transmitter to ensure the product in compliance with RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 25 to enable the Smart Transmit GEN2 Feature.

<Terminologies in this report>

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

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at WWAN and WLAN/BT/ UWB (802.15.4ab) bands. It will then be used as input for Smart Transmit to control and manage RF exposure for WWAN and WLAN/BT / UWB (802.15.4ab) bands.

<SAR design target and uncertainty>

Item		Uncertainty dB (k=2)
Total uncertainty	WWAN	1.5
	WLAN/BT/ UWB (802.15.4ab)	2.0

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

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

Antenna Group:

Antenna Group 0 (AG0)	ANT1 & ANT4 & ANT5 & ANT6 & ANT3& ANT7
Antenna Group 1 (AG1)	ANT0 & ANT2 & ANT8

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

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

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

Band	Antenna	Head DSI 2	Body-Worn DSI 3	Hotspot DSI 7	Extremity DSI 6	Sensor off DSI 4	Pmax*
GSM850	Ant 0	29.9	24.1	24.1	24.5	24.5	24.5
GSM850	Ant 1	26.3	24.5	23.4	24.5	24.5	24.5
GSM1900	Ant 2	33.5	23.3	23.0	26.7	22.0	22.0
WCDMA II	Ant 2	31.3	20.9	20.0	23.1	23.0	23.0
WCDMA IV	Ant 2	30.5	20.6	18.5	22.3	23.0	23.0
WCDMA V	Ant 0	28.5	22.8	23.0	23.0	23.0	23.0
WCDMA V	Ant 1	23.8	24.8	22.4	23.0	23.0	23.0
LTE Band 7	Ant 1	19.2	18.9	18.9	22.5	23.0	23.0
LTE Band 7	Ant 2	32.4	21.7	19.9	21.1	23.0	23.0
LTE Band 7	Ant 6	21.2	19.3	18.7	20.2	21.0	21.0
LTE Band 12(17)	Ant 0	29.5	23.5	23.5	23.0	23.0	23.0
LTE Band 12(17)	Ant 1	26.1	25.3	23.6	23.0	23.0	23.0
LTE Band 13	Ant 0	29.2	23.5	23.5	23.0	23.0	23.0
LTE Band 13	Ant 1	25.2	22.7	22.7	23.0	23.0	23.0
LTE Band 14	Ant 0	29.1	23.4	22.9	23.0	23.0	23.0
LTE Band 14	Ant 1	25.3	24.4	23.6	23.0	23.0	23.0
LTE Band 25(2)	Ant 1	17.1	15.4	15.4	20.8	23.0	23.0
LTE Band 25(2)	Ant 2	31.5	21.7	19.7	22.7	23.0	23.0
LTE Band 2	Ant 6	20.6	22.4	18.9	20.5	19.5	19.5
LTE Band 25	Ant 6	20.6	22.4	18.9	20.5	21.5	21.5
LTE Band 26(5)	Ant 0	28.7	23.3	23.3	23.0	23.0	23.0
LTE Band 26(5)	Ant 1	25.8	22.5	22.5	23.0	23.0	23.0
LTE Band 66(4)	Ant 1	16.6	17.2	17.2	21.1	23.0	23.0
LTE Band 66(4)	Ant 2	31.5	21.2	19.2	23.1	23.0	23.0
LTE Band 66(4)	Ant 6	21.5	22.6	18.9	21.4	21.5	21.5
LTE Band 30	Ant 1	21.7	18.8	18.8	22.2	23.0	23.0
LTE Band 30	Ant 2	23.0	23.0	21.3	23.0	23.0	23.0
LTE Band 30	Ant 6	21.0	19.8	18.7	19.0	22.0	22.0
LTE Band 71	Ant 0	30.1	25.0	22.5	23.0	23.0	23.0
LTE Band 71	Ant 1	26.2	25.7	23.4	23.0	23.0	23.0
LTE Band 41(38)	Ant 1	19.4	18.8	18.8	21.2	21.0	21.0
LTE Band 41_HPUE	Ant 1	19.4	18.8	18.8	21.2	22.4	22.4
LTE Band 41(38)	Ant 2	33.7	20.0	18.3	21.6	21.0	21.0
LTE Band 41_HPUE	Ant 2	33.7	20.0	18.3	21.6	22.4	22.4
LTE Band 41(38)	Ant 6	21.0	20.2	18.2	20.9	19.5	19.5
LTE Band 41_HPUE	Ant 6	21.0	20.2	18.2	20.9	20.4	20.4
LTE Band 42(27Q)	Ant 5	20.7	18.5	18.3	21.2	21.0	21.0
LTE Band 42(27Q)	Ant 7	22.3	19.3	19.3	22.1	21.0	21.0
LTE Band 48(42)	Ant 5	21.3	18.6	18.6	21.9	21.0	21.0
LTE Band 48(42)	Ant 7	21.1	19.5	19.5	21.0	21.0	21.0
FR1 n7	Ant 1	18.6	17.3	17.3	21.7	23.0	23.0
FR1 n7	Ant 2	33.2	20.9	19.4	21.4	23.0	23.0
FR1 n7	Ant 6	21.2	19.4	17.7	20.2	21.0	21.0
FR1 n12	Ant 0	32.2	26.2	25.6	23.0	23.0	23.0
FR1 n12	Ant 1	28.0	27.7	27.7	23.0	23.0	23.0
FR1 n13	Ant 0	32.0	26.2	26.2	23.0	23.0	23.0
FR1 n13	Ant 1	26.0	24.6	25.0	23.0	23.0	23.0
FR1 n14	Ant 0	26.0	25.0	25.0	26.0	23.0	23.0
FR1 n14_HPUE	Ant 0	26.0	25.0	25.0	26.0	26.0	26.0
FR1 n14	Ant 1	25.2	24.5	24.5	26.0	23.0	23.0
FR1 n14_HPUE	Ant 1	25.2	24.5	24.5	26.0	26.0	26.0



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FR1 n25(2)	Ant 1	17.9	16.4	16.4	21.4	23.0	23.0
FR1 n25(2)	Ant 2	32.5	21.1	19.1	23.0	23.0	23.0
FR1 n25(2)	Ant 6	21.0	21.0	19.0	20.7	21.0	21.0
FR1 n26(5)	Ant 0	32.4	27.6	23.0	28.2	26.0	23.0
FR1 n26(5)_HPUE	Ant 0	32.4	27.6	25.8	28.2	26.0	26.0
FR1 n26(5)	Ant 1	23.5	24.0	24.0	27.4	26.0	23.0
FR1 n26(5)_HPUE	Ant 1	23.5	24.0	24.0	27.4	26.0	26.0
FR1 n30	Ant 1	22.0	20.2	20.2	22.0	23.0	23.0
FR1 n30	Ant 2	23.0	23.0	21.6	23.0	23.0	23.0
FR1 n30	Ant 6	21.0	21.0	19.8	21.0	21.0	21.0
FR1 n66	Ant 1	17.4	16.0	16.0	20.5	23.0	23.0
FR1 n66	Ant 2	33.6	21.0	18.5	22.6	23.0	23.0
FR1 n66	Ant 6	21.0	21.0	21.0	21.0	21.0	21.0
FR1 n70	Ant 1	18.0	20.9	20.7	21.8	23.0	23.0
FR1 n70	Ant 2	33.5	21.5	20.4	23.9	23.0	23.0
FR1 n70	Ant 6	21.0	21.0	20.0	21.0	21.0	21.0
FR1 n71	Ant 0	26.0	26.0	23.0	26.0	23.0	23.0
FR1 n71_HPUE	Ant 0	26.0	26.0	24.2	26.0	26.0	26.0
FR1 n71	Ant 1	26.0	26.0	26.0	26.0	23.0	23.0
FR1 n71_HPUE	Ant 1	26.0	26.0	26.0	26.0	26.0	26.0
FR1 n41(38)	Ant 0	32.7	24.5	22.7	24.0	23.0	23.0
FR1 n41_HPUE	Ant 0	33.1	24.5	22.7	24.1	23.0	23.0
FR1 n41(38)	Ant 1	20.1	18.2	18.2	21.8	23.0	23.0
FR1 n41_HPUE	Ant 1	20.1	18.2	18.2	21.8	23.0	23.0
FR1 n41(38)	Ant 2	33.9	21.3	20.0	22.3	23.0	23.0
FR1 n41_HPUE	Ant 2	33.6	21.3	20.0	22.3	23.0	23.0
FR1 n38	Ant 6	19.8	19.0	18.0	20.5	22.0	22.0
FR1 n41	Ant 6	19.8	19.0	18.0	20.5	23.0	23.0
FR1 n41_HPUE	Ant 6	19.8	19.0	18.0	20.5	23.0	23.0
FR1 n48	Ant 4	16.0	19.5	19.5	19.8	20.0	20.0
FR1 n48	Ant 5	20.2	19.2	19.2	21.2	23.0	23.0
FR1 n48	Ant 7	19.9	20.0	20.0	24.4	23.0	23.0
FR1 n48	Ant 8	30.3	23.1	18.8	19.5	19.5	24.0
FR1 n77(78)_27Q	Ant 4	17.3	17.6	17.6	20.2	23.0	23.0
FR1 n77(78)_HPUE_27Q	Ant 4	17.3	17.6	17.6	20.2	23.0	23.0
FR1 n77(78)_27O	Ant 4	17.3	17.6	17.6	20.2	23.0	23.0
FR1 n77(78)_HPUE_27O	Ant 4	17.3	17.6	17.6	20.2	23.0	23.0
FR1 n77(78)_27Q	Ant 5	20.5	20.0	20.0	21.5	23.0	23.0
FR1 n77(78)_HPUE_27Q	Ant 5	20.5	20.0	20.0	21.5	23.0	23.0
FR1 n77(78)_27O	Ant 5	20.5	20.0	20.0	21.5	23.0	23.0
FR1 n77(78)_HPUE_27O	Ant 5	20.5	20.0	20.0	21.5	23.0	23.0
FR1 n77(78)_27Q	Ant 7	19.3	20.1	20.1	23.0	23.0	23.0
FR1 n77(78)_HPUE_27Q	Ant 7	19.3	20.1	20.1	23.0	23.0	23.0
FR1 n77(78)_27O	Ant 7	19.3	20.1	20.1	23.0	23.0	23.0
FR1 n77(78)_HPUE_27O	Ant 7	19.3	20.1	20.1	23.0	23.0	23.0
FR1 n77(78)_27Q	Ant 8	23.0	21.4	18.2	21.4	21.4	23.0
FR1 n77(78)_HPUE_27Q	Ant 8	23.0	21.4	18.2	21.4	21.4	23.0
FR1 n77(78)_27O	Ant 8	23.0	21.4	18.2	21.4	21.4	23.0
FR1 n77(78)_HPUE_27O	Ant 8	23.0	21.4	18.2	21.4	21.4	23.0
WLAN2.4GHz	Ant 6	19.5	19.0	19.0	23.5	23.5	23.5
WLAN2.4GHz	Ant 3	19.0	18.5	18.5	23.0	23.0	23.0
WLAN2.4GHz	Ant 6+3	19,19	18.5,18.5	18.5,18.5	23,23	23,23	26.3
WLAN5.2GHz	Ant 5	17.0	17.0	16.5	19.0	19.0	19.0
WLAN5.2GHz	Ant 4	17.0	17.0	15.0	18.0	18.0	18.0
WLAN5.2GHz	Ant 5+4	17,17	17,17	15,15	19,19	19,19	21.5
WLAN5.3GHz	Ant 5	18.0	18.0		18.5	18.5	18.5

WLAN5.3GHz	Ant 4	17.0	17.0		17.5	17.5	17.5
WLAN5.3GHz	Ant 5+4	17,17	17,17		18.5,18.5	18.5,18.5	21.0
WLAN5.5GHz	Ant 5	16.5	16.0		20.5	20.5	20.5
WLAN5.5GHz	Ant 4	15.5	15.0		19.0	19.0	19.0
WLAN5.5GHz	Ant 5+4	15.5,15.5	15,15		20.5,20.5	20.5,20.5	22.8
WLAN5.8GHz	Ant 5	18.0	15.5	15.5	21.5	21.5	21.5
WLAN5.8GHz	Ant 4	16.5	14.0	14.0	20.0	20.0	20.0
WLAN5.8GHz	Ant 5+4	16.5,16.5	14,14	14,14	20,20	20,20	23.8
WLAN6G Ant 5	Ant 5	14.5	16.5		17.0	17.0	17.0
WLAN6G Ant 4	Ant 4	14.0	16.0		16.5	16.5	16.5
WLAN6G Ant 5+4	Ant 5+4	14,14	16,16		16.5,16.5	16.5,16.5	19.8
BT	Ant 6	19.3	19.3	19.3	19.3	18.4	18.4
BT	Ant 3	18.3	18.3	18.3	18.3	17.4	17.4
UWB-NB	Ant 5	21.0	21.0	21.0	26.5	17.8	17.8
FR1 n2	Ant 2+1	17.1,17.1	15.4,15.4	15.4,15.4	20.8,20.8	23,23	26.0
FR1 n2	Ant 6+1	17.9,17.9	16.4,16.4	16.4,16.4	20.7,20.7	22.1,22.1	25.1
FR1 n25	Ant 2+1	17.1,17.1	15.4,15.4	15.4,15.4	20.8,20.8	23,23	26.0
FR1 n25	Ant 6+1	17.9,17.9	16.4,16.4	16.4,16.4	20.7,20.7	22.1,22.1	25.1
FR1 n7	Ant 2+1	19.2,19.2	18.9,18.9	18.9,18.9	21.1,21.1	23,23	26.0
FR1 n7	Ant 1+6	17.9,17.9	16.5,16.5	16.5,16.5	20.7,20.7	22.1,22.1	25.1
FR1 n30	Ant 2+1	22,22	20.2,20.2	20.2,20.2	22,22	23,23	23.0
FR1 n30	Ant 6+1	21,21	20.2,20.2	19.8,19.8	21,21	22.1,22.1	23.0
FR1 n66	Ant 2+1	17.4,17.4	16,16	16,16	20.5,20.5	23,23	23.0
FR1 n66	Ant 6+1	17.4,17.4	16,16	16,16	20.5,20.5	22.1,22.1	25.1
FR1 n41_HPUE	Ant 6+0	19.8,19.8	19,19	18,18	20.5,20.5	23,23	26.0
FR1 n41_PC1.5	Ant 6+0	19.8,19.8	19,19	18,18	20.5,20.5	23,23	26.0
FR1 n41_HPUE	Ant 1+6	18.8,18.8	18.1,18.1	15.6,15.6	21.3,21.3	23,23	26.0
FR1 n41_PC1.5	Ant 1+6	18.8,18.8	18.1,18.1	15.6,15.6	21.3,21.3	23,23	26.0
FR1 n41_HPUE	Ant 0+2	23,23	17.9,17.9	16.9,16.9	18.7,18.7	23,23	26.0
FR1 n41_PC1.5	Ant 0+2	23,23	17.9,17.9	16.9,16.9	18.7,18.7	23,23	26.0
FR1 n41_HPUE	Ant 2+1	20.1,20.1	18.2,18.2	18.2,18.2	21.8,21.8	23,23	26.0
FR1 n41_PC1.5	Ant 2+1	20.1,20.1	18.2,18.2	18.2,18.2	21.8,21.8	23,23	26.0
FR1 n48	Ant 7+5	19.2,19.2	17.4,17.4	17.4,17.4	20.9,20.9	20,20	23.0
FR1 n48	Ant 7+8	19.9,19.9	20,20	20,20	23,23	20,20	23.0
FR1 n48	Ant 4+5	16,16	15.9,15.9	15.9,15.9	18.2,18.2	20,20	23.0
FR1 n48	Ant 4+8	16,16	19.5,19.5	19.5,19.5	19.8,19.8	20,20	23.0
FR1 n77_HPUE	Ant 7+5	18.5,18.5	19.4,19.4	19.4,19.4	23,23	23,23	26.0
FR1 n77_PC1.5	Ant 7+5	18.5,18.5	19.4,19.4	19.4,19.4	23,23	23,23	26.0
FR1 n77_HPUE	Ant 4+5	16.7,16.7	14.8,14.8	14.8,14.8	18.2,18.2	23,23	26.0
FR1 n77_PC1.5	Ant 4+5	16.7,16.7	14.8,14.8	14.8,14.8	18.2,18.2	23,23	26.0
FR1 n77_HPUE	Ant 7+8	20.5,20.5	19.8,19.8	19.8,19.8	19.5,19.5	23,23	26.0
FR1 n77_PC1.5	Ant 7+8	20.5,20.5	19.8,19.8	19.8,19.8	19.5,19.5	23,23	26.0
FR1 n77_HPUE	Ant 4+8	16.7,16.7	14.8,14.8	14.8,14.8	18.2,18.2	23,23	26.0
FR1 n77_PC1.5	Ant 4+8	16.7,16.7	14.8,14.8	14.8,14.8	18.2,18.2	23,23	26.0

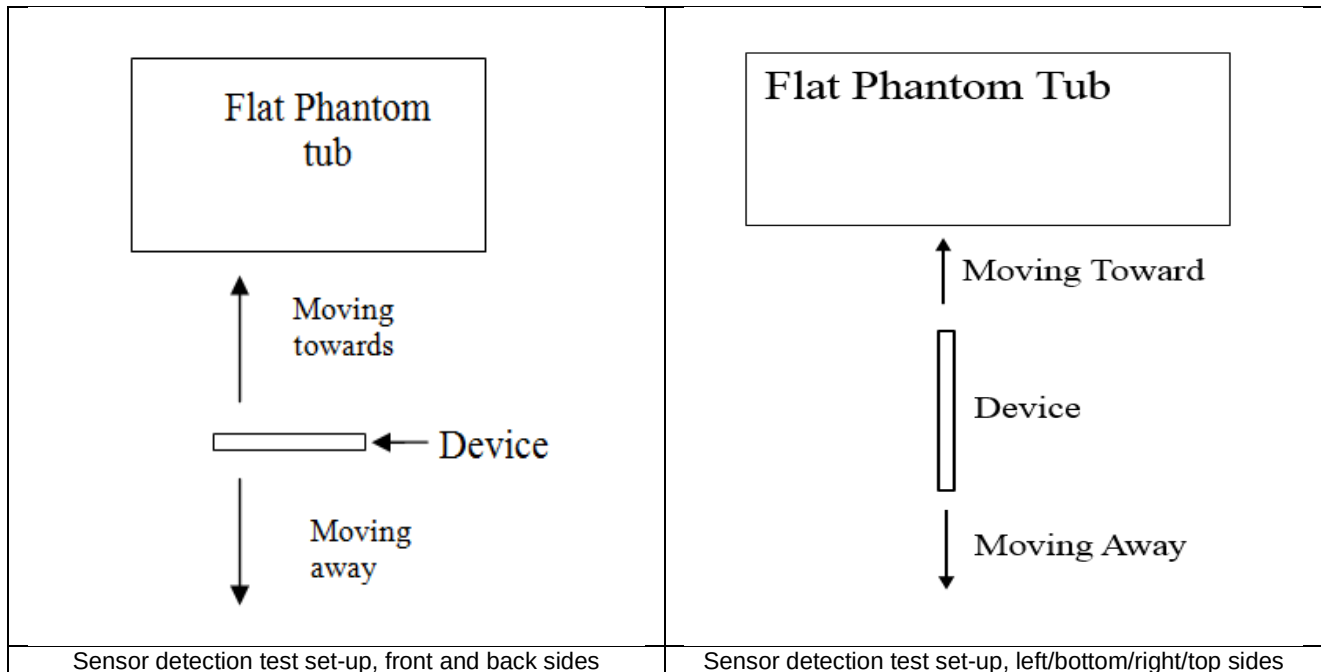
Note:

- 1) *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + Total uncertainty. (The DUT's device uncertainty is 1.0 dB for Sub-6GHz WWAN and 1.5 dB for WLAN/BT/UWB bands.)
- 2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD & WLAN/BT/ UWB).
- 3) The max allowed output power is the Plimit + Total uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

6. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (6500MHz) and lowest (1750MHz) was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back of the device. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
3. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/top/bottom/left /right sides of the device. When front/back/top/bottom /left /right sides of handheld condition is detected reduced power will be active.
4. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or top or right or left or bottom side of the device use a detection threshold distance. When front/back/top/left /right/ bottom sides of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
5. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed.



<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	17	22	17	23

<Handheld for ANT 2>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	7	13	7	13	7	13	8	13

<Handheld for ANT 1>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	7	13	13	18	12	18	7	13

<Handheld for ANT4/5/6>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	7	12	7	12	10	16	7	13

7. RF Exposure Limits

7.1 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.

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7.3 RF Exposure limit for above 6GHz

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

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

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

8. Specific Absorption Rate (SAR)

8.1 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.

8.2 SAR Definition

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

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

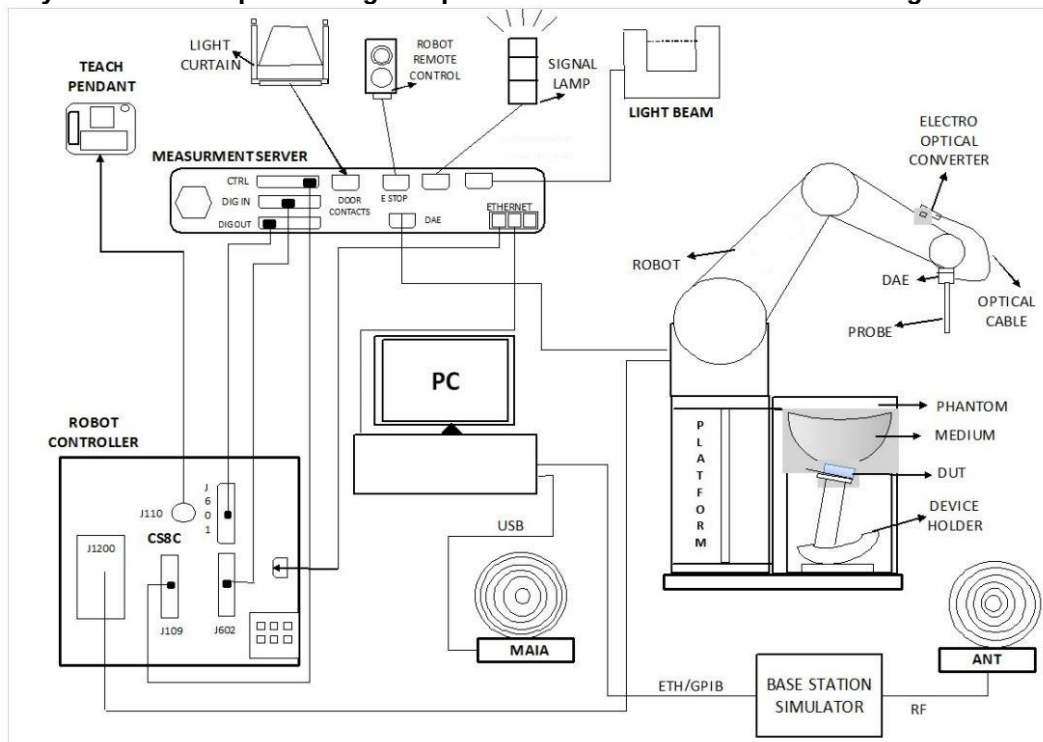
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. 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.

9.1 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: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Laboratory	Wensan Laboratory	
Test Site Location	TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010	
Test Site No.	SAR16-HY	SAR10-HY

9.2 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.

< EX3DV4 Probe >

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – > 6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

9.3 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.

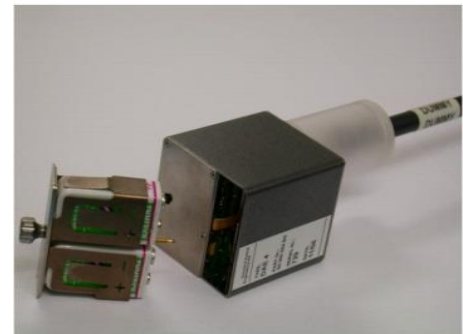


Fig 5.1 Photo of DAE

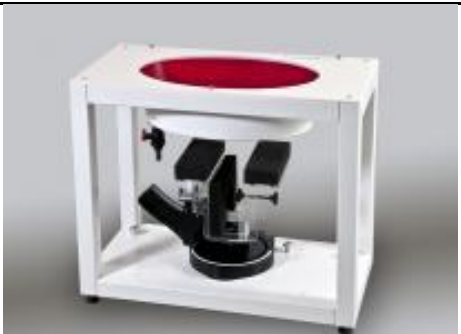
9.4 Phantom

< SAM Twin Phantom >

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

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

< ELI Phantom >

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

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

9.5 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

10. Measurement Procedures

The measurement procedures are as follows:

- (a) Configure the device RF transmitters to be in continuous transmission mode., 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

10.1 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

10.2 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.

10.3 Area Scan

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

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

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

10.4 Zoom Scan

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

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

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

10.5 Volume Scan Procedures

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

10.6 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.

11. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Last Cal.	Due Date
SPEAG	13MHz System Validation Kit	CLA13	1022	Sep. 12, 2025	Sep. 10, 2027
SPEAG	750MHz System Validation Kit	D750V3	1117	Mar. 12, 2025	Mar. 10, 2027
SPEAG	835MHz System Validation Kit	D835V2	4d167	Apr. 23, 2026	Apr. 22, 2027
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Feb. 20, 2025	Feb. 18, 2027
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Jun. 11, 2025	Jun. 09, 2027
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 14, 2025	Jan. 12, 2027
SPEAG	2450MHz System Validation Kit	D2450V2	929	Nov. 12, 2025	Nov. 11, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1078	Jun. 11, 2025	Jun. 09, 2027
SPEAG	3500MHz System Validation Kit	D3500V2	1014	Jan. 15, 2025	Jan. 13, 2027
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Jun. 12, 2025	Jun. 10, 2027
SPEAG	3900MHz System Validation Kit	D3900V2	1092	May. 11, 2026	May. 10, 2027
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1083	Oct. 22, 2025	Oct. 21, 2026
SPEAG	5GHz System Validation Kit	D5GHzV2	1006	Oct. 15, 2024	Oct. 13, 2026
SPEAG	5G Verification Source	10GHz	1020	Jan. 15, 2026	Jan. 14, 2027
SPEAG	Data Acquisition Electronics	DAE4	1694	Oct. 15, 2025	Oct. 14, 2026
SPEAG	Data Acquisition Electronics	DAE4	1647	Oct. 20, 2025	Oct. 19, 2026
SPEAG	Data Acquisition Electronics	DAE4	1399	Mar. 11, 2026	Mar. 10, 2027
SPEAG	Data Acquisition Electronics	DAE4	1805	May. 19, 2026	May. 18, 2027
SPEAG	Data Acquisition Electronics	DAE4ip	1800	Jun. 10, 2026	Jun. 09, 2027
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	Aug. 14, 2026	Aug. 13, 2027
SPEAG	Dosimetric E-Field Probe	EX3DV4	7785	Nov. 26, 2025	Nov. 25, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7791	Feb. 20, 2026	Feb. 19, 2027
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Mar. 17, 2026	Mar. 16, 2027
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 15, 2025	Oct. 14, 2026
SPEAG	Dielectric Probe Kit	DAK-12	1156	Jul. 13, 2026	Jul. 12, 2027
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 16, 2025	Sep. 15, 2026
SPEAG	Dielectric Probe Kit	DAK-3.5	1270	May. 11, 2026	May. 10, 2027
SPEAG	Dielectric Probe Kit	DAK-3.5	1146	Jul. 13, 2026	Jul. 12, 2027
SPEAG	Dielectric Probe Kit	DAK-12	1169	Aug. 10, 2026	Aug. 09, 2027
Testo	Hygro meter	608-H1	45256904	Dec. 08, 2025	Dec. 07, 2026
Testo	Hygro meter	608-H1	45142597	Jan. 19, 2026	Jan. 18, 2027
Testo	Hygro meter	608-H1	45196600	Nov. 04, 2025	Nov. 03, 2026
Testo	Hygro meter	608-H1	45207528	Nov. 04, 2025	Nov. 03, 2026
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 20, 2025	Nov. 19, 2026
Anritsu	Radio Communication Analyzer	MT8821C	6201074414	Sep. 01, 2026	Aug. 31, 2027
R&S	Wideband Radio Communication Tester	CMX500	101866	Apr. 08, 2026	Apr. 07, 2027
Keysight	5G Wireless Test Platform	E7515B	MY59321595	Jul. 20, 2026	Jul. 19, 2027
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Sep. 24, 2025	Sep. 23, 2026
R&S	Signal Generator	SMA100A	101091	Nov. 18, 2025	Nov. 17, 2026
Anritsu	Signal Generator	MG3692C	113508	Jan. 22, 2026	Jan. 21, 2027
Keysight	ENA Network Analyzer	E5071C	MY46316648	Aug. 04, 2026	Aug. 03, 2027
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 14, 2025	Oct. 13, 2026
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3902	Feb. 23, 2026	Feb. 22, 2027
Anritsu	Power Meter	ML2496A	2119003	Jul. 23, 2026	Jul. 22, 2027
R&S	Power Sensor	NRP8S	109687	Sep. 22, 2025	Sep. 21, 2026
R&S	Power Sensor	NRP50S	100983	Dec. 01, 2025	Nov. 30, 2026
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Sep. 09, 2025	Sep. 08, 2026
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 06, 2026	Jul. 05, 2027
Anritsu	Spectrum Analyzer	MS2830A	6272625959	Aug. 26, 2026	Aug. 25, 2027
Mini-Circuits	Power Amplifier	ZHL-42W+	N147802518	Aug. 03, 2026	Aug. 02, 2027
Mini-Circuits	Power Amplifier	ZHL-42W+	QA1344002	Oct. 17, 2025	Oct. 16, 2026
Custom Microwave	Standard Horn antenna	M15RH	V91113-A	NCR	NCR
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. 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.

12. System Verification

12.1 Tissue Verification

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

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

The SPEAG Dasy Measurement system implement a SAR error compensation algorithm as documented in IEEE Std 1528-2013 to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, according to KDB 865664 D01 and IEC/IEEE 62209-1528, the tolerance for "Delta (σ)" and "Delta (ϵ_r)" can be relaxed to $\pm 10\%$

< Tissue Dielectric Parameter Check Results >

Frequency (MHz)	Liquid Temp (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
13	22.6	0.758	55.4	0.75	55.0	1.07	0.73	± 10.0	2026-09-06
750	22.5	0.877	42.7	0.89	41.9	-1.46	1.91	± 10.0	2026-09-29
750	22.5	0.88	42.8	0.89	41.9	-1.12	2.15	± 10.0	2026-09-30
1750	22.5	1.36	41.1	1.37	40.1	-0.73	2.49	± 10.0	2026-09-09
1750	22.1	1.32	41.9	1.37	40.1	-3.65	4.49	± 10.0	2026-09-11
1900	22.5	1.45	40.9	1.40	40.0	3.57	2.25	± 10.0	2026-09-09
1900	22.1	1.39	41.7	1.40	40.0	-0.71	4.25	± 10.0	2026-09-11
2300	22.5	1.71	41	1.67	39.5	2.40	3.80	± 10.0	2026-09-10
2300	22.5	1.71	41	1.67	39.5	2.40	3.80	± 10.0	2026-09-10
2300	22.4	1.74	39.6	1.67	39.5	4.19	0.25	± 10.0	2026-09-14
2300	22.5	1.72	39.5	1.67	39.5	2.99	0.00	± 10.0	2026-09-15
2300	22.5	1.72	40.1	1.67	39.5	2.99	1.52	± 10.0	2026-09-20
3500	22.1	2.73	38	2.91	37.9	-6.19	0.26	± 10.0	2026-09-06
3500	22.5	2.71	38.1	2.91	37.9	-6.87	0.53	± 10.0	2026-09-07
3500	22.5	2.72	38.1	2.91	37.9	-6.53	0.53	± 10.0	2026-09-08
3500	22.5	2.72	40.9	2.91	37.9	-6.53	7.92	± 10.0	2026-09-12
3700	22.1	2.91	37.7	3.12	37.7	-6.73	0.00	± 10.0	2026-09-06
3700	22.5	2.9	40.6	3.12	37.7	-7.05	7.69	± 10.0	2026-09-12
3900	22.1	3.11	37.4	3.33	37.5	-6.61	-0.27	± 10.0	2026-09-06
3900	22.5	3.1	40.3	3.33	37.5	-6.91	7.47	± 10.0	2026-09-12
3900	22.6	3.18	37.2	3.33	37.5	-4.50	-0.80	± 10.0	2026-09-16
3900	22.2	3.08	37.1	3.33	37.5	-7.51	-1.07	± 10.0	2026-09-17
3900	22.5	3.07	37.5	3.33	37.5	-7.81	0.00	± 10.0	2026-09-21
835	22.5	0.912	43.9	0.90	41.5	1.33	5.78	± 10.0	2026-09-13
1750	22.5	1.38	41.5	1.37	40.1	0.73	3.49	± 10.0	2026-09-13
1900	22.5	1.47	41.2	1.40	40.0	5.00	3.00	± 10.0	2026-09-13
2450	22.5	1.86	40.2	1.80	39.2	3.33	2.55	± 10.0	2026-09-13
2450	22.5	1.85	40.5	1.80	39.2	2.78	3.32	± 10.0	2026-09-22
2600	22.5	1.99	39.9	1.96	39.0	1.53	2.31	± 10.0	2026-09-13
3500	22.5	2.73	38.1	2.91	37.9	-6.19	0.53	± 10.0	2026-09-13
3700	22.5	2.9	37.8	3.12	37.7	-7.05	0.27	± 10.0	2026-09-13
3900	22.5	3.08	37.5	3.33	37.5	-7.51	0.00	± 10.0	2026-09-13
5250	22.5	4.61	35.5	4.71	36.0	-2.12	-1.39	± 10.0	2026-09-22
5600	22.5	4.82	34.6	5.07	35.5	-4.93	-2.54	± 10.0	2026-09-13
5600	22.5	5	34.8	5.07	35.5	-1.38	-1.97	± 10.0	2026-09-22
5800	22.5	5.04	34.3	5.27	35.3	-4.36	-2.83	± 10.0	2026-09-13
5800	22.5	5.21	34.5	5.27	35.3	-1.14	-2.27	± 10.0	2026-09-22
6500	22.5	6.01	33.3	6.07	34.5	-0.99	-3.48	± 10.0	2026-09-22
3900	22.6	3.040	37.200	3.33	37.51	-8.71	-0.83	± 10.0	2026-10-08

12.2 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 (%)
2026-09-06	13	1000	CLA-13 - SN1022	EX3DV4 - SN7695	DAE4 Sn1647	0.491	0.536	0.491	-8.40	0.308	0.337	0.308	-8.61
2026-09-29	750	50.1187	D750V3 - SN1117	EX3DV4 - SN7791	DAE4 Sn1399	0.402	8.6	8.021	-6.73	0.266	5.57	5.3074	-4.71
2026-09-30	750	50.1187	D750V3 - SN1117	EX3DV4 - SN7791	DAE4 Sn1399	0.401	8.6	8.001	-6.97	0.264	5.57	5.2675	-5.43
2026-09-09	1750	50.1187	D1750V2 - SN1112	EX3DV4 - SN7590	DAE4ip Sn1800	1.84	36.3	36.7128	1.14	0.98	19.3	19.5536	1.31
2026-09-11	1750	50.1187	D1750V2 - SN1112	EX3DV4 - SN7590	DAE4 Sn1694	9.21	36.3	36.6656	1.01	4.87	19.3	19.3878	0.45
2026-09-09	1900	50.1187	D1900V2 - SN5d185	EX3DV4 - SN7590	DAE4ip Sn1800	2.05	39.6	40.9029	3.29	1.07	20.8	21.3493	2.64
2026-09-11	1900	251.189	D1900V2 - SN5d185	EX3DV4 - SN7590	DAE4 Sn1694	10.3	39.6	41.005	3.55	5.33	20.8	21.2191	2.01
2026-09-10	2300	251.189	D2300V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1694	11.9	48.2	47.3747	-1.71	5.71	23.2	22.7319	-2.02
2026-09-10	2300	50.1187	D2300V2 - SN1006	EX3DV4 - SN7785	DAE4ip Sn1800	2.52	48.2	50.2806	4.32	1.2	23.2	22.9432	3.20
2026-09-14	2300	251.189	D2300V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1647	11.9	48.2	47.3747	-1.71	5.74	23.2	22.8513	-1.50
2026-09-15	2300	251.189	D2300V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1647	11.8	48.2	46.9766	-2.54	5.69	23.2	22.6523	-2.36
2026-09-20	2300	50.1187	D2300V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1694	2.35	48.2	46.8887	-2.72	1.12	23.2	22.3469	-3.68
2026-09-06	3500	100	D3500V2 - SN1014	EX3DV4 - SN7785	DAE4 Sn1694	6.56	65.7	65.6	-0.15	2.5	24.9	25	0.40
2026-09-07	3500	50.1187	D3500V2 - SN1014	EX3DV4 - SN7785	DAE4 Sn1694	3.18	65.7	63.4494	-3.43	1.19	24.9	23.7436	-4.64
2026-09-08	3500	50.1187	D3500V2 - SN1014	EX3DV4 - SN7785	DAE4 Sn1694	3.19	65.7	63.6489	-3.12	1.2	24.9	23.9432	-3.84
2026-09-12	3500	100	D3500V2 - SN1014	EX3DV4 - SN7785	DAE4 Sn1694	6.58	65.7	65.8	0.15	2.5	24.9	25	0.40
2026-09-06	3700	100	D3700V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1694	6.8	69.9	68	-2.72	2.52	25.6	25.2	-1.56
2026-09-12	3700	100	D3700V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1694	6.64	69.9	66.4	-5.01	2.44	25.6	24.4	-4.69
2026-09-06	3900	100	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1694	6.53	65.7	65.3	-0.61	2.31	23.1	23.1	0.00
2026-09-12	3900	100	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1694	6.94	65.7	69.4	5.63	2.44	23.1	24.4	5.63
2026-09-16	3900	100	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1647	6.63	65.7	66.3	0.91	2.35	23.1	23.5	1.73
2026-09-17	3900	100	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1647	6.44	65.7	64.4	-1.98	2.27	23.1	22.7	-1.73
2026-09-21	3900	50.1187	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1694	2.99	65.7	59.6584	-9.20	1.05	23.1	20.9503	-9.31
2026-09-13	835	251.189	D835V2 - SN4d167	EX3DV4 - SN7785	DAE4 Sn1694	2.52	9.55	10.0323	5.05	1.67	6.25	6.6484	6.37
2026-09-13	1750	251.189	D1750V2 - SN1112	EX3DV4 - SN7785	DAE4 Sn1694	8.78	36.3	34.9538	-3.71	4.71	19.3	18.7508	-2.85
2026-09-13	1900	251.189	D1900V2 - SN5d185	EX3DV4 - SN7785	DAE4 Sn1694	9.97	39.6	39.6912	0.23	5.2	20.8	20.7015	-0.47
2026-09-13	2450	251.189	D2450V2 - SN929	EX3DV4 - SN7785	DAE4 Sn1694	14.3	53.3	56.9292	6.81	6.65	25.2	26.4741	5.06
2026-09-22	2450	251.189	D2450V2 - SN929	EX3DV4 - SN7590	DAE4 Sn1805	14.3	53.3	56.9292	6.81	6.7	25.2	26.6731	5.85
2026-09-13	2600	251.189	D2600V2 - SN1078	EX3DV4 - SN7785	DAE4 Sn1694	13	55.3	51.7539	-6.41	5.87	24.9	23.3689	-6.15
2026-09-13	3500	100	D3500V2 - SN1014	EX3DV4 - SN7785	DAE4 Sn1694	6.47	65.7	64.7	-1.52	2.46	24.9	24.6	-1.20
2026-09-13	3700	100	D3700V2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1694	6.56	69.9	65.6	-6.15	2.41	25.6	24.1	-5.86
2026-09-13	3900	100	D3900V2 - SN1092	EX3DV4 - SN7785	DAE4 Sn1694	6.78	65.7	67.8	3.20	2.38	23.1	23.8	3.03
2026-09-22	5250	100	D5GHZV2 - SN1006	EX3DV4 - SN7590	DAE4 Sn1805	8.09	80.6	80.9	0.37	2.32	22.8	23.2	1.75
2026-09-13	5600	100	D5GHZV2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1647	8.16	83.4	81.6	-2.16	2.32	23.7	23.2	-2.11
2026-09-22	5600	100	D5GHZV2 - SN1006	EX3DV4 - SN7590	DAE4 Sn1805	7.79	83.4	77.9	-6.59	2.23	23.7	22.3	-5.91
2026-09-13	5800	100	D5GHZV2 - SN1006	EX3DV4 - SN7785	DAE4 Sn1647	8.38	80.6	83.8	3.97	2.37	22.7	23.7	4.41
2026-09-22	5800	100	D5GHZV2 - SN1006	EX3DV4 - SN7590	DAE4 Sn1805	7.78	80.6	77.8	-3.47	2.21	22.7	22.1	-2.64
2026-09-22	6500	100	D6.5GHZV2 - SN1083	EX3DV4 - SN7590	DAE4 Sn1805	29.8	302	298	-1.32	5.53	56.5	55.3	-2.12
2026-10-08	3900	100	D3900V2-1092	EX3DV4 - SN7785	DAE4 Sn1694	6.18	65.7	61.8	-5.94	2.23	23.1	22.3	-3.46

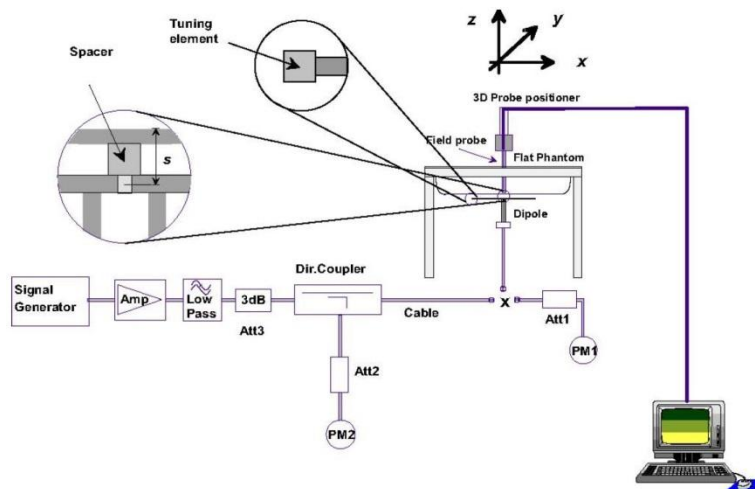


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

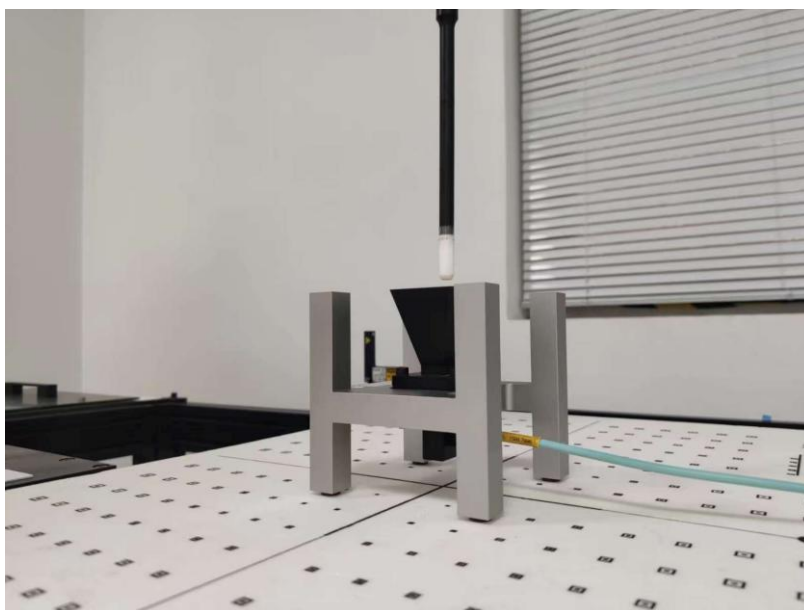


Fig 11.3.3 Setup Photo

12.3 PD System Verification Results

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

Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	psPDtot+ Measured 4 cm ² (W/m ²)	psPDtot+ Targeted 4 cm ² (W/m ²)	Deviation (dB)	Test Site	Date
10G	10GHz_1020	9461	1647	10mm	58.6	54.6	0.31	SAR14	2026/9/2



System Verification Setup Photo

13. RF Exposure Positions

13.1 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.

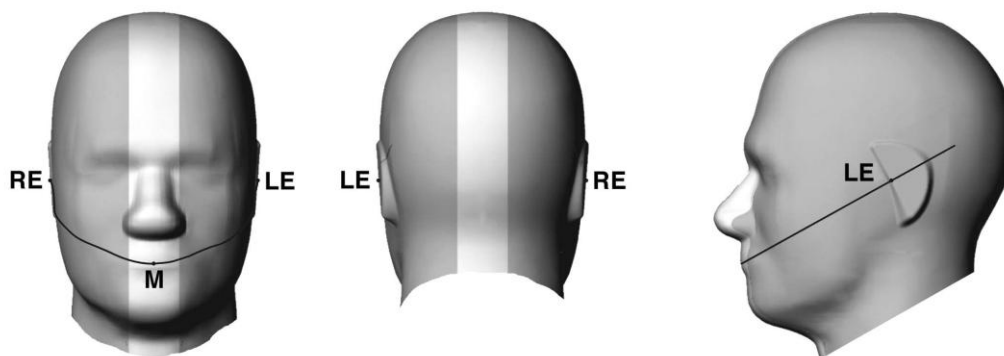


Fig 9.1.1 Front, back, and side views of SAM twin phantom

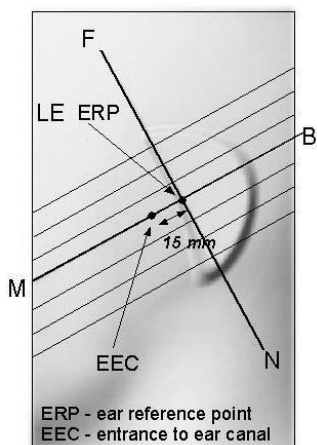


Fig 9.1.2 Close-up side view of phantom showing the ear region.

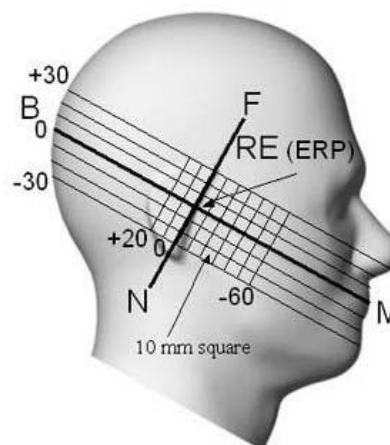


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 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.

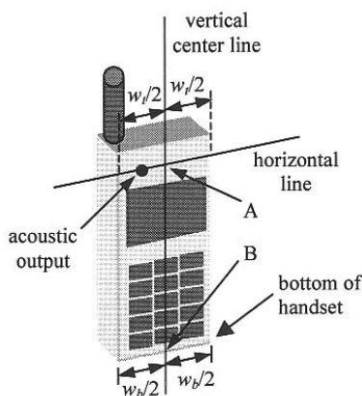


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case"

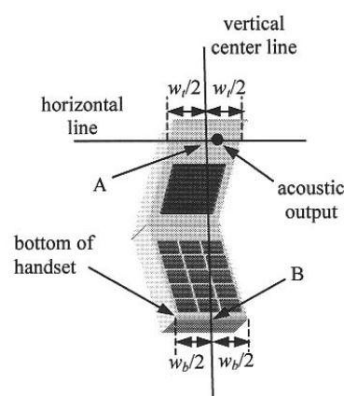


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

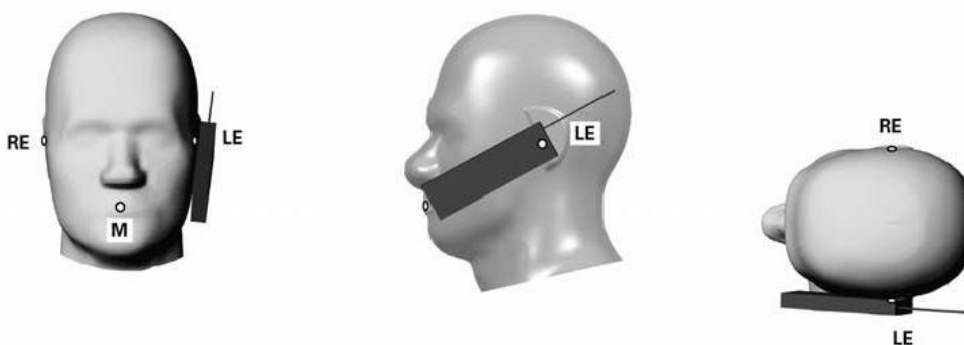


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 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

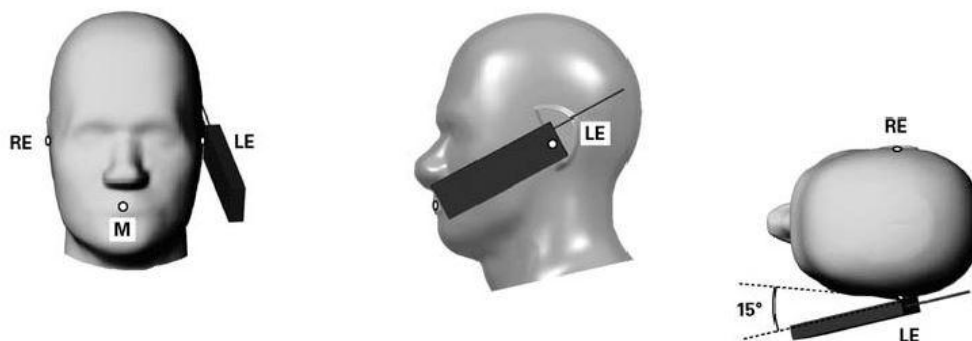


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 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.

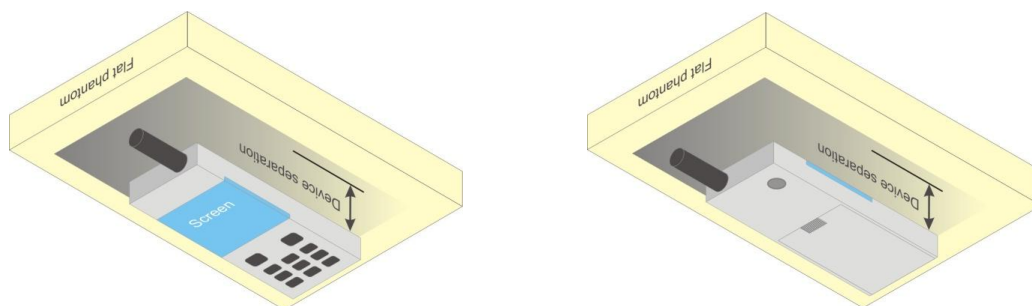


Fig 9.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

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

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

13.6 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.

13.7 Miscellaneous Testing Considerations

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

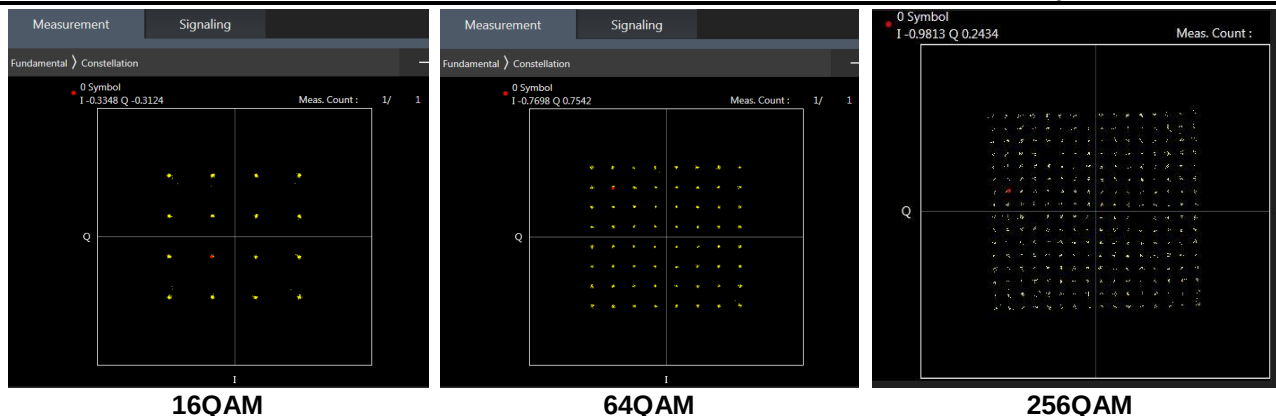
14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

< LTE Conducted Power >

General Note:

1. Anritsu MT8821C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $> \text{not } \frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $> \text{not } \frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2 / B4 / B5 / B17 / B38 / B42 (3550 MHz ~ 3600MHz)&B43 SAR test was covered by B25 / B66 / B26 / B12 / B41 / B48; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<LTE Carrier Aggregation>

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

General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
3. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.
4. This device supports LTE carrier aggregation in the downlink. All uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_5B	Ant0/1
CA_41C	Ant2/1/6
CA_48B	Ant7/5
CA_48C	Ant7/5

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation for LTE B5/41/48 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- ii. According Nov. 2017 TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iii. Additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.
- iv. LTE CA_48B test was covered by CA_48C; therefore, SAR was only assessed for CA_48C.



<Inter-band CA Configuration>

LTE Inter Band UL CA	TX ANT	TX ANT
CA_12A-30A	0	1
	1	2/6
CA_12A-66A	0	1
	1	2/6
CA_13A-66A	0	1
	1	2/6
CA_14A-30A	0	1
	1	2/6
CA_14A-66A	0	1
	1	2/6
CA_2A-12A	2	1
	1	0
	6	1
CA_2A-13A	2	1
	1	0
	6	1
CA_2A-14A	2	1
	1	0
	6	1
CA_2A-4A	2	1
	1	2/6
	6	1
CA_2A-5A	2	1
	1	0
	6	1
CA_2A-66A	2	1
	1	2/6
	6	1
CA_2A-71A	2	1
	1	0
	6	1
CA_4A-12A	2	1
	1	0
	6	1
CA_4A-13A	2	1
	1	0
	6	1
CA_4A-5A	2	1
	1	0
	6	1
CA_5A-30A	0	1
	1	2/6
CA_5A-66A	0	1
	1	2/6
CA_7A-66A	2	1
	1	2/6
	6	1

General Note:

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

3. For LTE inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. Smart Transmit algorithm controls the total RF exposure base on LTE inter CA bands to not exceed FCC limit.

5G NR Output Power (Unit: dBm)**General Note:**

1. 5G NR n2/n5/n7/n25/n26/n38/n41/n48/n66 /n71/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n12/n13/n30/n14/n25/n26/n38/n41/n48/n66/n70 /n71/n77/n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR n41/n77/n78 HPUE, 5G NR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
5. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
6. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
7. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
8. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
9. For NR inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two NR bands. Smart Transmit algorithm controls the total RF exposure base on NR inter band ULCA bands to not exceed FCC limit.
10. 5G NR n2/n7/n25/n30/n41/n48/n66/n77 support UL MIMO. If the UL MIMO antennas operate on different antenna groups, TAS validation is not required. If the MIMO antennas are in the same antenna group, the MIMO SAR is derived by summing the standalone SAR values. Detailed analysis results are provided in Section 17.

< 3GPP 38.101 MPR >
Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
CP-OFDM	256 QAM	≤ 4.5		
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

<EN-DC combination>

ENDC mode	LTE ANT	NR ANT
DC_2A_n5A	2	0/1
	1	0
	6	0/1
DC_2A_n7A	2	1
	1	2/6
	6	1
DC_2A_n38A	1	2
	2/6	1
	1	6
DC_2A_n41A	2/6	0
	1	2
	2/6	1
	1	6
DC_2A_n66A	2/6	0
	2	1
	1	2/6
DC_2A_n71A	6	1
	2	0/1
	1	0
DC_2A_n77A	6	0/1
	2/6	7
	1	5
	2/6	4
DC_2A_n78A	1	8
	2/6	7



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	1	5
	2/6	4
	1	8
DC_4A_n2A	2	1
	1	2/6
	6	1
DC_4A_n5A	2	0/1
	1	0
	6	0/1
DC_4A_n7A	2	1
	1	2/6
	6	1
DC_4A_n38A	1	2
	2/6	1
	1	6
	2/6	0
DC_4A_n41A	1	2
	2/6	1
	1	6
	2/6	0
DC_4A_n78A	2/6	7
	1	5
	2/6	4
	1	8
DC_5A_n2A	0	1
	0/1	2/6
DC_5A_n7A	0/1	2
	0	1
	0/1	6
DC_5A_n38A	0/1	2
	0	1
	0/1	6
	1	0
DC_5A_n41A	0/1	2
	0	1
	0/1	6
	1	0
DC_5A_n66A	0	1
	0/1	2/6
DC_5A_n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
DC_5A_n78A	0/1	7
	0/1	5
	0/1	4
	0/1	8
DC_7A_n2A	2	1
	1	2/6
	6	1
DC_7A_n5A	2	0/1
	1	0
	6	0/1
DC_7A_n25A	2	1
	1	2/6
	6	1

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DC_7A_n26A	2	0/1
	1	0
	6	0/1
DC_7A_n66A	2	1
	1	2/6
	6	1
DC_7A_n71A	2	0/1
	1	0
	6	0/1
DC_7A_n77A	2/6	7
	1	5
	2/6	4
	1	8
DC_7A_n78A	2/6	7
	1	5
	2/6	4
	1	8
DC_12A_n2A	0	1
	0/1	2/6
DC_12A_n7A	0/1	2
	0	1
	0/1	6
DC_12A_n25A	0	1
	0/1	2/6
DC_12A_n38A	0/1	2
	0	1
	0/1	6
	1	0
DC_12A_n41A	0/1	2
	0	1
	0/1	6
	1	0
DC_12A_n66A	0	1
	0/1	2/6
DC_12A_n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
	0/1	7
DC_12A_n78A	0/1	5
	0/1	4
	0/1	8
	0	1
DC_13A_n2A	0/1	2/6
	0	1
DC_13A_n66A	0/1	2/6
	0/1	7
DC_13A_n77A	0/1	5
	0/1	4
	0/1	8
	0/1	7
DC_13A_n78A	0/1	5
	0/1	4
	0/1	8
	0	1
DC_14A_n2A	0/1	2/6



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Report No. : FA672113-02

DC_14A_n66A	0	1
	0/1	2/6
DC_14A_n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
DC_25A_n41A	1	2
	2/6	1
	1	6
DC_25A_n77A	2/6	0
	2/6	7
	1	5
	2/6	4
DC_25A_n78A	1	8
	2/6	7
	1	5
DC_26A_n25A	2/6	4
	1	8
	0	1
DC_26A_n41A	0/1	2/6
	0/1	2
	0	1
	0/1	6
DC_26A_n78A	1	0
	0/1	7
	0/1	5
	0/1	4
DC_30A_n2A	0/1	8
	2	1
	1	2/6
DC_30A_n5A	6	1
	2	0/1
	1	0
DC_30A_n66A	6	0/1
	2	1
	1	2/6
DC_30A_n77A	6	1
	2/6	7
	1	5
	2/6	4
DC_38A_n78A	1	8
	2/6	7
	1	5
	2/6	4
DC_41A_n77A	1	8
	2/6	7
	1	5
	2/6	4
DC_41A_n78A	1	8
	2/6	7
	1	5
	2/6	4
DC_48A_n2A	5/7	2/6
	5/7	1
DC_48A_n5A	7	0/1



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	5	0/1
DC_48A_n66A	5/7	2/6
	5/7	1
DC_48A_n71A	7	0/1
	5	0/1
DC_66A_n2A	2	1
	1	2/6
	6	1
DC_66A_n5A	2	0/1
	1	0
	6	0/1
DC_66A_n7A	2	1
	1	2/6
	6	1
DC_66A_n25A	2	1
	1	2/6
	6	1
DC_66A_n38A	1	2
	2/6	1
	1	6
	2/6	0
DC_66A_n41A	1	2
	2/6	1
	1	6
	2/6	0
DC_66A_n71A	2	0/1
	1	0
	6	0/1
DC_66A_n77A	2/6	7
	1	5
	2/6	4
	1	8
DC_66A_n78A	2/6	7
	1	5
	2/6	4
	1	8
DC_71A_n2A	0	1
	0/1	2/6
DC_71A_n41A	0/1	2
	0	1
	0/1	6
	1	0
DC_71A_n48A	0/1	7
	0/1	5
	0/1	4
	0/1	8
DC_71A_n66A	0	1
	0/1	2/6
DC_71A_n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
DC_71A_n78A	0/1	7
	0/1	5
	0/1	4
	0/1	8

**Inter-Band CA Configuration:**

NR UL CA mode Inter band	NR ANT	NR ANT
CA_n12A-n66A	1/0	2/6
	0	1
CA_n12A-n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
CA_n13A-n66A	1/0	2/6
	0	1
CA_n13A-n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
CA_n14A-n30A	1/0	2
	0	1
CA_n14A-n66A	1/0	6
	0	2/6
CA_n14A-n77A	0/1	1
	0/1	7
	0/1	5
	0/1	4
CA_n25A-n41A	0/1	8
	2	0/1/6
	6	0/1/2
CA_n25A-n66A	1	0/2/6
	2/6	1
CA_n25A-n71A	1	2/6
	2/6	1/0
CA_n25A-n77A	1	0
	2/6	4/5/7/8
CA_n25A-n78A	1	4/5/7/8
	2/6	4/5/7/8
CA_n2A-n12A	1	4/5/7/8
	2/6	1/0
CA_n2A-n14A	1	0
	2/6	1/0
CA_n2A-n30A	1	0
	2/6	1
CA_n2A-n48A	1	2/6
	2/6	4/5/7/8
CA_n2A-n5A	1	4/5/7/8
	2/6	1/0
CA_n2A-n66A	1	0
	2/6	1
CA_n2A-n71A	1	2/6
	2/6	1/0
CA_n2A-n77A	1	0
	2/6	4/5/7/8
CA_n30A-n66A	1	4/5/7/8
	2	1
	6	2/6
CA_n30A-n77A	2/6	1



	1	5
	2/6	4
	1	8
CA_n41A-n48A	2	7/5/4/8
	1	5/7/8/4
	6	7/5/4/8
	0	5/7/8/4
CA_n41A-n66A	0/2/6	1
	0/1/2	6
	0/1/6	2
CA_n41A-n71A	2	0/1
	1	0
	6	0/1
	0	1
CA_n41A-n77A	2	7/5/4/8
	1	5/7/8/4
	6	7/5/4/8
	0	5/7/8/4
CA_n41A-n78A	2	7/5/4/8
	1	5/7/8/4
	6	7/5/4/8
	0	5/7/8/4
CA_n48A-n66A	4/5/7/8	2/6
	4/5/7/8	1
CA_n48A-n71A	7	0/1
	5	0/1
	4	0/1
	8	0/1
CA_n5A-n25A	1/0	2/6
	0	1
CA_n5A-n30A	1/0	2
	0	1
	1/0	6
CA_n5A-n48A	0/1	7
	0/1	5
	0/1	4
	0/1	8
CA_n5A-n66A	1/0	2/6
	0	1
CA_n5A-n77A	0/1	7
	0/1	5
	0/1	4
	0/1	8
CA_n5A-n78A	0/1	7
	0/1	5
	0/1	4
	0/1	8
CA_n66A-n71A	2/6	1/0
	1	0
CA_n66A-n77A	2/6	4/5/7/8
	1	4/5/7/8
CA_n66A-n78A	2/6	4/5/7/8
	1	4/5/7/8
CA_n71A-n77A	0/1	7
	0/1	5
	0/1	4

	0/1	8
CA_n71A-n78A	0/1	7
	0/1	5
	0/1	4
	0/1	8

Intra-Band CA Configuration:

NR Uplink CA	2CC Uplink Carrier Aggregation	
Intra-band	Main Antenna Tx	ASDiv-1 Tx
CA_n41C	Ant2/6	Ant1/0
CA_n77C	Ant7/4	Ant5/8

UL MIMO combination:

ULMIMO mode	NR ANT	NR ANT
n2	2/6	1
n7	2/6	1
n25	2/6	1
n30	2/6	1
n41	2/6	1/0
n48	7/4	5/8
n66	2/6	1
n77	7/4	5/8



15. Antenna Location

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

16. SAR Test Results

General Note:

1. According to section 3.3, spot check conducted power test against the variant project based on the worst-case SAR condition from the original project was performed in this filing to demonstrate the test data from original project remains representative for the variant project. Detail Conducted power measurement referred to appendix E.
2. The worst case configurations of reference model for each equipment class and antenna was selected for spot-check verification with variant model.
3. SAR spot check verification on the worst cases from the original model was performed to demonstrate the test data from original model remains representative for the variant model.
4. Per KDB 484596 D01 v03, the variant filings must demonstrate that the referenced test data remain valid for the variant device by including spot-check measurements that meet the following criteria:

- a. Operating in linear units, the relative difference (expressed as a percentage) between the TER of the variant (TER_V) and that of the parent model used as a reference (TER_R) is defined as

$$DTE_R = | TER_V - TER_R | / TER_R \quad (5)$$

and the acceptance criterion for the spot-check on the variant will be:

$$d_{TER} \leq d_{TERmax} \quad (6)$$

where d_{TERmax} , to be defined further below, is the maximum acceptable d_{TER} , and all the quantities are expressed in linear units.

- b. The maximum d_{TER} allowed for the spot-check to be deemed acceptable, is established based on the compliance margin M corresponding to the worst-case test scenario (i.e., the most challenging from the compliance perspective) for the parent model. The margin M is defined as

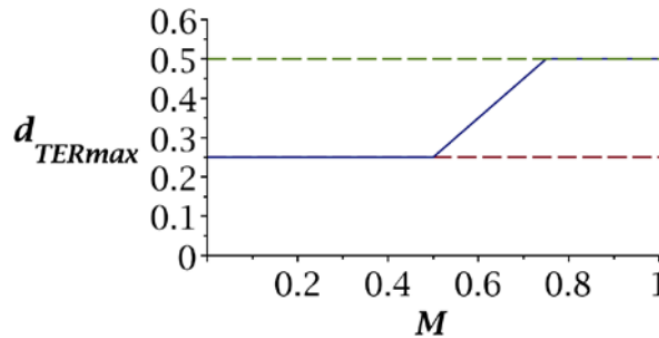
$$M = | TER_T - TER_R | = 1 - TER_R \quad (7)$$

where TER_T is the TER corresponding to the compliance threshold, which is always $TER_T = 1$.

- c. The threshold d_{TERmax} is defined as function of the margin M to provide values between 25% and 50%, linearly increasing between $M = 0.5$ (50% of the compliance limit) and $M = 0.75$ (75% of the compliance limit), in accordance with the following expression:

$$d_{TERmax}(M) = \begin{cases} 0.25 & , \text{ for } 0 \leq M < 0.5 \\ M - 0.25 & , \text{ for } 0.5 \leq M < 0.75 \\ 0.5 & , \text{ for } 0.75 \leq M \end{cases} \quad (8)$$

and the following Figure shows a plot of $d_{TERmax}(M)$.



The piecewise linear function for $d_{TERmax}(M)$ in (8), which represents the maximum allowed d_{TER} , is the relative difference between the variant and parent model as defined by eq.

- (6). The spot-check is considered acceptable when the d_{TER} is below the curve $d_{TERmax}(M)$.

5. The spot check results showed that the deviation of the SAR results all are met $d_{TER} < d_{TERmax}(M)$, thus the spot-check yields an acceptable condition.
6. The SAR data shown in gray are taken from the worst-case result of the parent device.

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
 - d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - e. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
 - g. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements the power management, proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
6. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM850/1900, WCDMA Band II/IV/V, LTE Band 2/4/7/13/25/30/38/41/66/42/43/48, 5G NR n2/n7 /n25/n26/n5/n30/n66/n70/n38/n41/n48/n77/n78 and WLAN 2.4GHz/WLAN 5.8GHz therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5/6GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
7. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is <1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
8. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
9. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.
10. Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors.

11. Per October 2020 TCB Workshop Interim procedures, start instead with a minimum of 5 test channels across the full band, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub. 248227 v02r02.
12. Absorbed power density (APD) using a 4cm^2 averaging area is reported based on SAR measurements.
13. Per October 2022 TCB Workshop, IPD and SAR test frequencies for 5.85-7.125 GHz portable devices, continue with adapt and apply conducted power-based channel picks and test reduction procedures of KDB 248227 (v02r02), also in case of 320 MHz (pre-802.11be).
14. For testing the WLAN 6GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WLAN 6GHz Bands.
15. 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. Further simplification chose the worse SAR value and the worst scaling factor from each transmit chain perform reported SAR calculation conservatively. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain.
16. Since the EUT's rear camera is protruding and multiple transmitting antennas are distributed in various positions of the mobile phone, different reference surfaces are used for each antenna: a 0 mm separation for extremity testing. For more details, refer to the test photos.

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 $\leq 0.8 \text{ W/kg}$. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is $> 1.45 \text{ W/kg}$, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $> \text{not } \frac{1}{2} \text{ dB}$ higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is $\leq 1.45 \text{ W/kg}$; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $> \text{not } \frac{1}{2} \text{ dB}$ higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is $\leq 1.45 \text{ W/kg}$; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 /B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 / B4 / B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
 - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n2/n5/n7/n25/n26/n66/n38/n41/n77 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

NFC Note:

1. NFC mainly operate in hand-held extremity exposure conditions, therefore Standalone 10-g extremity SAR testing for NFC will be performed with active mode, with 100% duty cycle at 0mm separation distance.
2. NFC SAR is measured for all surface edges of the device with a transmitting antenna located within 25 mm from that surface or edge.
3. NFC SAR test tissue-simulating liquid parameter: refer to IEC/IEEE 62209-1528:2020.

Power Density General Notes:

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements.
3. Absorbed power density (APD) using a 4cm^2 averaging area is reported based on SAR measurements.
4. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $> 30\%$. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
7. Per April 2021 TCB Workshop and KDB 388624 D02v18r08, for the highest SAR test configurations, incident power density (total) was also measured using the power-density reconstruction method in the measurement planes closest to the device: 5 mm for body-worn and 2 mm for head/extremity.
8. Per October 2020 TCB Workshop, PTP-PR algorithm was used during psPD measurement and calculations.
9. Since this device is considered a phablet and there is no different PD limit on different exposure conditions, therefore select highest phablet SAR at 0 mm test distance and configurations evaluate power density. Since there is no different PD limit on different exposure conditions, the PD test was performed at the applicable separation distances between the probe sensor and the EUT surface, covering head exposure (front) at head power and other exposure conditions at their corresponding power levels, with distances assigned per condition.
10. The measurement procedure consists of measuring the PDinc 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 iPDn fulfill the criterion described below. Since iPD ratio between the two distances is $\geq -1\text{dB}$, the grid step (0.0625) was sufficient for determining compliance at $d=2\text{mm}$.

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

DSI status description:

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

This WWAN/WLAN/BT/ UWB (802.15.4ab) bands enabled with Qualcomm Smart Transmit feature which located at section 4.

The default power is Pmax power, When Plimit power higher than Pmax power, the output power will be limited at Pmax, and so the SAR will use Pmax power to do the testing.

Exposure Condition	Main PA	Trigger Conditions
Head SAR	DSI 2	Earpiece On
Body worn SAR	DSI 3	Sensor On
Hotspot SAR	DSI 7	Hotspot On
Extremity SAR	DSI 6	Sensor On
Body Worn / Extremity Sensor Off	DSI 4	Sensor Off

16.1 Head SAR
[LTE SAR]

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
	LTE Band 30	10M	QPSK	1	0	Right Cheek	0mm	Ant 2	DSI 2	27710	2310	23.07	24.00	1.239	0.01	0.099	0.123
	LTE Band 30	10M	QPSK	25	0	Right Cheek	0mm	Ant 2	DSI 2	27710	2310	22.98	24.00	1.265	-0.17	0.079	0.100
	LTE Band 30	10M	QPSK	1	0	Right Tilted	0mm	Ant 2	DSI 2	27710	2310	23.07	24.00	1.239	-0.14	0.001	0.001
	LTE Band 30	10M	QPSK	25	0	Right Tilted	0mm	Ant 2	DSI 2	27710	2310	22.98	24.00	1.265	-0.05	0.001	0.001
	LTE Band 30	10M	QPSK	1	0	Left Cheek	0mm	Ant 2	DSI 2	27710	2310	23.07	24.00	1.239	-0.04	0.077	0.095
	LTE Band 30	10M	QPSK	25	0	Left Cheek	0mm	Ant 2	DSI 2	27710	2310	22.98	24.00	1.265	-0.11	0.061	0.077
	LTE Band 30	10M	QPSK	1	0	Left Tilted	0mm	Ant 2	DSI 2	27710	2310	23.07	24.00	1.239	-0.16	0.045	0.056
	LTE Band 30	10M	QPSK	25	0	Left Tilted	0mm	Ant 2	DSI 2	27710	2310	22.98	24.00	1.265	-0.17	0.035	0.044
	LTE Band 30	10M	QPSK	1	0	Right Cheek	0mm	Ant 1	DSI 2	27710	2310	21.07	22.70	1.455	0.02	0.668	0.972
	LTE Band 30	10M	QPSK	25	0	Right Cheek	0mm	Ant 1	DSI 2	27710	2310	21.06	22.70	1.459	0.06	0.478	0.697
	LTE Band 30	10M	QPSK	50	0	Right Cheek	0mm	Ant 1	DSI 2	27710	2310	21.01	22.70	1.476	-0.09	0.478	0.706
	LTE Band 30	10M	QPSK	1	0	Right Tilted	0mm	Ant 1	DSI 2	27710	2310	21.07	22.70	1.455	0.13	0.655	0.953
	LTE Band 30	10M	QPSK	25	0	Right Tilted	0mm	Ant 1	DSI 2	27710	2310	21.06	22.70	1.459	0.16	0.513	0.748
	LTE Band 30	10M	QPSK	50	0	Right Tilted	0mm	Ant 1	DSI 2	27710	2310	21.01	22.70	1.476	-0.06	0.517	0.763
	LTE Band 30	10M	QPSK	1	0	Left Cheek	0mm	Ant 1	DSI 2	27710	2310	21.07	22.70	1.455	0.08	0.293	0.426
	LTE Band 30	10M	QPSK	25	0	Left Cheek	0mm	Ant 1	DSI 2	27710	2310	21.06	22.70	1.459	0.15	0.231	0.337
	LTE Band 30	10M	QPSK	1	0	Left Tilted	0mm	Ant 1	DSI 2	27710	2310	21.07	22.70	1.455	-0.02	0.461	0.671
	LTE Band 30	10M	QPSK	25	0	Left Tilted	0mm	Ant 1	DSI 2	27710	2310	21.06	22.70	1.459	-0.08	0.361	0.527
	LTE Band 30	10M	QPSK	1	0	Right Cheek	0mm	Ant 6	DSI 2	27710	2310	20.61	22.00	1.377	0.05	0.332	0.457
	LTE Band 30	10M	QPSK	25	0	Right Cheek	0mm	Ant 6	DSI 2	27710	2310	20.59	22.00	1.384	-0.09	0.263	0.364
	LTE Band 30	10M	QPSK	1	0	Right Tilted	0mm	Ant 6	DSI 2	27710	2310	20.61	22.00	1.377	-0.02	0.098	0.135
	LTE Band 30	10M	QPSK	25	0	Right Tilted	0mm	Ant 6	DSI 2	27710	2310	20.59	22.00	1.384	0.12	0.075	0.104
01	LTE Band 30	10M	QPSK	1	0	Left Cheek	0mm	Ant 6	DSI 2	27710	2310	20.61	22.00	1.377	0.01	0.893	1.230
	LTE Band 30	10M	QPSK	25	0	Left Cheek	0mm	Ant 6	DSI 2	27710	2310	20.59	22.00	1.384	-0.09	0.716	0.991
	LTE Band 30	10M	QPSK	50	0	Left Cheek	0mm	Ant 6	DSI 2	27710	2310	20.55	22.00	1.396	-0.05	0.718	1.002
	LTE Band 30	10M	QPSK	1	0	Left Tilted	0mm	Ant 6	DSI 2	27710	2310	20.61	22.00	1.377	-0.01	0.208	0.286
	LTE Band 30	10M	QPSK	25	0	Left Tilted	0mm	Ant 6	DSI 2	27710	2310	20.59	22.00	1.384	0.17	0.164	0.227

[FR1 SAR]

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n14_HPUE	10M	BPSK	1	1	Right Cheek	0mm	Ant 1	DSI 2	158600	793	25.28	26.20	1.236			0.13	0.969	1.198
02	FR1 n14_HPUE	10M	BPSK	25	14	Right Cheek	0mm	Ant 1	DSI 2	158600	793	25.27	26.20	1.239			0.04	0.977	1.211
	FR1 n14_HPUE	10M	BPSK	1	1	Right Tilted	0mm	Ant 1	DSI 2	158600	793	25.28	26.20	1.236			0.04	0.890	1.100
	FR1 n14_HPUE	10M	BPSK	25	14	Right Tilted	0mm	Ant 1	DSI 2	158600	793	25.27	26.20	1.239			-0.04	0.961	1.191
	FR1 n14_HPUE	10M	BPSK	1	1	Left Cheek	0mm	Ant 1	DSI 2	158600	793	25.28	26.20	1.236			0.07	0.442	0.546
	FR1 n14_HPUE	10M	BPSK	1	1	Left Tilted	0mm	Ant 1	DSI 2	158600	793	25.28	26.20	1.236			0.16	0.431	0.533
	FR1 n14_HPUE	10M	BPSK	25	14	Left Tilted	0mm	Ant 1	DSI 2	158600	793	25.27	26.20	1.239			-0.10	0.489	0.606
	FR1 n14_HPUE	10M	BPSK	1	1	Right Cheek	0mm	Ant 0	DSI 2	158600	793	26.32	27.00	1.169			-0.18	0.144	0.168
	FR1 n14_HPUE	10M	BPSK	25	14	Right Cheek	0mm	Ant 0	DSI 2	158600	793	26.26	27.00	1.186			-0.10	0.146	0.173
	FR1 n14_HPUE	10M	BPSK	1	1	Right Tilted	0mm	Ant 0	DSI 2	158600	793	26.32	27.00	1.169			-0.15	0.110	0.129
	FR1 n14_HPUE	10M	BPSK	25	14	Right Tilted	0mm	Ant 0	DSI 2	158600	793	26.26	27.00	1.186			0.18	0.104	0.123
	FR1 n14_HPUE	10M	BPSK	1	1	Left Cheek	0mm	Ant 0	DSI 2	158600	793	26.32	27.00	1.169			-0.15	0.256	0.299
	FR1 n14_HPUE	10M	BPSK	25	14	Left Cheek	0mm	Ant 0	DSI 2	158600	793	26.26	27.00	1.186			0.11	0.249	0.295
	FR1 n14_HPUE	10M	BPSK	1	1	Left Tilted	0mm	Ant 0	DSI 2	158600	793	26.32	27.00	1.169			-0.11	0.159	0.186
	FR1 n14_HPUE	10M	BPSK	25	14	Left Tilted	0mm	Ant 0	DSI 2	158600	793	26.26	27.00	1.186			-0.18	0.158	0.187



FCC SAR TEST REPORT

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	FR1 n25	40M	BPSK	1	1	Right Cheek	0mm	Ant 6	DSI 2	376500	1882.5	21.48	22.00	1.127			-0.14	0.580	0.654
	FR1 n25	40M	BPSK	108	54	Right Cheek	0mm	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			0.17	0.602	0.688
	FR1 n25	40M	BPSK	1	1	Right Tilted	0mm	Ant 6	DSI 2	376500	1882.5	21.48	22.00	1.127			-0.01	0.129	0.145
	FR1 n25	40M	BPSK	108	54	Right Tilted	0mm	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			-0.16	0.141	0.161
	FR1 n25	40M	BPSK	1	1	Left Cheek	0mm	Ant 6	DSI 2	376500	1882.5	21.48	22.00	1.127			0.06	0.969	1.092
03	FR1 n25	40M	BPSK	108	54	Left Cheek	0mm	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			0.01	1.010	1.154
	FR1 n25	40M	BPSK	216	0	Left Cheek	0mm	Ant 6	DSI 2	376500	1882.5	21.32	22.00	1.169			-0.12	0.971	1.135
	FR1 n25	40M	BPSK	1	1	Left Tilted	0mm	Ant 6	DSI 2	376500	1882.5	21.48	22.00	1.127			0.11	0.188	0.212
	FR1 n25	40M	BPSK	108	54	Left Tilted	0mm	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			-0.03	0.206	0.235
	FR1 n30	10M	BPSK	1	1	Right Cheek	0mm	Ant 2	DSI 2	462000	2310	23.40	24.00	1.148			-0.07	0.063	0.072
	FR1 n30	10M	BPSK	25	14	Right Cheek	0mm	Ant 2	DSI 2	462000	2310	23.38	24.00	1.153			0.11	0.062	0.071
	FR1 n30	10M	BPSK	1	1	Right Tilted	0mm	Ant 2	DSI 2	462000	2310	23.40	24.00	1.148			0.10	0.032	0.037
	FR1 n30	10M	BPSK	25	14	Right Tilted	0mm	Ant 2	DSI 2	462000	2310	23.38	24.00	1.153			0.05	0.031	0.036
	FR1 n30	10M	BPSK	1	1	Left Cheek	0mm	Ant 2	DSI 2	462000	2310	23.40	24.00	1.148			0.11	0.063	0.072
	FR1 n30	10M	BPSK	25	14	Left Cheek	0mm	Ant 2	DSI 2	462000	2310	23.38	24.00	1.153			0.15	0.066	0.076
	FR1 n30	10M	BPSK	1	1	Left Tilted	0mm	Ant 2	DSI 2	462000	2310	23.40	24.00	1.148			0.14	0.035	0.040
	FR1 n30	10M	BPSK	25	14	Left Tilted	0mm	Ant 2	DSI 2	462000	2310	23.38	24.00	1.153			-0.05	0.036	0.042
	FR1 n30	10M	BPSK	1	1	Right Cheek	0mm	Ant 1	DSI 2	462000	2310	22.42	23.00	1.143			-0.02	0.990	1.132
	FR1 n30	10M	BPSK	25	14	Right Cheek	0mm	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			0.00	1.020	1.187
	FR1 n30	10M	BPSK	50	0	Right Cheek	0mm	Ant 1	DSI 2	462000	2310	22.33	23.00	1.167			-0.07	1.010	1.179
	FR1 n30	10M	BPSK	1	1	Right Tilted	0mm	Ant 1	DSI 2	462000	2310	22.42	23.00	1.143			0.03	1.020	1.166
04	FR1 n30	10M	BPSK	25	14	Right Tilted	0mm	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			0.00	1.060	1.234
	FR1 n30	10M	BPSK	50	0	Right Tilted	0mm	Ant 1	DSI 2	462000	2310	22.33	23.00	1.167			-0.07	1.040	1.214
	FR1 n30	10M	BPSK	1	1	Left Cheek	0mm	Ant 1	DSI 2	462000	2310	22.42	23.00	1.143			0.18	0.506	0.578
	FR1 n30	10M	BPSK	25	14	Left Cheek	0mm	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			0.16	0.504	0.587
	FR1 n30	10M	BPSK	1	1	Left Tilted	0mm	Ant 1	DSI 2	462000	2310	22.42	23.00	1.143			-0.08	0.576	0.658
	FR1 n30	10M	BPSK	25	14	Left Tilted	0mm	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			0.07	0.598	0.696
	FR1 n30	10M	BPSK	1	1	Right Cheek	0mm	Ant 6	DSI 2	462000	2310	21.53	22.00	1.114			-0.10	0.347	0.387
	FR1 n30	10M	BPSK	25	14	Right Cheek	0mm	Ant 6	DSI 2	462000	2310	21.52	22.00	1.117			0.12	0.350	0.391
	FR1 n30	10M	BPSK	1	1	Right Tilted	0mm	Ant 6	DSI 2	462000	2310	21.53	22.00	1.114			-0.01	0.087	0.097
	FR1 n30	10M	BPSK	25	14	Right Tilted	0mm	Ant 6	DSI 2	462000	2310	21.52	22.00	1.117			0.18	0.085	0.095
	FR1 n30	10M	BPSK	1	1	Left Cheek	0mm	Ant 6	DSI 2	462000	2310	21.53	22.00	1.114			0.01	0.834	0.929
	FR1 n30	10M	BPSK	25	14	Left Cheek	0mm	Ant 6	DSI 2	462000	2310	21.52	22.00	1.117			0.02	0.842	0.941
	FR1 n30	10M	BPSK	50	0	Left Cheek	0mm	Ant 6	DSI 2	462000	2310	21.47	22.00	1.13			-0.02	0.738	0.834
	FR1 n30	10M	BPSK	1	1	Left Tilted	0mm	Ant 6	DSI 2	462000	2310	21.53	22.00	1.114			-0.16	0.198	0.221
	FR1 n30	10M	BPSK	25	14	Left Tilted	0mm	Ant 6	DSI 2	462000	2310	21.52	22.00	1.117			0.17	0.193	0.216
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant 6	DSI 2	349000	1745	21.88	22.00	1.028			-0.10	0.178	0.183
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant 6	DSI 2	349000	1745	21.63	22.00	1.089			0.03	0.164	0.179
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant 6	DSI 2	349000	1745	21.88	22.00	1.028			-0.01	0.044	0.045
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 6	DSI 2	349000	1745	21.63	22.00	1.089			0.01	0.037	0.040
05	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant 6	DSI 2	349000	1745	21.88	22.00	1.028			0.02	0.313	0.322
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant 6	DSI 2	349000	1745	21.63	22.00	1.089			0.16	0.289	0.315
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant 6	DSI 2	349000	1745	21.88	22.00	1.028			0.18	0.066	0.068
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant 6	DSI 2	349000	1745	21.63	22.00	1.089			0.12	0.057	0.062
	FR1 n70	15M	BPSK	1	1	Right Cheek	0mm	Ant 6	DSI 2	340500	1702.5	21.75	22.00	1.059			-0.15	0.439	0.465
	FR1 n70	15M	BPSK	36	22	Right Cheek	0mm	Ant 6	DSI 2	340500	1702.5	21.66	22.00	1.081			0.13	0.431	0.466
	FR1 n70	15M	BPSK	1	1	Right Tilted	0mm	Ant 6	DSI 2	340500	1702.5	21.75	22.00	1.059			0.00	0.110	0.116
	FR1 n70	15M	BPSK	36	22	Right Tilted	0mm	Ant 6	DSI 2	340500	1702.5	21.66	22.00	1.081			-0.04	0.112	0.121
	FR1 n70	15M	BPSK	1	1	Left Cheek	0mm	Ant 6	DSI 2	340500	1702.5	21.75	22.00	1.059			0.03	0.772	0.818
06	FR1 n70	15M	BPSK	36	22	Left Cheek	0mm	Ant 6	DSI 2	340500	1702.5	21.66	22.00	1.081			-0.03	0.785	0.849
	FR1 n70	15M	BPSK	75	0	Left Cheek	0mm	Ant 6	DSI 2	340500	1702.5	21.54	22.00	1.112			0.17	0.748	0.832
	FR1 n70	15M	BPSK	1	1	Left Tilted	0mm	Ant 6	DSI 2	340500	1702.5	21.75	22.00	1.059			-0.12	0.172	0.182
	FR1 n70	15M	BPSK	36	22	Left Tilted	0mm	Ant 6	DSI 2	340500	1702.5	21.66	22.00	1.081			-0.07	0.168	0.182
	FR1 n71_HPUE	35M	BPSK	1	1	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	26.31	27.00	1.172			-0.18	0.612	0.717
07	FR1 n71_HPUE	35M	BPSK	90	45	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	26.26	27.00	1.186			0.05	0.657	0.779
	FR1 n71_HPUE	35M	BPSK	1	1	Right Tilted	0mm	Ant 1	DSI 2	136100	680.5	26.31	27.00	1.172			0.16	0.607	0.711
	FR1 n71_HPUE	35M	BPSK	90	45	Right Tilted	0mm	Ant 1	DSI 2	136100	680.5	26.26	27.00	1.186			-0.09	0.648	0.769
	FR1 n71_HPUE	35M	BPSK	1	1	Left Cheek	0mm	Ant 1	DSI 2	136100	680.5	26.31	27.00	1.172			0.16	0.234	0.274
	FR1 n71_HPUE	35M	BPSK	90	45	Left Cheek	0mm	Ant 1	DSI 2	136100	680.5	26.26	27.00	1.186			-0.05	0.261	0.310
	FR1 n71_HPUE	35M	BPSK	1	1	Left Tilted	0mm	Ant 1	DSI 2	136100	680.5	26.31	27.00	1.172			-0.17	0.239	0.280
	FR1 n71_HPUE	35M	BPSK	90	45	Left Tilted	0mm	Ant 1	DSI 2	136100	680.5	26.26	27.00	1.186			0.00	0.223	0.264
	FR1 n71_HPUE	35M	BPSK	1	1	Right Cheek	0mm	Ant 0	DSI 2	136100	680.5	26.37	27.00	1.156			-0.11	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	90	45	Right Cheek	0mm	Ant 0	DSI 2	136100	680.5	26.35	27.00	1.161			0.06	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	1	1	Right Tilted	0mm	Ant 0	DSI 2	136100	680.5	26.37	27.00	1.156			-0.04	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	90	45	Right Tilted	0mm	Ant 0	DSI 2	136100	680.5	26.35	27.00	1.161			0.09	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	1	1	Left Cheek	0mm	Ant 0	DSI 2	136100	680.5	26.37	27.00	1.156			-0.15	0.125	0.145
	FR1 n71_HPUE	35M	BPSK	90	45	Left Cheek	0mm	Ant 0	DSI 2	136100	680.5	26.35	27.00	1.161			-0.05	0.123	0.143
	FR1 n71_HPUE	35M	BPSK	1	1	Left Tilted	0mm	Ant 0	DSI 2	136100	680.5	26.37	27.00	1.156			-0.09	0.080	0.092
	FR1 n71_HPUE	35M	BPSK	90	45	Left Tilted	0mm	Ant 0	DSI 2	136100	680.5	26.35	27.00	1.161			0.06	0.078	0.091



FCC SAR TEST REPORT

Report No. : FA672113-02

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7	DSI 2	633332	3499.98	19.36	20.30	1.242	100.0	1.000	-0.11	0.632	0.785
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	633332	3499.98	19.35	20.30	1.245	100.0	1.000	-0.04	0.753	0.937
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Cheek	0mm	Ant 7	DSI 2	633332	3499.98	19.30	20.30	1.259	100.0	1.000	0.10	0.733	0.923
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7	DSI 2	633332	3499.98	19.36	20.30	1.242	100.0	1.000	-0.01	0.157	0.195
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7	DSI 2	633332	3499.98	19.35	20.30	1.245	100.0	1.000	-0.02	0.204	0.254
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 7	DSI 2	633332	3499.98	19.36	20.30	1.242	100.0	1.000	-0.05	0.239	0.297
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 7	DSI 2	633332	3499.98	19.35	20.30	1.245	100.0	1.000	-0.07	0.226	0.281
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 7	DSI 2	633332	3499.98	19.36	20.30	1.242	100.0	1.000	0.18	0.069	0.086
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 7	DSI 2	633332	3499.98	19.35	20.30	1.245	100.0	1.000	-0.04	0.076	0.095
	FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	633332	3499.98	22.34	23.30	1.247	50.0	1.000	0.07	0.768	0.958
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7	DSI 2	661334	3920.01	19.39	20.30	1.233	100.0	1.000	0.16	0.822	1.014
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7	DSI 2	650000	3750	19.15	20.30	1.303	100.0	1.000	0.14	0.826	1.076
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7	DSI 2	655668	3835.02	19.28	20.30	1.265	100.0	1.000	-0.14	0.809	1.023
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7	DSI 2	662000	3930	19.21	20.30	1.285	100.0	1.000	0.1	0.795	1.022
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	661334	3920.01	19.37	20.30	1.239	100.0	1.000	-0.07	0.933	1.156
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	650000	3750	19.25	20.30	1.274	100.0	1.000	0.00	0.866	1.103
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	655668	3835.02	19.33	20.30	1.250	100.0	1.000	-0.06	0.842	1.053
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	662000	3930	19.20	20.30	1.288	100.0	1.000	0.02	0.858	1.105
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Cheek	0mm	Ant 7	DSI 2	661334	3920.01	19.33	20.30	1.250	100.0	1.000	-0.12	0.869	1.086
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7	DSI 2	661334	3920.01	19.39	20.30	1.233	100.0	1.000	0.14	0.331	0.408
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7	DSI 2	650000	3750	19.15	20.30	1.303	100.0	1.000	0.12	0.330	0.430
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7	DSI 2	655668	3835.02	19.28	20.30	1.265	100.0	1.000	-0.15	0.339	0.429
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7	DSI 2	662000	3930	19.21	20.30	1.285	100.0	1.000	0.08	0.330	0.424
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7	DSI 2	661334	3920.01	19.37	20.30	1.239	100.0	1.000	-0.13	0.389	0.482
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7	DSI 2	650000	3750	19.25	20.30	1.274	100.0	1.000	-0.07	0.336	0.428
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7	DSI 2	655668	3835.02	19.33	20.30	1.250	100.0	1.000	0.04	0.315	0.394
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7	DSI 2	662000	3930	19.20	20.30	1.288	100.0	1.000	-0.07	0.317	0.408
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 7	DSI 2	661334	3920.01	19.39	20.30	1.233	100.0	1.000	-0.10	0.198	0.244
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 7	DSI 2	661334	3920.01	19.37	20.30	1.239	100.0	1.000	0.10	0.214	0.265
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 7	DSI 2	661334	3920.01	19.39	20.30	1.233	100.0	1.000	0.07	0.124	0.153
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 7	DSI 2	661334	3920.01	19.37	20.30	1.239	100.0	1.000	-0.08	0.148	0.183
	FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Right Cheek	0mm	Ant 7	DSI 2	661334	3920.01	22.35	23.30	1.245	50.0	1.000	0.01	0.872	1.086
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 5	DSI 2	633332	3499.98	21.08	21.50	1.102	100.0	1.000	-0.12	0.346	0.381
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 5	DSI 2	633332	3499.98	21.03	21.50	1.114	100.0	1.000	0.03	0.305	0.340
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 5	DSI 2	633332	3499.98	21.08	21.50	1.102	100.0	1.000	-0.09	0.230	0.253
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 5	DSI 2	633332	3499.98	21.03	21.50	1.114	100.0	1.000	0.03	0.221	0.246
08	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	633332	3499.98	21.08	21.50	1.102	100.0	1.000	-0.03	1.170	1.289
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	DSI 2	633332	3499.98	21.03	21.50	1.114	100.0	1.000	-0.01	1.070	1.192
	FR1 n77 (27Q)	100M	BPSK	270	0	Left Cheek	0mm	Ant 5	DSI 2	633332	3499.98	21.01	21.50	1.119	100.0	1.000	0.02	1.030	1.153
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	DSI 2	633332	3499.98	21.08	21.50	1.102	100.0	1.000	0.16	0.808	0.890
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	DSI 2	633332	3499.98	21.03	21.50	1.114	100.0	1.000	0.11	0.706	0.786
	FR1 n77 (27Q)	100M	BPSK	270	0	Left Tilted	0mm	Ant 5	DSI 2	633332	3499.98	21.01	21.50	1.119	100.0	1.000	-0.08	0.712	0.797
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	633332	3499.98	24.05	24.50	1.109	50.0	1.000	0.04	1.110	1.231
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 5	DSI 2	661334	3920.01	21.23	21.50	1.064	100.0	1.000	0.00	0.178	0.189
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 5	DSI 2	661334	3920.01	21.22	21.50	1.067	100.0	1.000	-0.17	0.215	0.229
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 5	DSI 2	661334	3920.01	21.23	21.50	1.064	100.0	1.000	0.01	0.147	0.156
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 5	DSI 2	661334	3920.01	21.22	21.50	1.067	100.0	1.000	0.00	0.189	0.202
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	661334	3920.01	21.23	21.50	1.064	100.0	1.000	0.02	0.694	0.738
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	650000	3750	20.74	21.50	1.191	100.0	1.000	-0.01	0.648	0.772
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	655668	3835.02	21.09	21.50	1.099	100.0	1.000	0.14	0.596	0.655
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	DSI 2	662000	3930	21.15	21.50	1.084	100.0	1.000	0.15	0.574	0.622
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	DSI 2	661334	3920.01	21.22	21.50	1.067	100.0	1.000	-0.03	0.780	0.832
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	DSI 2	650000	3750	20.86	21.50	1.159	100.0	1.000	0.09	0.608	0.705
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	DSI 2	655668	3835.02	21.08	21.50	1.102	100.0	1.000	0.18	0.625	0.689



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FR1 n77 (270)	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	DSI 2	662000	3930	21.06	21.50	1.107	100.0	1.000	-0.04	0.591	0.654
FR1 n77 (270)	100M	BPSK	270	0	Left Cheek	0mm	Ant 5	DSI 2	661334	3920.01	21.15	21.50	1.084	100.0	1.000	0.00	0.774	0.839
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	DSI 2	661334	3920.01	21.23	21.50	1.064	100.0	1.000	-0.03	0.450	0.479
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	DSI 2	650000	3750	20.74	21.50	1.191	100.0	1.000	0.03	0.373	0.444
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	DSI 2	655668	3835.02	21.09	21.50	1.099	100.0	1.000	-0.01	0.377	0.414
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	DSI 2	662000	3930	21.15	21.50	1.084	100.0	1.000	-0.16	0.334	0.362
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	DSI 2	661334	3920.01	21.22	21.50	1.067	100.0	1.000	0.07	0.536	0.572
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	DSI 2	650000	3750	20.86	21.50	1.159	100.0	1.000	0.01	0.367	0.425
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	DSI 2	655668	3835.02	21.08	21.50	1.102	100.0	1.000	-0.14	0.393	0.433
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	DSI 2	662000	3930	21.06	21.50	1.107	100.0	1.000	0.03	0.313	0.346
FR1 n77 (270)_HPUE	100M	BPSK	270	0	Left Cheek	0mm	Ant 5	DSI 2	661334	3920.01	24.11	24.50	1.094	100.0	1.000	0.12	0.724	0.792
FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	DSI 2	633332	3499.98	17.13	18.30	1.309	100.0	1.000	0.18	0.456	0.597
FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	DSI 2	633332	3499.98	17.03	18.30	1.340	100.0	1.000	0.06	0.497	0.666
FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	DSI 2	633332	3499.98	17.13	18.30	1.309	100.0	1.000	-0.12	0.545	0.713
FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	DSI 2	633332	3499.98	17.03	18.30	1.340	100.0	1.000	0.06	0.600	0.804
FR1 n77 (27Q)	100M	BPSK	270	0	Right Tilted	0mm	Ant 4	DSI 2	633332	3499.98	16.96	18.30	1.361	100.0	1.000	-0.12	0.580	0.789
FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	DSI 2	633332	3499.98	17.13	18.30	1.309	100.0	1.000	0.17	0.825	1.080
FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	DSI 2	633332	3499.98	17.03	18.30	1.340	100.0	1.000	-0.05	0.870	1.166
FR1 n77 (27Q)	100M	BPSK	270	0	Left Cheek	0mm	Ant 4	DSI 2	633332	3499.98	16.96	18.30	1.361	100.0	1.000	-0.09	0.804	1.094
FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	633332	3499.98	17.13	18.30	1.309	100.0	1.000	-0.04	0.876	1.147
FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	633332	3499.98	17.03	18.30	1.340	100.0	1.000	0.06	0.911	1.221
FR1 n77 (27Q)	100M	BPSK	270	0	Left Tilted	0mm	Ant 4	DSI 2	633332	3499.98	16.96	18.30	1.361	100.0	1.000	0.08	0.876	1.192
FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	633332	3499.98	20.05	21.30	1.334	50.0	1.000	-0.06	0.904	1.206
FR1 n77 (270)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	DSI 2	661334	3920.01	17.23	18.30	1.279	100.0	1.000	-0.17	0.318	0.407
FR1 n77 (270)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	DSI 2	650000	3750	17.13	18.30	1.309	100.0	1.000	0.14	0.493	0.645
FR1 n77 (270)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	DSI 2	655668	3835.02	17.09	18.30	1.321	100.0	1.000	0.18	0.364	0.481
FR1 n77 (270)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	DSI 2	662000	3930	17.10	18.30	1.318	100.0	1.000	0.02	0.409	0.539
FR1 n77 (270)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	DSI 2	661334	3920.01	17.18	18.30	1.294	100.0	1.000	0.15	0.354	0.458
FR1 n77 (270)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	DSI 2	650000	3750	16.83	18.30	1.403	100.0	1.000	-0.04	0.394	0.553
FR1 n77 (270)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	DSI 2	655668	3835.02	16.87	18.30	1.390	100.0	1.000	0.14	0.316	0.439
FR1 n77 (270)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	DSI 2	662000	3930	17.05	18.30	1.334	100.0	1.000	-0.07	0.330	0.440
FR1 n77 (270)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	DSI 2	661334	3920.01	17.23	18.30	1.279	100.0	1.000	-0.10	0.397	0.508
FR1 n77 (270)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	DSI 2	650000	3750	17.13	18.30	1.309	100.0	1.000	0.13	0.609	0.797
FR1 n77 (270)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	DSI 2	655668	3835.02	17.09	18.30	1.321	100.0	1.000	-0.11	0.450	0.594
FR1 n77 (270)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	DSI 2	662000	3930	17.10	18.30	1.318	100.0	1.000	-0.1	0.500	0.659
FR1 n77 (270)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	DSI 2	661334	3920.01	17.18	18.30	1.294	100.0	1.000	0.16	0.424	0.549
FR1 n77 (270)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	DSI 2	650000	3750	16.83	18.30	1.403	100.0	1.000	-0.05	0.483	0.678
FR1 n77 (270)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	DSI 2	655668	3835.02	16.87	18.30	1.390	100.0	1.000	-0.02	0.400	0.556
FR1 n77 (270)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	DSI 2	662000	3930	17.05	18.30	1.334	100.0	1.000	0.08	0.442	0.590
FR1 n77 (270)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	DSI 2	661334	3920.01	17.23	18.30	1.279	100.0	1.000	0.07	0.450	0.576
FR1 n77 (270)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	DSI 2	650000	3750	17.13	18.30	1.309	100.0	1.000	0.15	0.791	1.035
FR1 n77 (270)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	DSI 2	655668	3835.02	17.09	18.30	1.321	100.0	1.000	0.09	0.569	0.752
FR1 n77 (270)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	DSI 2	662000	3930	17.10	18.30	1.318	100.0	1.000	0.03	0.625	0.824
FR1 n77 (270)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	DSI 2	661334	3920.01	17.18	18.30	1.294	100.0	1.000	-0.07	0.526	0.681
FR1 n77 (270)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	DSI 2	650000	3750	16.83	18.30	1.403	100.0	1.000	-0.16	0.639	0.897
FR1 n77 (270)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	DSI 2	655668	3835.02	16.87	18.30	1.390	100.0	1.000	0.10	0.496	0.689
FR1 n77 (270)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	DSI 2	662000	3930	17.05	18.30	1.334	100.0	1.000	0.07	0.581	0.775
FR1 n77 (270)	100M	BPSK	270	0	Left Cheek	0mm	Ant 4	DSI 2	661334	3920.01	16.95	18.30	1.365	100.0	1.000	0.12	0.500	0.683
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	661334	3920.01	17.23	18.30	1.279	100.0	1.000	-0.02	0.582	0.744
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	650000	3750	17.13	18.30	1.309	100.0	1.000	-0.01	0.943	1.234
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	655668	3835.02	17.09	18.30	1.321	100.0	1.000	-0.05	0.685	0.905
FR1 n77 (270)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	662000	3930	17.10	18.30	1.318	100.0	1.000	0.14	0.725	0.956
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	661334	3920.01	17.18	18.30	1.294	100.0	1.000	0.09	0.586	0.758
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	650000	3750	16.83	18.30	1.403	100.0	1.000	0.02	0.758	1.063
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	655668	3835.02	16.87	18.30	1.390	100.0	1.000	-0.03	0.582	0.809
FR1 n77 (270)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	DSI 2	662000	3930	17.05	18.30	1.334	100.0	1.000	0.05	0.661	0.882



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FR1 n77 (27Q)	100M	BPSK	270	0	Left Tilted	0mm	Ant 4	DSI 2	661334	3920.01	16.95	18.30	1.365	100.0	1.000	0.14	0.609	0.831
FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	DSI 2	650000	3750	19.96	21.30	1.361	100.0	1.000	0.06	0.904	1.230
FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 8	DSI 2	633332	3499.98	23.78	24.00	1.052	100.0	1.000	-0.14	0.252	0.265
FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 8	DSI 2	633332	3499.98	23.43	24.00	1.140	100.0	1.000	-0.05	0.262	0.299
FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 8	DSI 2	633332	3499.98	23.78	24.00	1.052	100.0	1.000	-0.10	0.088	0.093
FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 8	DSI 2	633332	3499.98	23.43	24.00	1.140	100.0	1.000	0.01	0.081	0.092
FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 8	DSI 2	633332	3499.98	23.78	24.00	1.052	100.0	1.000	0.10	0.156	0.164
FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 8	DSI 2	633332	3499.98	23.43	24.00	1.140	100.0	1.000	-0.06	0.158	0.180
FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 8	DSI 2	633332	3499.98	23.78	24.00	1.052	100.0	1.000	-0.11	0.143	0.150
FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 8	DSI 2	633332	3499.98	23.43	24.00	1.140	100.0	1.000	0.09	0.150	0.171
FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Right Cheek	0mm	Ant 8	DSI 2	633332	3499.98	26.78	27.00	1.052	50.0	1.000	0.12	0.258	0.271
FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 8	DSI 2	661334	3920.01	23.95	24.00	1.012	100.0	1.000	0.04	0.261	0.264
FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 8	DSI 2	661334	3920.01	23.89	24.00	1.026	100.0	1.000	0.02	0.256	0.263
FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 8	DSI 2	661334	3920.01	23.95	24.00	1.012	100.0	1.000	-0.03	0.087	0.088
FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 8	DSI 2	661334	3920.01	23.89	24.00	1.026	100.0	1.000	0.11	0.083	0.085
FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 8	DSI 2	661334	3920.01	23.95	24.00	1.012	100.0	1.000	-0.01	0.153	0.155
FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 8	DSI 2	661334	3920.01	23.89	24.00	1.026	100.0	1.000	-0.03	0.160	0.164
FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 8	DSI 2	661334	3920.01	23.95	24.00	1.012	100.0	1.000	-0.19	0.164	0.166
FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 8	DSI 2	661334	3920.01	23.89	24.00	1.026	100.0	1.000	0.05	0.156	0.160
FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant 8	DSI 2	661334	3920.01	26.55	27.00	1.109	50.0	1.000	-0.17	0.256	0.284

MIMO SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25	40M	BPSK	1	1	Right Cheek	0mm	Ant 6+1	DSI 2	376500	1882.5	20.26	21.90	1.459	100.0	1.000	0.11	0.438	0.639
	FR1 n25	40M	BPSK	108	54	Right Cheek	0mm	Ant 6+1	DSI 2	376500	1882.5	20.23	21.90	1.469	100.0	1.000	0.14	0.411	0.604
	FR1 n25	40M	BPSK	1	1	Right Tilted	0mm	Ant 6+1	DSI 2	376500	1882.5	20.26	21.90	1.459	100.0	1.000	-0.03	0.111	0.162
	FR1 n25	40M	BPSK	108	54	Right Tilted	0mm	Ant 6+1	DSI 2	376500	1882.5	20.23	21.90	1.469	100.0	1.000	-0.12	0.135	0.198
	FR1 n25	40M	BPSK	1	1	Left Cheek	0mm	Ant 6+1	DSI 2	376500	1882.5	20.26	21.90	1.459	100.0	1.000	-0.09	0.695	1.014
	FR1 n25	40M	BPSK	108	54	Left Cheek	0mm	Ant 6+1	DSI 2	376500	1882.5	20.23	21.90	1.469	100.0	1.000	-0.14	0.745	1.094
	FR1 n25	40M	BPSK	216	0	Left Cheek	0mm	Ant 6+1	DSI 2	376500	1882.5	20.17	21.90	1.489	100.0	1.000	0.04	0.711	1.059
	FR1 n25	40M	BPSK	1	1	Left Tilted	0mm	Ant 6+1	DSI 2	376500	1882.5	20.26	21.90	1.459	100.0	1.000	0.03	0.145	0.212
	FR1 n25	40M	BPSK	108	54	Left Tilted	0mm	Ant 6+1	DSI 2	376500	1882.5	20.23	21.90	1.469	100.0	1.000	0.05	0.131	0.192
	FR1 n30	10M	BPSK	1	1	Right Cheek	0mm	Ant 6+1	DSI 2	462000	2310	23.37	24.00	1.156	100.0	1.000	0.00	0.765	0.884
	FR1 n30	10M	BPSK	25	14	Right Cheek	0mm	Ant 6+1	DSI 2	462000	2310	23.35	24.00	1.161	100.0	1.000	0.07	0.781	0.907
	FR1 n30	10M	BPSK	50	0	Right Cheek	0mm	Ant 6+1	DSI 2	462000	2310	23.32	24.00	1.169	100.0	1.000	0.02	0.801	0.936
	FR1 n30	10M	BPSK	1	1	Right Tilted	0mm	Ant 6+1	DSI 2	462000	2310	23.37	24.00	1.156	100.0	1.000	0.05	0.820	0.948
	FR1 n30	10M	BPSK	25	14	Right Tilted	0mm	Ant 6+1	DSI 2	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.09	0.860	0.998
	FR1 n30	10M	BPSK	50	0	Right Tilted	0mm	Ant 6+1	DSI 2	462000	2310	23.32	24.00	1.169	100.0	1.000	0.16	0.840	0.982
	FR1 n30	10M	BPSK	1	1	Left Cheek	0mm	Ant 6+1	DSI 2	462000	2310	23.37	24.00	1.156	100.0	1.000	0.05	0.306	0.354
	FR1 n30	10M	BPSK	25	14	Left Cheek	0mm	Ant 6+1	DSI 2	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.09	0.304	0.353
	FR1 n30	10M	BPSK	1	1	Left Tilted	0mm	Ant 6+1	DSI 2	462000	2310	23.37	24.00	1.156	100.0	1.000	-0.03	0.376	0.435
	FR1 n30	10M	BPSK	25	14	Left Tilted	0mm	Ant 6+1	DSI 2	462000	2310	23.35	24.00	1.161	100.0	1.000	0.19	0.398	0.462
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant 6+1	DSI 2	349000	1745	20.48	21.40	1.236	100.0	1.000	-0.06	0.752	0.929
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant 6+1	DSI 2	349000	1745	20.46	21.40	1.242	100.0	1.000	0.08	0.822	1.021
	FR1 n66	45M	BPSK	240	0	Right Cheek	0mm	Ant 6+1	DSI 2	349000	1745	20.39	21.40	1.262	100.0	1.000	0.11	0.850	1.073
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant 6+1	DSI 2	349000	1745	20.48	21.40	1.236	100.0	1.000	0.14	0.651	0.805
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 6+1	DSI 2	349000	1745	20.46	21.40	1.242	100.0	1.000	0.09	0.682	0.847
	FR1 n66	45M	BPSK	240	0	Right Tilted	0mm	Ant 6+1	DSI 2	349000	1745	20.39	21.40	1.262	100.0	1.000	0.03	0.689	0.870
	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant 6+1	DSI 2	349000	1745	20.48	21.40	1.236	100.0	1.000	-0.11	0.151	0.187
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant 6+1	DSI 2	349000	1745	20.46	21.40	1.242	100.0	1.000	-0.14	0.168	0.209
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant 6+1	DSI 2	349000	1745	20.48	21.40	1.236	100.0	1.000	-0.17	0.207	0.256
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant 6+1	DSI 2	349000	1745	20.46	21.40	1.242	100.0	1.000	0.05	0.245	0.304
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	21.44	22.50	1.276	100.0	1.000	0.03	0.532	0.679



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FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	21.42	22.50	1.282	100.0	1.000	-0.16	0.651	0.835
FR1 n77 (27Q)	100M	BPSK	270	0	Right Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	21.31	22.50	1.315	100.0	1.000	0	0.633	0.832
FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 7+5	DSI 2	633332	3499.98	21.44	22.50	1.276	100.0	1.000	0.01	0.157	0.200
FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 7+5	DSI 2	633332	3499.98	21.42	22.50	1.282	100.0	1.000	0.05	0.204	0.262
FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	21.44	22.50	1.276	100.0	1.000	0.04	0.239	0.305
FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	21.42	22.50	1.282	100.0	1.000	0.05	0.226	0.290
FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 7+5	DSI 2	633332	3499.98	21.44	22.50	1.276	100.0	1.000	0.1	0.069	0.088
FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 7+5	DSI 2	633332	3499.98	21.42	22.50	1.282	100.0	1.000	-0.09	0.076	0.097
FR1 n77 (27Q)_PC1.5	100M	BPSK	135	69	Right Cheek	0mm	Ant 7+5	DSI 2	633332	3499.98	24.55	25.50	1.245	50.0	1.000	-0.03	0.768	0.956
FR1 n77 (27Q)	100M	BPSK	1	1	Right Cheek	0mm	Ant 4+5	DSI 2	633332	3499.98	20.01	20.70	1.172	100.0	1.000	-0.04	0.316	0.370
FR1 n77 (27Q)	100M	BPSK	135	69	Right Cheek	0mm	Ant 4+5	DSI 2	633332	3499.98	20.02	20.70	1.169	100.0	1.000	0.07	0.357	0.417
FR1 n77 (27Q)	100M	BPSK	1	1	Right Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	20.01	20.70	1.172	100.0	1.000	0.11	0.405	0.475
FR1 n77 (27Q)	100M	BPSK	135	69	Right Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	20.02	20.70	1.169	100.0	1.000	0.08	0.460	0.538
FR1 n77 (27Q)	100M	BPSK	1	1	Left Cheek	0mm	Ant 4+5	DSI 2	633332	3499.98	20.01	20.70	1.172	100.0	1.000	0.09	0.685	0.803
FR1 n77 (27Q)	100M	BPSK	135	69	Left Cheek	0mm	Ant 4+5	DSI 2	633332	3499.98	20.02	20.70	1.169	100.0	1.000	-0.13	0.730	0.853
FR1 n77 (27Q)	100M	BPSK	270	0	Left Cheek	0mm	Ant 4+5	DSI 2	633332	3499.98	19.87	20.70	1.211	100.0	1.000	0.07	0.664	0.804
FR1 n77 (27Q)	100M	BPSK	1	1	Left Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	20.01	20.70	1.172	100.0	1.000	-0.08	0.736	0.863
FR1 n77 (27Q)	100M	BPSK	135	69	Left Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	20.02	20.70	1.169	100.0	1.000	-0.05	0.771	0.901
FR1 n77 (27Q)	100M	BPSK	270	0	Left Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	19.87	20.70	1.211	100.0	1.000	-0.11	0.736	0.891
FR1 n77 (27Q)_PC1.5	100M	BPSK	135	69	Left Tilted	0mm	Ant 4+5	DSI 2	633332	3499.98	22.87	23.70	1.211	50.0	1.000	0.01	0.764	0.925

CA SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 5	10M	QPSK	1	49	Left Cheek	0mm	Ant 0	DSI 2	20476+20575	831.6+841.5	22.92	24.00	1.282	100.0	1.000	0.06	0.268	0.344
	LTE Band 5	10M	QPSK	1	49	Right Cheek	0mm	Ant 1	DSI 2	20476+20575	831.6+841.5	23.30	24.00	1.175	100.0	1.000	0.03	0.575	0.676
	LTE Band 48	20M	QPSK	1	99	Left Cheek	0mm	Ant 5	DSI 2	55830+56028	3609+3628.8	23.28	24.00	1.180	62.9	1.006	-0.01	0.933	1.108
	LTE Band 48	20M	QPSK	1	99	Right Cheek	0mm	Ant 7	DSI 2	55830+56028	3609+3628.8	23.41	24.00	1.146	62.9	1.006	-0.1	0.869	1.002
	FR1 n77 (27Q)	100M	BPSK	1	272	Right Cheek	0mm	Ant 7	DSI 2	655336+662000	3830.04+3930	19.25	20.30	1.274	100.0	1.000	-0.03	0.901	1.148
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	272	Left Cheek	0mm	Ant 5	DSI 2	655336+662000	3830.04+3930	23.27	24.50	1.327	100.0	1.000	0.09	0.895	1.188
	FR1 n77 (27Q)	100M	BPSK	1	272	Left Tilted	0mm	Ant 4	DSI 2	650000+656664	3750+3849.96	17.29	18.30	1.262	100.0	1.000	-0.03	0.911	1.150
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	272	Right Cheek	0mm	Ant 8	DSI 2	655336+662000	3830.04+3930	26.31	27.00	1.172	50.0	1.000	0.05	0.204	0.239

<Spot check>

Plot No	Band	BW	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	-				GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	DSI 2	189	836.4	27.21	28.50	1.346	100.0	1.000	0.12	0.275	0.370
09	GSM850					GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	DSI 2	189	836.4	26.89	28.50	1.449	100.0	1.000	0.04	0.186	0.270
	WCDMA IV					RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 2	1413	1732.6	22.65	24.00	1.365	100.0	1.000	0.10	0.166	0.227
10	WCDMA IV					RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 2	1413	1732.6	22.97	24.00	1.268	100.0	1.000	-0.04	0.122	0.155
	LTE Band 25	20M	QPSK	1	0		Left Cheek	0mm	Ant 6	DSI 2	26590	1905	21.16	21.60	1.107	100.0	1.000	0.03	1.150	1.273
11	LTE Band 25	20M	QPSK	1	0		Left Cheek	0mm	Ant 6	DSI 2	26590	1905	21.23	21.60	1.089	100.0	1.000	-0.08	0.931	1.014
	LTE Band 66	20M	QPSK	1	0		Right Cheek	0mm	Ant 1	DSI 2	132572	1770	16.78	17.60	1.208	100.0	1.000	0.03	1.060	1.280
12	LTE Band 66	20M	QPSK	1	0		Right Cheek	0mm	Ant 1	DSI 2	132572	1770	16.87	17.60	1.183	100.0	1.000	0.12	1.010	1.195
	LTE Band 42 (27Q)	20M	QPSK	1	0		Left Cheek	0mm	Ant 5	DSI 2	42990	3540	22.16	23.70	1.426	62.9	1.006	-0.03	0.839	1.204
	LTE Band 42 (27Q)	20M	QPSK	1	0		Left Cheek	0mm	Ant 5	DSI 2	42990	3540	22.27	23.70	1.390	62.9	1.006	-0.05	0.700	0.979
	LTE Band 42 (27Q)	20M	QPSK	1	0		Right Cheek	0mm	Ant 7	DSI 2	42990	3540	22.53	24.00	1.403	62.9	1.006	0.06	0.867	1.224
13	LTE Band 42 (27Q)	20M	QPSK	1	0		Right Cheek	0mm	Ant 7	DSI 2	42990	3540	22.48	24.00	1.419	62.9	1.006	-0.01	0.694	0.991
	FR1 n48	40M	BPSK	50	28		Left Tilted	0mm	Ant 4	DSI 2	641666	3624.99	17.63	18.00	1.089	100.0	1.000	-0.04	1.180	1.285
	FR1 n48	40M	BPSK	50	28		Left Tilted	0mm	Ant 4	DSI 2	641666	3624.99	17.61	18.00	1.094	100.0	1.000	0.02	1.050	1.149
	FR1 n48	40M	BPSK	1	1		Left Cheek	0mm	Ant 5	DSI 2	638000	3570	20.47	21.20	1.183	100.0	1.000	0.00	1.090	1.289
	FR1 n48	40M	BPSK	1	1		Left Cheek	0mm	Ant 5	DSI 2	638000	3570	20.77	21.20	1.104	100.0	1.000	0.03	0.971	1.072
	FR1 n48	40M	BPSK	1	1		Right Cheek	0mm	Ant 7	DSI 2	641666	3624.99	20.32	20.90	1.143	100.0	1.000	0.01	1.120	1.280



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15	FR1 n48	40M	BPSK	1	1		Right Cheek	0mm	Ant 7	DSI 2	641666	3624.99	20.58	20.90	1.076	100.0	1.000	0.03	1.110	1.194
	FR1 n48	40M	BPSK	50	28		Right Cheek	0mm	Ant 8	DSI 2	641666	3624.99	24.56	25.00	1.107	100.0	1.000	-0.08	0.268	0.297
	FR1 n48	40M	BPSK	50	28		Right Cheek	0mm	Ant 8	DSI 2	641666	3624.99	24.64	25.00	1.086	100.0	1.000	0.15	0.352	0.382

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	2.4GHz WLAN	802.11b 1Mbps	Left Cheek	0mm	Ant 3+6(3)	DSI 2	11	2462	19.26	20.50	1.330	97.7	1.024	0.03	0.910	1.239
16	2.4GHz WLAN	802.11b 1Mbps	Left Cheek	0mm	Ant 3+6(3)	DSI 2	11	2462	19.46	20.50	1.271	97.7	1.024	-0.02	0.917	1.193
	5.8GHz WLAN	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5(5)	DSI 2	155	5775	17.87	19.50	1.455	99.2	1.009	0.00	0.705	1.035
17	5.8GHz WLAN	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5(5)	DSI 2	155	5775	17.89	19.50	1.449	99.2	1.009	-0.07	0.558	0.816

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)
	WLAN6GHz	802.11be-EHT320 MCS0	Left Tilted	0mm	Ant 5+4(4)	DSI 2	127	6585	13.22	15.00	1.507	99.6	1.004	0.001	0.258	0.390	1.530
18	WLAN6GHz	802.11be-EHT320 MCS0	Left Tilted	0mm	Ant 5+4(4)	DSI 2	127	6585	13.42	15.00	1.439	99.6	1.004	0.100	0.268	0.387	1.580

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	DSI 2	39	2441	18.37	20.00	1.455	76.8	1.084	0.12	0.303	0.478
19	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	DSI 2	39	2441	18.79	20.00	1.321	76.8	1.084	0.05	0.457	0.654



16.2 Hotspot SAR

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.17	0.404	0.599
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	-0.04	0.359	0.536
	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.07	0.411	0.610
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	-0.19	0.323	0.482
	LTE Band 30	10M	QPSK	1	0	Left Side	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.13	0.064	0.095
	LTE Band 30	10M	QPSK	25	0	Left Side	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	0.03	0.055	0.082
	LTE Band 30	10M	QPSK	1	0	Right Side	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.11	0.211	0.313
	LTE Band 30	10M	QPSK	25	0	Right Side	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	-0.12	0.205	0.306
	LTE Band 30	10M	QPSK	1	0	Top Side	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.15	0.001	0.001
	LTE Band 30	10M	QPSK	25	0	Top Side	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	0.07	0.001	0.001
	LTE Band 30	10M	QPSK	1	0	Bottom Side	5mm	Ant 2	DSI 7	27710	2310	20.59	22.30	1.483	-0.14	0.659	0.977
	LTE Band 30	10M	QPSK	25	0	Bottom Side	5mm	Ant 2	DSI 7	27710	2310	20.56	22.30	1.493	0.04	0.518	0.773
	LTE Band 30	10M	QPSK	50	0	Bottom Side	5mm	Ant 2	DSI 7	27710	2310	20.45	22.30	1.531	-0.01	0.559	0.856
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	-0.17	0.177	0.262
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	-0.01	0.135	0.201
	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	0.02	0.676	1.003
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	-0.03	0.570	0.849
	LTE Band 30	10M	QPSK	50	0	Back	5mm	Ant 1	DSI 7	27710	2310	17.97	19.80	1.524	0.06	0.591	0.901
	LTE Band 30	10M	QPSK	1	0	Left Side	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	0.02	0.449	0.666
	LTE Band 30	10M	QPSK	25	0	Left Side	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	0.18	0.375	0.558
	LTE Band 30	10M	QPSK	1	0	Right Side	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	-0.09	0.026	0.039
	LTE Band 30	10M	QPSK	25	0	Right Side	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	0.00	0.023	0.034
	LTE Band 30	10M	QPSK	1	0	Top Side	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	-0.02	0.433	0.642
	LTE Band 30	10M	QPSK	25	0	Top Side	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	0.02	0.412	0.613
	LTE Band 30	10M	QPSK	1	0	Bottom Side	5mm	Ant 1	DSI 7	27710	2310	18.09	19.80	1.483	0.09	0.001	0.001
	LTE Band 30	10M	QPSK	25	0	Bottom Side	5mm	Ant 1	DSI 7	27710	2310	18.07	19.80	1.489	0.01	0.001	0.001
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	0.08	0.279	0.407
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	-0.12	0.224	0.329
	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	0.19	0.523	0.763
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	0.16	0.366	0.538
	LTE Band 30	10M	QPSK	1	0	Left Side	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	-0.05	0.001	0.001
	LTE Band 30	10M	QPSK	25	0	Left Side	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	0.02	0.001	0.001
20	LTE Band 30	10M	QPSK	1	0	Right Side	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	-0.06	0.750	1.094
	LTE Band 30	10M	QPSK	25	0	Right Side	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	0.01	0.599	0.880
	LTE Band 30	10M	QPSK	50	0	Right Side	5mm	Ant 6	DSI 7	27710	2310	18.01	19.70	1.476	-0.14	0.556	0.821
	LTE Band 30	10M	QPSK	1	0	Top Side	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	-0.12	0.070	0.102
	LTE Band 30	10M	QPSK	25	0	Top Side	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	-0.01	0.049	0.072
	LTE Band 30	10M	QPSK	1	0	Bottom Side	5mm	Ant 6	DSI 7	27710	2310	18.06	19.70	1.459	-0.17	0.017	0.025
	LTE Band 30	10M	QPSK	25	0	Bottom Side	5mm	Ant 6	DSI 7	27710	2310	18.03	19.70	1.469	0.16	0.017	0.025

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n14_HPUE	10M	BPSK	1	1	Front	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			0.01	0.313	0.414
	FR1 n14_HPUE	10M	BPSK	25	14	Front	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			0.02	0.343	0.458
21	FR1 n14_HPUE	10M	BPSK	1	1	Back	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			-0.14	0.870	1.152
	FR1 n14_HPUE	10M	BPSK	25	14	Back	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			0.15	0.844	1.126
	FR1 n14_HPUE	10M	BPSK	50	0	Back	5mm	Ant 1	DSI 7	158600	793	24.24	25.50	1.337			0.14	0.828	1.107
	FR1 n14_HPUE	10M	BPSK	1	1	Left Side	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			0.04	0.425	0.563
	FR1 n14_HPUE	10M	BPSK	25	14	Left Side	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			-0.08	0.434	0.579
	FR1 n14_HPUE	10M	BPSK	1	1	Right Side	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			0.03	0.054	0.071
	FR1 n14_HPUE	10M	BPSK	25	14	Right Side	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			-0.08	0.055	0.073
	FR1 n14_HPUE	10M	BPSK	1	1	Top Side	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			0.12	0.423	0.560
	FR1 n14_HPUE	10M	BPSK	25	14	Top Side	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			0.11	0.381	0.508
	FR1 n14_HPUE	10M	BPSK	1	1	Bottom Side	5mm	Ant 1	DSI 7	158600	793	24.28	25.50	1.324			0.10	0.001	0.001
	FR1 n14_HPUE	10M	BPSK	25	14	Bottom Side	5mm	Ant 1	DSI 7	158600	793	24.25	25.50	1.334			0.04	0.001	0.001
	FR1 n14_HPUE	10M	BPSK	1	1	Front	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			0.18	0.723	0.852
	FR1 n14_HPUE	10M	BPSK	25	14	Front	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			-0.17	0.731	0.867
	FR1 n14_HPUE	10M	BPSK	1	1	Back	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			-0.18	0.735	0.866
	FR1 n14_HPUE	10M	BPSK	25	14	Back	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			0.07	0.762	0.904
	FR1 n14_HPUE	10M	BPSK	1	1	Left Side	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			0.01	0.917	1.080
	FR1 n14_HPUE	10M	BPSK	25	14	Left Side	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			0.09	0.956	1.134



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	FR1 n14_HPUE	10M	BPSK	1	1	Right Side	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			0.00	0.117	0.138
	FR1 n14_HPUE	10M	BPSK	25	14	Right Side	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			-0.13	0.121	0.144
	FR1 n14_HPUE	10M	BPSK	1	1	Top Side	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			0.09	0.002	0.002
	FR1 n14_HPUE	10M	BPSK	25	14	Top Side	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			0.15	0.002	0.002
	FR1 n14_HPUE	10M	BPSK	1	1	Bottom Side	5mm	Ant 0	DSI 7	158600	793	25.29	26.00	1.178			-0.10	0.574	0.676
	FR1 n14_HPUE	10M	BPSK	25	14	Bottom Side	5mm	Ant 0	DSI 7	158600	793	25.26	26.00	1.186			-0.19	0.587	0.696
	FR1 n25	40M	BPSK	1	1	Front	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			-0.14	0.309	0.348
	FR1 n25	40M	BPSK	108	54	Front	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			0.09	0.362	0.414
	FR1 n25	40M	BPSK	1	1	Back	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			0.09	0.613	0.691
	FR1 n25	40M	BPSK	108	54	Back	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			0.14	0.714	0.816
	FR1 n25	40M	BPSK	216	0	Back	5mm	Ant 6	DSI 7	376500	1882.5	19.34	20.00	1.164			0.14	0.652	0.759
	FR1 n25	40M	BPSK	1	1	Left Side	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			0.02	0.001	0.001
	FR1 n25	40M	BPSK	108	54	Left Side	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			-0.10	0.001	0.001
	FR1 n25	40M	BPSK	1	1	Right Side	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			-0.12	0.739	0.833
22	FR1 n25	40M	BPSK	108	54	Right Side	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			0.02	0.911	1.041
	FR1 n25	40M	BPSK	216	0	Right Side	5mm	Ant 6	DSI 7	376500	1882.5	19.34	20.00	1.164			-0.12	0.862	1.003
	FR1 n25	40M	BPSK	1	1	Top Side	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			-0.17	0.085	0.096
	FR1 n25	40M	BPSK	108	54	Top Side	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			-0.10	0.092	0.105
	FR1 n25	40M	BPSK	1	1	Bottom Side	5mm	Ant 6	DSI 7	376500	1882.5	19.48	20.00	1.127			-0.06	0.022	0.025
	FR1 n25	40M	BPSK	108	54	Bottom Side	5mm	Ant 6	DSI 7	376500	1882.5	19.42	20.00	1.143			0.07	0.021	0.024
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			-0.17	0.526	0.767
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			0.03	0.536	0.793
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			0.00	0.561	0.818
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			0.13	0.571	0.845
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 2	DSI 7	462000	2310	20.84	22.60	1.5			-0.16	0.546	0.819
	FR1 n30	10M	BPSK	1	1	Left Side	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			-0.13	0.101	0.147
	FR1 n30	10M	BPSK	25	14	Left Side	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			-0.08	0.098	0.145
	FR1 n30	10M	BPSK	1	1	Right Side	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			0.11	0.256	0.374
	FR1 n30	10M	BPSK	25	14	Right Side	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			-0.01	0.252	0.373
	FR1 n30	10M	BPSK	1	1	Top Side	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			0.00	0.022	0.032
	FR1 n30	10M	BPSK	25	14	Top Side	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			0.14	0.020	0.030
23	FR1 n30	10M	BPSK	1	1	Bottom Side	5mm	Ant 2	DSI 7	462000	2310	20.96	22.60	1.459			-0.15	0.869	1.268
	FR1 n30	10M	BPSK	25	14	Bottom Side	5mm	Ant 2	DSI 7	462000	2310	20.90	22.60	1.479			0.00	0.799	1.182
	FR1 n30	10M	BPSK	50	0	Bottom Side	5mm	Ant 2	DSI 7	462000	2310	20.84	22.60	1.5			0.19	0.829	1.244
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			-0.15	0.155	0.230
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			-0.04	0.160	0.242
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			0.12	0.596	0.886
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			-0.10	0.654	0.988
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 1	DSI 7	462000	2310	19.31	21.20	1.545			-0.16	0.630	0.973
	FR1 n30	10M	BPSK	1	1	Left Side	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			0.12	0.397	0.590
	FR1 n30	10M	BPSK	25	14	Left Side	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			0.16	0.436	0.658
	FR1 n30	10M	BPSK	1	1	Right Side	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			0.00	0.024	0.036
	FR1 n30	10M	BPSK	25	14	Right Side	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			0.13	0.027	0.041
	FR1 n30	10M	BPSK	1	1	Top Side	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			0.04	0.362	0.538
	FR1 n30	10M	BPSK	25	14	Top Side	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			0.06	0.373	0.563
	FR1 n30	10M	BPSK	1	1	Bottom Side	5mm	Ant 1	DSI 7	462000	2310	19.48	21.20	1.486			-0.02	0.001	0.001
	FR1 n30	10M	BPSK	25	14	Bottom Side	5mm	Ant 1	DSI 7	462000	2310	19.41	21.20	1.51			0.15	0.001	0.002
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			0.03	0.268	0.396
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			0.17	0.251	0.373
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			-0.18	0.438	0.648
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			-0.15	0.464	0.690
	FR1 n30	10M	BPSK	1	1	Left Side	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			0.17	0.001	0.001
	FR1 n30	10M	BPSK	25	14	Left Side	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			-0.05	0.001	0.001
	FR1 n30	10M	BPSK	1	1	Right Side	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			0.13	0.574	0.849
	FR1 n30	10M	BPSK	25	14	Right Side	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			-0.01	0.689	1.024
	FR1 n30	10M	BPSK	50	0	Right Side	5mm	Ant 6	DSI 7	462000	2310	19.00	20.80	1.514			0.01	0.587	0.889
	FR1 n30	10M	BPSK	1	1	Top Side	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			0.07	0.070	0.104
	FR1 n30	10M	BPSK	25	14	Top Side	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			0.10	0.066	0.098
	FR1 n30	10M	BPSK	1	1	Bottom Side	5mm	Ant 6	DSI 7	462000	2310	19.10	20.80	1.479			-0.07	0.014	0.021
	FR1 n30	10M	BPSK	25	14	Bottom Side	5mm	Ant 6	DSI 7	462000	2310	19.08	20.80	1.486			0.11	0.016	0.024
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			0.08	0.344	0.354
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			0.13	0.347	0.378
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			-0.10	0.575	0.591
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			0.00	0.594	0.647
	FR1 n66	45M	BPSK	1	1	Left Side	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			0.02	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Left Side	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			0.13	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Right Side	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			-0.05	0.889	0.914
	FR1 n66	45M	BPSK	120	60	Right Side	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			-0.07	0.901	0.981
24	FR1 n66	45M	BPSK	240	0	Right Side	5mm	Ant 6	DSI 7	349000	1745	21.58	22.00	1.102			0.00	0.960	1.058
	FR1 n66	45M	BPSK	1	1	Top Side	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			0.12	0.090	0.093
	FR1 n66	45M	BPSK	120	60	Top Side	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			-0.10	0.073	0.079
	FR1 n66	45M	BPSK	1	1	Bottom Side	5mm	Ant 6	DSI 7	349000	1745	21.88	22.00	1.028			-0.04	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Bottom Side	5mm	Ant 6	DSI 7	349000	1745	21.63	22.00	1.089			-0.06	0.001	0.001



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	FR1 n70	15M	BPSK	1	1	Front	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			0.15	0.334	0.393
	FR1 n70	15M	BPSK	36	22	Front	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			0.10	0.353	0.419
	FR1 n70	15M	BPSK	1	1	Back	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			0.01	0.708	0.834
	FR1 n70	15M	BPSK	36	22	Back	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			-0.14	0.582	0.690
	FR1 n70	15M	BPSK	75	0	Back	5mm	Ant 6	DSI 7	340500	1702.5	20.06	21.00	1.242			-0.11	0.601	0.746
	FR1 n70	15M	BPSK	1	1	Left Side	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			0.11	0.001	0.001
	FR1 n70	15M	BPSK	36	22	Left Side	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			0.14	0.001	0.001
	FR1 n70	15M	BPSK	1	1	Right Side	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			-0.04	0.778	0.916
25	FR1 n70	15M	BPSK	36	22	Right Side	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			0.03	0.958	1.136
	FR1 n70	15M	BPSK	75	0	Right Side	5mm	Ant 6	DSI 7	340500	1702.5	20.06	21.00	1.242			0.16	0.914	1.135
	FR1 n70	15M	BPSK	1	1	Top Side	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			-0.06	0.094	0.111
	FR1 n70	15M	BPSK	36	22	Top Side	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			0.06	0.091	0.108
	FR1 n70	15M	BPSK	1	1	Bottom Side	5mm	Ant 6	DSI 7	340500	1702.5	20.29	21.00	1.178			0.07	0.001	0.001
	FR1 n70	15M	BPSK	36	22	Bottom Side	5mm	Ant 6	DSI 7	340500	1702.5	20.26	21.00	1.186			-0.09	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	1	1	Front	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			0.03	0.168	0.197
	FR1 n71_HPUE	35M	BPSK	90	45	Front	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			-0.05	0.170	0.202
	FR1 n71_HPUE	35M	BPSK	1	1	Back	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			0.09	0.582	0.682
	FR1 n71_HPUE	35M	BPSK	90	45	Back	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			0.09	0.561	0.665
	FR1 n71_HPUE	35M	BPSK	1	1	Left Side	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			0.04	0.418	0.490
	FR1 n71_HPUE	35M	BPSK	90	45	Left Side	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			0.15	0.476	0.565
	FR1 n71_HPUE	35M	BPSK	1	1	Right Side	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			-0.12	0.056	0.066
	FR1 n71_HPUE	35M	BPSK	90	45	Right Side	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			0.11	0.046	0.055
	FR1 n71_HPUE	35M	BPSK	1	1	Top Side	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			0.15	0.314	0.368
	FR1 n71_HPUE	35M	BPSK	90	45	Top Side	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			-0.05	0.277	0.329
	FR1 n71_HPUE	35M	BPSK	1	1	Bottom Side	5mm	Ant 1	DSI 7	136100	680.5	26.31	27.00	1.172			0.15	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	90	45	Bottom Side	5mm	Ant 1	DSI 7	136100	680.5	26.26	27.00	1.186			-0.12	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	1	1	Front	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			0.12	0.327	0.404
	FR1 n71_HPUE	35M	BPSK	90	45	Front	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			-0.18	0.383	0.476
	FR1 n71_HPUE	35M	BPSK	1	1	Back	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			0.09	0.446	0.551
	FR1 n71_HPUE	35M	BPSK	90	45	Back	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			-0.04	0.555	0.689
	FR1 n71_HPUE	35M	BPSK	1	1	Left Side	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			0.11	0.868	1.073
26	FR1 n71_HPUE	35M	BPSK	90	45	Left Side	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			0.04	0.924	1.148
	FR1 n71_HPUE	35M	BPSK	1	1	Right Side	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			-0.08	0.087	0.108
	FR1 n71_HPUE	35M	BPSK	90	45	Right Side	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			0.11	0.104	0.129
	FR1 n71_HPUE	35M	BPSK	1	1	Top Side	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			0.01	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	90	45	Top Side	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			0.11	0.001	0.001
	FR1 n71_HPUE	35M	BPSK	1	1	Bottom Side	5mm	Ant 0	DSI 7	136100	680.5	24.28	25.20	1.236			0.07	0.353	0.436
	FR1 n71_HPUE	35M	BPSK	90	45	Bottom Side	5mm	Ant 0	DSI 7	136100	680.5	24.26	25.20	1.242			0.17	0.436	0.542

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	-0.05	0.241	0.358
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	0.16	0.265	0.396
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	-0.04	0.802	1.192
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	0.13	0.732	1.093
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 7	DSI 7	633332	3499.98	19.33	21.10	1.503	100.0	1.000	-0.05	0.711	1.069
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	0.16	0.483	0.718
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	-0.02	0.435	0.649
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	0.15	0.034	0.051
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	-0.19	0.034	0.051
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	-0.15	0.021	0.031
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	-0.08	0.020	0.030
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 7	DSI 7	633332	3499.98	19.38	21.10	1.486	100.0	1.000	0.04	0.018	0.027
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 7	DSI 7	633332	3499.98	19.36	21.10	1.493	100.0	1.000	-0.10	0.029	0.043
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	633332	3499.98	22.31	24.10	1.510	50.0	1.000	0.07	0.767	1.158
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.03	0.403	0.589
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 7	650000	3750	19.29	21.10	1.517	100.0	1.000	0.08	0.338	0.513
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 7	655668	3835.02	19.31	21.10	1.510	100.0	1.000	0.15	0.360	0.544
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 7	662000	3930	19.26	21.10	1.528	100.0	1.000	0.02	0.351	0.536
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	0.15	0.387	0.576
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 7	650000	3750	19.31	21.10	1.510	100.0	1.000	0.06	0.350	0.529
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 7	655668	3835.02	19.26	21.10	1.528	100.0	1.000	-0.11	0.381	0.582
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 7	662000	3930	19.22	21.10	1.542	100.0	1.000	0.12	0.364	0.561
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.01	0.599	0.876



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	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	650000	3750	19.29	21.10	1.517	100.0	1.000	0.08	0.575	0.872
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	655668	3835.02	19.31	21.10	1.510	100.0	1.000	-0.03	0.523	0.790
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 7	662000	3930	19.26	21.10	1.528	100.0	1.000	0.01	0.517	0.790
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	-0.11	0.568	0.846
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	650000	3750	19.31	21.10	1.510	100.0	1.000	-0.10	0.554	0.837
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	655668	3835.02	19.26	21.10	1.528	100.0	1.000	0.03	0.599	0.915
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	662000	3930	19.22	21.10	1.542	100.0	1.000	-0.18	0.581	0.896
	FR1 n77 (270)	100M	BPSK	270	0	Back	5mm	Ant 7	DSI 7	661334	3920.01	19.28	21.10	1.521	100.0	1.000	0.08	0.589	0.896
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	-0.01	0.506	0.740
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 7	DSI 7	650000	3750	19.29	21.10	1.517	100.0	1.000	-0.04	0.353	0.536
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 7	DSI 7	655668	3835.02	19.31	21.10	1.510	100.0	1.000	-0.13	0.402	0.607
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 7	DSI 7	662000	3930	19.26	21.10	1.528	100.0	1.000	-0.16	0.411	0.628
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	0.00	0.533	0.794
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 7	DSI 7	650000	3750	19.31	21.10	1.510	100.0	1.000	-0.03	0.395	0.596
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 7	DSI 7	655668	3835.02	19.26	21.10	1.528	100.0	1.000	0.16	0.512	0.782
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 7	DSI 7	662000	3930	19.22	21.10	1.542	100.0	1.000	-0.07	0.431	0.665
	FR1 n77 (270)	100M	BPSK	270	0	Left Side	5mm	Ant 7	DSI 7	661334	3920.01	19.28	21.10	1.521	100.0	1.000	0.08	0.471	0.716
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.08	0.022	0.032
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	0.05	0.029	0.043
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	-0.13	0.068	0.099
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	-0.10	0.071	0.106
	FR1 n77 (270)	100M	BPSK	1	1	Bottom Side	5mm	Ant 7	DSI 7	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.02	0.026	0.038
	FR1 n77 (270)	100M	BPSK	135	69	Bottom Side	5mm	Ant 7	DSI 7	661334	3920.01	19.37	21.10	1.489	100.0	1.000	-0.10	0.027	0.040
	FR1 n77 (270)_HPUE	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 7	655668	3835.02	22.23	24.10	1.538	50.0	1.000	0.04	0.576	0.886
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.19	0.167	0.240
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	0.17	0.191	0.282
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.17	0.774	1.111
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	-0.19	0.738	1.089
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 5	DSI 7	633332	3499.98	19.05	21.00	1.567	100.0	1.000	0.10	0.703	1.102
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.06	0.001	0.001
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	-0.06	0.001	0.001
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	0.09	0.530	0.761
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	0.07	0.538	0.794
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.04	0.106	0.152
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	-0.03	0.108	0.159
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 5	DSI 7	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.09	0.012	0.017
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 5	DSI 7	633332	3499.98	19.31	21.00	1.476	100.0	1.000	0.11	0.016	0.024
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	633332	3499.98	22.58	24.00	1.387	50.0	1.000	0.01	0.782	1.085
	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 5	DSI 7	661334	3920.01	19.24	21.00	1.500	100.0	1.000	-0.10	0.173	0.260
	FR1 n77 (270)	100M	BPSK	135	69	Front	5mm	Ant 5	DSI 7	661334	3920.01	19.21	21.00	1.510	100.0	1.000	0.12	0.184	0.278
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	661334	3920.01	19.24	21.00	1.500	100.0	1.000	-0.12	0.458	0.687
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	650000	3750	19.13	21.00	1.538	100.0	1.000	-0.10	0.382	0.588
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	655668	3835.02	19.18	21.00	1.521	100.0	1.000	0.17	0.451	0.686
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 7	662000	3930	19.06	21.00	1.563	100.0	1.000	0.12	0.401	0.627
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	661334	3920.01	19.21	21.00	1.510	100.0	1.000	0.03	0.543	0.820
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	650000	3750	19.11	21.00	1.545	100.0	1.000	0.01	0.530	0.819
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	655668	3835.02	19.17	21.00	1.524	100.0	1.000	0.13	0.440	0.671
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	662000	3930	18.98	21.00	1.592	100.0	1.000	-0.07	0.469	0.747
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 5	DSI 7	661334	3920.01	19.24	21.00	1.500	100.0	1.000	0.14	0.001	0.002
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 5	DSI 7	661334	3920.01	19.21	21.00	1.510	100.0	1.000	-0.15	0.001	0.002
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 5	DSI 7	661334	3920.01	19.24	21.00	1.500	100.0	1.000	0.05	0.350	0.525
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 5	DSI 7	650000	3750	19.13	21.00	1.538	100.0	1.000	0.16	0.377	0.580
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 5	DSI 7	655668	3835.02	19.18	21.00	1.521	100.0	1.000	-0.04	0.377	0.573
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 5	DSI 7	662000	3930	19.06	21.00	1.563	100.0	1.000	0.04	0.342	0.535
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 5	DSI 7	661334	3920.01	19.21	21.00	1.510	100.0	1.000	-0.14	0.366	0.553
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 5	DSI 7	650000	3750	19.11	21.00	1.545	100.0	1.000	0.15	0.395	0.610



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	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 5	DSI 7	6556683835.02	19.17	21.00	1.524	100.0	1.000	0.07	0.303	0.462
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 5	DSI 7	662000 3930	18.98	21.00	1.592	100.0	1.000	0.06	0.334	0.532
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	5mm	Ant 5	DSI 7	6613343920.01	19.24	21.00	1.500	100.0	1.000	0.13	0.038	0.057
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	5mm	Ant 5	DSI 7	6613343920.01	19.21	21.00	1.510	100.0	1.000	-0.06	0.033	0.050
	FR1 n77 (270)	100M	BPSK	1	1	Bottom Side	5mm	Ant 5	DSI 7	6613343920.01	19.24	21.00	1.500	100.0	1.000	-0.05	0.009	0.014
	FR1 n77 (270)	100M	BPSK	135	69	Bottom Side	5mm	Ant 5	DSI 7	6613343920.01	19.21	21.00	1.510	100.0	1.000	0.13	0.011	0.017
	FR1 n77 (270)_HPUE	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 7	6613343920.01	22.43	24.00	1.435	50.0	1.000	0.17	0.551	0.791
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	-0.07	0.156	0.205
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	-0.01	0.191	0.252
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	0.16	0.552	0.724
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	0.02	0.559	0.737
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	-0.01	0.026	0.034
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	-0.04	0.026	0.034
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	0.18	0.134	0.176
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	0.11	0.132	0.174
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	-0.05	0.468	0.614
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	0.14	0.512	0.675
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 4	DSI 7	6333323499.98	17.42	18.60	1.312	100.0	1.000	0.09	0.010	0.013
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 4	DSI 7	6333323499.98	17.40	18.60	1.318	100.0	1.000	-0.04	0.011	0.014
	FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	6333323499.98	20.06	21.60	1.426	50.0	1.000	0.01	0.510	0.727
	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	-0.06	0.114	0.148
	FR1 n77 (270)	100M	BPSK	135	69	Front	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	0.18	0.159	0.208
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	-0.09	0.457	0.593
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	650000 3750	17.29	18.60	1.352	100.0	1.000	0.19	0.488	0.660
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	6556683835.02	17.31	18.60	1.346	100.0	1.000	0.11	0.423	0.569
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	662000 3930	17.36	18.60	1.330	100.0	1.000	-0.16	0.411	0.547
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	0.09	0.494	0.645
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	650000 3750	17.22	18.60	1.374	100.0	1.000	-0.01	0.435	0.598
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	6556683835.02	17.36	18.60	1.330	100.0	1.000	0.11	0.322	0.428
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 7	662000 3930	17.34	18.60	1.337	100.0	1.000	0.03	0.462	0.618
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	-0.06	0.018	0.023
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	-0.17	0.022	0.029
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	-0.04	0.085	0.110
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	0.14	0.133	0.174
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	0.12	0.287	0.372
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	0.03	0.210	0.274
	FR1 n77 (270)	100M	BPSK	1	1	Bottom Side	5mm	Ant 4	DSI 7	6613343920.01	17.47	18.60	1.297	100.0	1.000	-0.10	0.001	0.001
	FR1 n77 (270)	100M	BPSK	135	69	Bottom Side	5mm	Ant 4	DSI 7	6613343920.01	17.44	18.60	1.306	100.0	1.000	-0.11	0.001	0.001
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 7	650000 3750	19.69	21.60	1.552	50.0	1.000	0.01	0.401	0.622
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	-0.17	0.508	0.558
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	0.01	0.520	0.574
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	0.17	0.507	0.557
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	0.16	0.549	0.606
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	0.18	0.001	0.001
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	0.10	0.001	0.001
27	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	-0.07	1.120	1.231
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	0.05	0.799	0.882
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Side	5mm	Ant 8	DSI 7	6333323499.98	18.75	19.20	1.109	100.0	1.000	-0.15	0.969	1.075
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	-0.01	0.014	0.015
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	-0.09	0.016	0.018
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 8	DSI 7	6333323499.98	18.79	19.20	1.099	100.0	1.000	-0.08	0.081	0.089
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 8	DSI 7	6333323499.98	18.77	19.20	1.104	100.0	1.000	-0.14	0.083	0.092
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	6333323499.98	21.79	22.20	1.099	50.0	1.000	-0.10	1.090	1.198
	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 7	6613343920.01	18.85	19.20	1.084	100.0	1.000	-0.08	0.521	0.565
	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 7	650000 3750	18.71	19.20	1.119	100.0	1.000	-0.14	0.510	0.571
	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 7	6556683835.02	18.65	19.20	1.135	100.0	1.000	0.04	0.489	0.555



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	FR1 n77 (270)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 7	662000	3930	18.63	19.20	1.140	100.0	1.000	0.13	0.501	0.571
	FR1 n77 (270)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	-0.06	0.354	0.386
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 7	661334	3920.01	18.85	19.20	1.084	100.0	1.000	0.06	0.374	0.405
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 7	650000	3750	18.71	19.20	1.119	100.0	1.000	-0.08	0.486	0.544
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 7	655668	3835.02	18.65	19.20	1.135	100.0	1.000	0.16	0.527	0.598
	FR1 n77 (270)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 7	662000	3930	18.61	19.20	1.146	100.0	1.000	0.05	0.501	0.574
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	0.09	0.341	0.371
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	5mm	Ant 8	DSI 7	661334	3920.01	18.85	19.20	1.084	100.0	1.000	0.10	0.001	0.001
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	0.13	0.001	0.001
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	661334	3920.01	18.85	19.20	1.084	100.0	1.000	-0.16	0.880	0.954
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	650000	3750	18.71	19.20	1.119	100.0	1.000	0.05	0.847	0.948
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	655668	3835.02	18.65	19.20	1.135	100.0	1.000	0.09	0.934	1.060
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	662000	3930	18.63	19.20	1.140	100.0	1.000	-0.19	0.840	0.958
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	0.13	0.762	0.830
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 8	DSI 7	650000	3750	18.61	19.20	1.146	100.0	1.000	-0.07	0.877	1.005
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 8	DSI 7	655668	3835.02	18.66	19.20	1.132	100.0	1.000	-0.13	0.742	0.840
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	5mm	Ant 8	DSI 7	662000	3930	18.61	19.20	1.146	100.0	1.000	0.12	0.803	0.920
	FR1 n77 (270)	100M	BPSK	270	0	Right Side	5mm	Ant 8	DSI 7	661334	3920.01	18.66	19.20	1.132	100.0	1.000	0.01	0.712	0.806
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	5mm	Ant 8	DSI 7	661334	3920.01	18.85	19.20	1.084	100.0	1.000	0.06	0.010	0.011
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	0.17	0.014	0.015
	FR1 n77 (270)	100M	BPSK	1	1	Bottom Side	5mm	Ant 8	DSI 7	661334	3920.01	18.85	19.20	1.084	100.0	1.000	0.04	0.067	0.073
	FR1 n77 (270)	100M	BPSK	135	69	Bottom Side	5mm	Ant 8	DSI 7	661334	3920.01	18.83	19.20	1.089	100.0	1.000	0.08	0.069	0.075
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Right Side	5mm	Ant 8	DSI 7	655668	3835.02	21.68	22.20	1.127	50.0	1.000	0.05	0.885	0.997

MIMO SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25	40M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	0.08	0.159	0.230
	FR1 n25	40M	BPSK	108	54	Front	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	-0.10	0.212	0.309
	FR1 n25	40M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	0.18	0.463	0.671
	FR1 n25	40M	BPSK	108	54	Back	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	0.12	0.564	0.823
	FR1 n25	40M	BPSK	216	0	Back	5mm	Ant 6+1	DSI 7	376500	1882.5	18.70	20.40	1.479	100.0	1.000	-0.09	0.502	0.742
	FR1 n25	40M	BPSK	1	1	Left Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	-0.15	0.285	0.413
	FR1 n25	40M	BPSK	108	54	Left Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	-0.16	0.273	0.398
	FR1 n25	40M	BPSK	1	1	Right Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	-0.01	0.589	0.853
	FR1 n25	40M	BPSK	108	54	Right Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	-0.10	0.761	1.110
	FR1 n25	40M	BPSK	216	0	Right Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.70	20.40	1.479	100.0	1.000	-0.03	0.712	1.053
	FR1 n25	40M	BPSK	1	1	Top Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	0.19	0.282	0.409
	FR1 n25	40M	BPSK	108	54	Top Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	0.09	0.370	0.540
	FR1 n25	40M	BPSK	1	1	Bottom Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.79	20.40	1.449	100.0	1.000	0.04	0.022	0.032
	FR1 n25	40M	BPSK	108	54	Bottom Side	5mm	Ant 6+1	DSI 7	376500	1882.5	18.76	20.40	1.459	100.0	1.000	-0.16	0.021	0.031
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	0.07	0.155	0.229
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	0.01	0.160	0.237
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	0.05	0.596	0.880
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	-0.14	0.654	0.970
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 6+1	DSI 7	462000	2310	22.01	23.80	1.510	100.0	1.000	-0.18	0.630	0.951
	FR1 n30	10M	BPSK	1	1	Left Side	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	0.01	0.397	0.586
	FR1 n30	10M	BPSK	25	14	Left Side	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	0.09	0.436	0.647
	FR1 n30	10M	BPSK	1	1	Right Side	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	0.01	0.689	1.017
	FR1 n30	10M	BPSK	25	14	Right Side	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	0.03	0.587	0.871
	FR1 n30	10M	BPSK	1	1	Top Side	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	-0.10	0.362	0.534
	FR1 n30	10M	BPSK	25	14	Top Side	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	0.10	0.373	0.553
	FR1 n30	10M	BPSK	1	1	Bottom Side	5mm	Ant 6+1	DSI 7	462000	2310	22.11	23.80	1.476	100.0	1.000	0.11	0.001	0.001
	FR1 n30	10M	BPSK	25	14	Bottom Side	5mm	Ant 6+1	DSI 7	462000	2310	22.09	23.80	1.483	100.0	1.000	-0.15	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	-0.02	0.890	1.013



FCC SAR TEST REPORT

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	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	-0.02	0.860	0.987
	FR1 n66	45M	BPSK	240	0	Front	5mm	Ant 6+1	DSI 7	349000	1745	19.34	20.00	1.164	100.0	1.000	0.13	0.860	1.001
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	-0.15	0.970	1.104
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	0.17	0.950	1.091
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant 6+1	DSI 7	349000	1745	19.34	20.00	1.164	100.0	1.000	-0.06	0.900	1.048
	FR1 n66	45M	BPSK	1	1	Left Side	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	-0.18	0.591	0.673
	FR1 n66	45M	BPSK	120	60	Left Side	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	0.01	0.526	0.604
	FR1 n66	45M	BPSK	240	0	Left Side	5mm	Ant 6+1	DSI 7	349000	1745	19.34	20.00	1.164	100.0	1.000	-0.15	0.564	0.656
	FR1 n66	45M	BPSK	1	1	Right Side	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	0.09	0.739	0.841
	FR1 n66	45M	BPSK	120	60	Right Side	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	0.08	0.751	0.862
	FR1 n66	45M	BPSK	1	1	Top Side	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	0.09	0.676	0.769
	FR1 n66	45M	BPSK	120	60	Top Side	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	0.02	0.667	0.766
	FR1 n66	45M	BPSK	240	0	Top Side	5mm	Ant 6+1	DSI 7	349000	1745	19.34	20.00	1.164	100.0	1.000	-0.04	0.650	0.757
	FR1 n66	45M	BPSK	1	1	Bottom Side	5mm	Ant 6+1	DSI 7	349000	1745	19.44	20.00	1.138	100.0	1.000	-0.10	0.018	0.020
	FR1 n66	45M	BPSK	120	60	Bottom Side	5mm	Ant 6+1	DSI 7	349000	1745	19.40	20.00	1.148	100.0	1.000	0.19	0.013	0.015
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	0.07	0.241	0.373
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	-0.01	0.265	0.414
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	0.03	0.662	1.025
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	-0.13	0.592	0.925
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 7+5	DSI 7	633332	3499.98	21.41	23.40	1.581	100.0	1.000	-0.17	0.571	0.903
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	-0.15	0.343	0.531
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	0.02	0.295	0.461
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	0.03	0.390	0.604
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	-0.09	0.398	0.622
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	-0.1	0.021	0.033
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	0.05	0.020	0.031
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.50	23.40	1.549	100.0	1.000	-0.04	0.018	0.028
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 7+5	DSI 7	633332	3499.98	21.46	23.40	1.563	100.0	1.000	0.04	0.029	0.045
	FR1 n77 (27Q)_PC1.5	100M	BPSK	1	1	Back	5mm	Ant 7+5	DSI 7	633332	3499.98	24.55	26.40	1.531	50.0	1.000	-0.1	0.627	0.960
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	-0.04	0.156	0.234
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.01	0.191	0.288
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	0.03	0.412	0.619
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.01	0.419	0.631
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	0.1	0.026	0.039
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	-0.06	0.026	0.039
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	-0.03	0.530	0.797
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.08	0.398	0.600
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	-0.09	0.328	0.493
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.08	0.372	0.561
	FR1 n77 (27Q)	100M	BPSK	1	1	Bottom Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.03	18.80	1.503	100.0	1.000	0.07	0.010	0.015
	FR1 n77 (27Q)	100M	BPSK	135	69	Bottom Side	5mm	Ant 4+5	DSI 7	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.06	0.011	0.017
	FR1 n77 (27Q)_PC1.5	100M	BPSK	135	69	Back	5mm	Ant 4+5	DSI 7	633332	3499.98	20.15	21.80	1.462	50.0	1.000	0.07	0.370	0.541

CA SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 5	10M	QPSK	1	49	Back	5mm	Ant 0	DSI 7	20476+20575	831.6+841.5	22.92	24.00	1.282	100.0	1.000	-0.08	0.931	1.194
	LTE Band 5	10M	QPSK	1	49	Back	5mm	Ant 1	DSI 7	20476+20575	831.6+841.5	21.48	23.50	1.592	100.0	1.000	0.1	0.752	1.197
	LTE Band 48	20M	QPSK	1	99	Back	5mm	Ant 5	DSI 7	55830+56028	3609+3628.8	23.28	24.00	1.180	62.9	1.006	-0.18	0.718	0.852
	LTE Band 48	20M	QPSK	1	99	Back	5mm	Ant 7	DSI 7	55830+56028	3609+3628.8	23.41	24.00	1.146	62.9	1.006	0.1	0.743	0.857
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	272	Back	5mm	Ant 7	DSI 7	655336+662000	3830.04+3930	23.23	24.10	1.222	50.0	1.000	-0.05	0.734	0.897
	FR1 n77 (27Q)	100M	BPSK	1	272	Back	5mm	Ant 5	DSI 7	655336+662000	3830.04+3930	19.87	21.00	1.297	100.0	1.000	-0.09	0.511	0.663
	FR1 n77 (27Q)	100M	BPSK	1	272	Back	5mm	Ant 4	DSI 7	655336+662000	3830.04+3930	17.13	18.60	1.403	100.0	1.000	0.01	0.701	0.984
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	272	Right Side	5mm	Ant 8	DSI 7	655336+662000	3830.04+3930	21.47	22.20	1.183	50.0	1.000	0.04	0.892	1.055

<Spot check>

Plot No	Band	BW	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850					GPRS 4 Tx slots	Back	5mm	Ant 0	DSI 7	251	848.8	26.95	28.10	1.303	100.0	1.000	0.11	0.984	1.282
28	GSM850					GPRS 4 Tx slots	Back	5mm	Ant 0	DSI 7	251	848.8	26.36	28.10	1.493	100.0	1.000	-0.02	0.649	0.969
	LTE Band 25	20M	QPSK	1	0		Right Side	5mm	Ant 6	DSI 7	26590	1905	19.20	19.90	1.175	100.0	1.000	-0.01	0.970	1.140
29	LTE Band 25	20M	QPSK	1	0		Right Side	5mm	Ant 6	DSI 7	26590	1905	19.12	19.90	1.197	100.0	1.000	-0.04	0.949	1.136
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 7	42190	3460	19.62	21.30	1.472	62.9	1.006	-0.18	0.627	0.928
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 7	42190	3460	20.08	21.30	1.324	62.9	1.006	-0.01	0.641	0.854
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 7	DSI 7	42190	3460	20.89	22.30	1.384	62.9	1.006	0.01	0.911	1.268
30	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 7	DSI 7	42190	3460	20.86	22.30	1.393	62.9	1.006	-0.01	0.791	1.108
	FR1 n7	50M	BPSK	1	1		Back	5mm	Ant 1	DSI 7	507000	2535	17.69	18.30	1.151	100.0	1.000	-0.18	1.120	1.289
31	FR1 n7	50M	BPSK	1	1		Back	5mm	Ant 1	DSI 7	507000	2535	17.45	18.30	1.216	100.0	1.000	0	0.928	1.128
	FR1 n66	45M	BPSK	120	60		Bottom Side	5mm	Ant 2	DSI 7	349000	1745	18.53	19.50	1.250	100.0	1.000	-0.02	1.030	1.288
14	FR1 n66	45M	BPSK	120	60		Bottom Side	5mm	Ant 2	DSI 7	349000	1745	18.41	19.50	1.285	100.0	1.000	-0.01	0.793	1.019
	FR1 n48	40M	BPSK	50	28		Right Side	5mm	Ant 5	DSI 7	638000	3570	18.35	20.20	1.531	100.0	1.000	-0.01	0.738	1.130
	FR1 n48	40M	BPSK	50	28		Right Side	5mm	Ant 5	DSI 7	638000	3570	18.85	20.20	1.365	100.0	1.000	-0.17	0.718	0.980
	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 7	DSI 7	645332	3679.98	19.27	21.00	1.489	100.0	1.000	-0.01	0.717	1.068
32	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 7	DSI 7	645332	3679.98	19.16	21.00	1.528	100.0	1.000	-0.1	0.642	0.981
	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 4	DSI 7	645332	3679.98	18.67	20.50	1.524	100.0	1.000	0.02	0.738	1.125
	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 4	DSI 7	645332	3679.98	18.50	20.50	1.585	100.0	1.000	0.03	0.605	0.959
	FR1 n48	40M	BPSK	50	28		Right Side	5mm	Ant 8	DSI 7	645332	3679.98	19.26	19.80	1.132	100.0	1.000	-0.01	0.884	1.001
	FR1 n48	40M	BPSK	50	28		Right Side	5mm	Ant 8	DSI 7	645332	3679.98	19.52	19.80	1.067	100.0	1.000	0.06	0.776	0.828

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	2.4GHz WLAN	802.11b 1Mbps	Back	5mm	Ant 3+6(3)	DSI 7	1	2412	19.34	21.00	1.466	97.7	1.024	-0.14	0.737	1.106
33	2.4GHz WLAN	802.11b 1Mbps	Back	5mm	Ant 3+6(3)	DSI 7	1	2412	19.31	21.00	1.476	97.7	1.024	0.04	0.668	1.010
	5.8GHz WLAN	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5(5)	DSI 7	155	5775	15.89	17.00	1.291	99.6	1.004	0.10	0.918	1.190
34	5.8GHz WLAN	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5(5)	DSI 7	155	5775	15.91	17.00	1.285	99.6	1.004	-0.13	0.795	1.026
	Bluetooth	1Mbps	Back	5mm	Ant 3	DSI 7	39	2441	18.37	20.00	1.455	76.8	1.084	0.01	0.395	0.623
35	Bluetooth	1Mbps	Back	5mm	Ant 3	DSI 7	39	2441	18.79	20.00	1.321	76.8	1.084	-0.08	0.526	0.753



16.3 Body Worn Accessory SAR

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
	LTE Band 30	10M	QPSK	1	0	Front	16mm	Ant 2	DSI 4	27710	2310	23.07	24.00	1.239	0.05	0.411	0.509
	LTE Band 30	10M	QPSK	1	0	Back	16mm	Ant 2	DSI 4	27710	2310	23.07	24.00	1.239	-0.18	0.378	0.468
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 2	DSI 3	27710	2310	22.62	24.00	1.374	-0.15	0.681	0.936
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 2	DSI 3	27710	2310	22.60	24.00	1.38	-0.14	0.607	0.838
36	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 2	DSI 3	27710	2310	22.62	24.00	1.374	0.03	0.694	0.954
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 2	DSI 3	27710	2310	22.60	24.00	1.38	0.12	0.645	0.890
	LTE Band 30	10M	QPSK	1	0	Front	16mm	Ant 1	DSI 4	27710	2310	23.02	24.00	1.253	0.01	0.475	0.595
	LTE Band 30	10M	QPSK	1	0	Back	16mm	Ant 1	DSI 4	27710	2310	23.02	24.00	1.253	-0.18	0.451	0.565
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 1	DSI 3	27710	2310	18.09	19.80	1.483	-0.17	0.177	0.262
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 1	DSI 3	27710	2310	18.07	19.80	1.489	-0.01	0.135	0.201
	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 1	DSI 3	27710	2310	18.09	19.80	1.483	0.02	0.576	0.854
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 1	DSI 3	27710	2310	18.07	19.80	1.489	-0.03	0.570	0.849
	LTE Band 30	10M	QPSK	50	0	Back	5mm	Ant 1	DSI 3	27710	2310	17.97	19.80	1.524	0.06	0.591	0.901
	LTE Band 30	10M	QPSK	1	0	Front	16mm	Ant 6	DSI 4	27710	2310	21.55	23.00	1.396	0.05	0.154	0.215
	LTE Band 30	10M	QPSK	1	0	Back	16mm	Ant 6	DSI 4	27710	2310	21.55	23.00	1.396	0.19	0.163	0.228
	LTE Band 30	10M	QPSK	1	0	Front	5mm	Ant 6	DSI 4	27710	2310	19.06	20.80	1.493	-0.16	0.279	0.417
	LTE Band 30	10M	QPSK	25	0	Front	5mm	Ant 6	DSI 3	27710	2310	19.05	20.80	1.496	-0.14	0.224	0.335
	LTE Band 30	10M	QPSK	1	0	Back	5mm	Ant 6	DSI 3	27710	2310	19.06	20.80	1.493	0.09	0.626	0.935
	LTE Band 30	10M	QPSK	25	0	Back	5mm	Ant 6	DSI 3	27710	2310	19.05	20.80	1.496	0.05	0.567	0.848

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n14_HPUE	10M	BPSK	1	1	Front	16mm	Ant 1	DSI 4	158600	793	26.35	27.00	1.161			-0.14	0.342	0.397
	FR1 n14_HPUE	10M	BPSK	1	1	Back	16mm	Ant 1	DSI 4	158600	793	26.35	27.00	1.161			0.06	0.315	0.366
	FR1 n14_HPUE	10M	BPSK	1	1	Front	5mm	Ant 1	DSI 3	158600	793	24.28	25.50	1.324			0.01	0.313	0.414
	FR1 n14_HPUE	10M	BPSK	25	14	Front	5mm	Ant 1	DSI 3	158600	793	24.25	25.50	1.334			0.02	0.343	0.458
37	FR1 n14_HPUE	10M	BPSK	1	1	Back	5mm	Ant 1	DSI 3	158600	793	24.28	25.50	1.324			-0.14	0.870	1.152
	FR1 n14_HPUE	10M	BPSK	25	14	Back	5mm	Ant 1	DSI 3	158600	793	24.25	25.50	1.334			0.15	0.844	1.126
	FR1 n14_HPUE	10M	BPSK	50	0	Back	5mm	Ant 1	DSI 3	158600	793	24.24	25.50	1.337			0.14	0.828	1.107
	FR1 n14_HPUE	10M	BPSK	1	1	Front	16mm	Ant 0	DSI 4	158600	793	26.32	27.00	1.169			0.05	0.315	0.368
	FR1 n14_HPUE	10M	BPSK	25	14	Front	16mm	Ant 0	DSI 4	158600	793	26.26	27.00	1.186			-0.14	0.289	0.343
	FR1 n14_HPUE	10M	BPSK	1	1	Back	16mm	Ant 0	DSI 4	158600	793	26.32	27.00	1.169			0.06	0.265	0.310
	FR1 n14_HPUE	10M	BPSK	25	14	Back	16mm	Ant 0	DSI 4	158600	793	26.26	27.00	1.186			-0.14	0.260	0.308
	FR1 n14_HPUE	10M	BPSK	1	1	Front	5mm	Ant 0	DSI 3	158600	793	25.36	26.00	1.159			-0.09	0.573	0.664
	FR1 n14_HPUE	10M	BPSK	25	14	Front	5mm	Ant 0	DSI 3	158600	793	25.34	26.00	1.164			-0.12	0.671	0.781
	FR1 n14_HPUE	10M	BPSK	1	1	Back	5mm	Ant 0	DSI 3	158600	793	25.36	26.00	1.159			0.01	0.781	0.905
	FR1 n14_HPUE	10M	BPSK	25	14	Back	5mm	Ant 0	DSI 3	158600	793	25.34	26.00	1.164			-0.18	0.972	1.131
	FR1 n14_HPUE	10M	BPSK	50	0	Back	5mm	Ant 0	DSI 3	158600	793	25.25	26.00	1.189			0.00	0.841	1.000
	FR1 n25	40M	BPSK	1	1	Front	16mm	Ant 6	DSI 4	376500	1882.5	21.48	22.00	1.127			0.09	0.132	0.149
	FR1 n25	40M	BPSK	108	54	Front	16mm	Ant 6	DSI 4	376500	1882.5	21.42	22.00	1.143			-0.14	0.108	0.123
	FR1 n25	40M	BPSK	1	1	Back	16mm	Ant 6	DSI 4	376500	1882.5	21.48	22.00	1.127			0.03	0.124	0.140
	FR1 n25	40M	BPSK	108	54	Back	16mm	Ant 6	DSI 4	376500	1882.5	21.42	22.00	1.143			-0.10	0.101	0.115
	FR1 n25	40M	BPSK	1	1	Front	5mm	Ant 6	DSI 3	376500	1882.5	20.51	22.00	1.409			0.08	0.241	0.340
	FR1 n25	40M	BPSK	108	54	Front	5mm	Ant 6	DSI 3	376500	1882.5	20.48	22.00	1.419			-0.09	0.255	0.362
	FR1 n25	40M	BPSK	1	1	Back	5mm	Ant 6	DSI 3	376500	1882.5	20.51	22.00	1.409			0.08	0.588	0.828
38	FR1 n25	40M	BPSK	108	54	Back	5mm	Ant 6	DSI 3	376500	1882.5	20.48	22.00	1.419			0.02	0.685	0.972
	FR1 n25	40M	BPSK	216	0	Back	5mm	Ant 6	DSI 3	376500	1882.5	20.38	22.00	1.452			-0.02	0.626	0.909
	FR1 n30	10M	BPSK	1	1	Front	16mm	Ant 2	DSI 4	462000	2310	23.40	24.00	1.148			0.04	0.387	0.444
	FR1 n30	10M	BPSK	25	14	Front	16mm	Ant 2	DSI 4	462000	2310	23.38	24.00	1.153			-0.15	0.341	0.393
	FR1 n30	10M	BPSK	1	1	Back	16mm	Ant 2	DSI 4	462000	2310	23.40	24.00	1.148			0.02	0.365	0.419
	FR1 n30	10M	BPSK	25	14	Back	16mm	Ant 2	DSI 4	462000	2310	23.38	24.00	1.153			0.08	0.314	0.362
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 2	DSI 3	462000	2310	22.46	24.00	1.426			0.10	0.640	0.913
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 2	DSI 3	462000	2310	22.42	24.00	1.439			-0.01	0.652	0.938
	FR1 n30	10M	BPSK	50	0	Front	5mm	Ant 2	DSI 3	462000	2310	22.33	24.00	1.469			-0.02	0.616	0.905
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 2	DSI 3	462000	2310	22.46	24.00	1.426			-0.07	0.682	0.973
39	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 2	DSI 3	462000	2310	22.42	24.00	1.439			-0.02	0.694	0.999
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 2	DSI 3	462000	2310	22.33	24.00	1.469			-0.11	0.664	0.975
	FR1 n30	10M	BPSK	1	1	Front	16mm	Ant 1	DSI 4	462000	2310	23.36	24.00	1.159			0.02	0.421	0.488
	FR1 n30	10M	BPSK	25	14	Front	16mm	Ant 1	DSI 4	462000	2310	23.34	24.00	1.164			-0.14	0.387	0.450
	FR1 n30	10M	BPSK	1	1	Back	16mm	Ant 1	DSI 4	462000	2310	23.36	24.00	1.159			0.02	0.457	0.530
	FR1 n30	10M	BPSK	25	14	Back	16mm	Ant 1	DSI 4	462000	2310	23.34	24.00	1.164			-0.17	0.419	0.488
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 1	DSI 3	462000	2310	19.48	21.20	1.486			-0.15	0.155	0.230
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 1	DSI 3	462000	2310	19.41	21.20	1.51			-0.04	0.160	0.242



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	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 1	DSI 3	462000	2310	19.48	21.20	1.486			0.12	0.596	0.886
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 1	DSI 3	462000	2310	19.41	21.20	1.51			-0.10	0.654	0.988
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 1	DSI 3	462000	2310	19.31	21.20	1.545			-0.16	0.630	0.973
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 6	DSI 3	462000	2310	21.53	22.00	1.114			0.02	0.353	0.393
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 6	DSI 3	462000	2310	21.52	22.00	1.117			-0.09	0.331	0.370
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 6	DSI 3	462000	2310	21.53	22.00	1.114			0.17	0.576	0.642
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 6	DSI 3	462000	2310	21.52	22.00	1.117			0.02	0.610	0.681
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 6	DSI 3	349000	1745	21.88	22.00	1.028			-0.04	0.165	0.170
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 6	DSI 3	349000	1745	21.63	22.00	1.089			0.08	0.166	0.181
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 6	DSI 3	349000	1745	21.88	22.00	1.028			0.00	0.275	0.283
40	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 6	DSI 3	349000	1745	21.63	22.00	1.089			-0.04	0.284	0.309
	FR1 n70	15M	BPSK	1	1	Front	5mm	Ant 6	DSI 3	340500	1702.5	21.75	22.00	1.059			0.01	0.207	0.219
	FR1 n70	15M	BPSK	36	22	Front	5mm	Ant 6	DSI 3	340500	1702.5	21.66	22.00	1.081			-0.13	0.218	0.236
41	FR1 n70	15M	BPSK	1	1	Back	5mm	Ant 6	DSI 3	340500	1702.5	21.75	22.00	1.059			-0.01	0.402	0.426
	FR1 n70	15M	BPSK	36	22	Back	5mm	Ant 6	DSI 3	340500	1702.5	21.66	22.00	1.081			0.07	0.331	0.358
	FR1 n71_HPUE	35M	BPSK	1	1	Front	5mm	Ant 1	DSI 3	136100	680.5	26.31	27.00	1.172			0.15	0.364	0.427
	FR1 n71_HPUE	35M	BPSK	90	45	Front	5mm	Ant 1	DSI 3	136100	680.5	26.26	27.00	1.186			0.10	0.383	0.454
42	FR1 n71_HPUE	35M	BPSK	1	1	Back	5mm	Ant 1	DSI 3	136100	680.5	26.31	27.00	1.172			0.01	0.708	0.830
	FR1 n71_HPUE	35M	BPSK	90	45	Back	5mm	Ant 1	DSI 3	136100	680.5	26.26	27.00	1.186			-0.14	0.582	0.690
	FR1 n71_HPUE	35M	BPSK	180	0	Back	5mm	Ant 1	DSI 3	136100	680.5	25.78	26.50	1.18			-0.11	0.601	0.709
	FR1 n71_HPUE	35M	BPSK	1	1	Front	16mm	Ant 0	DSI 4	136100	680.5	26.37	27.00	1.156			0.02	0.183	0.212
	FR1 n71_HPUE	35M	BPSK	90	45	Front	16mm	Ant 0	DSI 4	136100	680.5	26.35	27.00	1.161			0.09	0.178	0.207
	FR1 n71_HPUE	35M	BPSK	1	1	Back	16mm	Ant 0	DSI 4	136100	680.5	26.37	27.00	1.156			-0.05	0.200	0.231
	FR1 n71_HPUE	35M	BPSK	90	45	Back	16mm	Ant 0	DSI 4	136100	680.5	26.35	27.00	1.161			0.01	0.196	0.228
	FR1 n71_HPUE	35M	BPSK	1	1	Front	5mm	Ant 0	DSI 3	136100	680.5	26.37	27.00	1.156			0.15	0.397	0.459
	FR1 n71_HPUE	35M	BPSK	90	45	Front	5mm	Ant 0	DSI 3	136100	680.5	26.35	27.00	1.161			-0.01	0.464	0.539
	FR1 n71_HPUE	35M	BPSK	1	1	Back	5mm	Ant 0	DSI 3	136100	680.5	26.37	27.00	1.156			-0.09	0.540	0.624
	FR1 n71_HPUE	35M	BPSK	90	45	Back	5mm	Ant 0	DSI 3	136100	680.5	26.35	27.00	1.161			0.03	0.673	0.781

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 7	DSI 4	633332	3499.98	23.31	24.00	1.172	100.0	1.000	0.06	0.215	0.252
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 7	DSI 4	633332	3499.98	23.31	24.00	1.172	100.0	1.000	-0.14	0.198	0.232
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 3	633332	3499.98	19.38	21.10	1.486	100.0	1.000	-0.05	0.281	0.418
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 3	633332	3499.98	19.37	21.10	1.489	100.0	1.000	0.16	0.265	0.395
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	633332	3499.98	19.38	21.10	1.486	100.0	1.000	-0.04	0.750	1.115
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 3	633332	3499.98	19.37	21.10	1.489	100.0	1.000	0.13	0.732	1.090
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 7	DSI 3	633332	3499.98	19.33	21.10	1.503	100.0	1.000	-0.05	0.711	1.069
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	633332	3499.98	22.31	24.10	1.510	50.0	1.000	0.07	0.767	1.158
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 7	DSI 4	661334	3920.01	23.38	24.00	1.153	100.0	1.000	0.01	0.224	0.258
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 7	DSI 4	661334	3920.01	23.38	24.00	1.153	100.0	1.000	-0.14	0.215	0.248
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 3	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.03	0.443	0.648
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 3	650000	3750	19.29	21.10	1.517	100.0	1.000	0.08	0.338	0.513
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 3	655668	3835.02	19.31	21.10	1.510	100.0	1.000	0.15	0.360	0.544
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7	DSI 3	662000	3930	19.38	21.10	1.486	100.0	1.000	0.02	0.353	0.525
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 3	661334	3920.01	19.37	21.10	1.489	100.0	1.000	0.15	0.417	0.621
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 3	650000	3750	19.31	21.10	1.510	100.0	1.000	0.06	0.350	0.529
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 3	655668	3835.02	19.26	21.10	1.528	100.0	1.000	-0.11	0.395	0.604
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7	DSI 3	662000	3930	19.30	21.10	1.514	100.0	1.000	0.14	0.381	0.577
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	661334	3920.01	19.45	21.10	1.462	100.0	1.000	0.01	0.599	0.876
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	650000	3750	19.29	21.10	1.517	100.0	1.000	0.08	0.575	0.872
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	655668	3835.02	19.31	21.10	1.510	100.0	1.000	-0.03	0.523	0.790
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	662000	3930	19.38	21.10	1.486	100.0	1.000	0.01	0.519	0.771
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 3	661334	3920.01	19.37	21.10	1.489	100.0	1.000	-0.11	0.568	0.846
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 3	650000	3750	19.31	21.10	1.510	100.0	1.000	-0.10	0.554	0.837
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 3	655668	3835.02	19.26	21.10	1.528	100.0	1.000	0.03	0.599	0.915
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7	DSI 3	662000	3930	19.30	21.10	1.514	100.0	1.000	0.04	0.574	0.869
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 7	DSI 3	661334	3920.01	22.40	24.10	1.479	50.0	1.000	0.02	0.581	0.859
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 5	DSI 4	633332	3499.98	23.53	24.00	1.114	100.0	1.000	0.09	0.205	0.228
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 5	DSI 4	633332	3499.98	23.53	24.00	1.114	100.0	1.000	0.11	0.187	0.208
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 5	DSI 3	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.03	0.253	0.363
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 5	DSI 3	633332	3499.98	19.31	21.00	1.476	100.0	1.000	-0.03	0.237	0.350



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	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	633332	3499.98	19.43	21.00	1.435	100.0	1.000	-0.17	0.774	1.111
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	633332	3499.98	19.31	21.00	1.476	100.0	1.000	0.17	0.738	1.089
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 5	DSI 3	633332	3499.98	19.05	21.00	1.567	100.0	1.000	-0.18	0.703	1.102
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	633332	3499.98	22.58	24.00	1.387	50.0	1.000	0.01	0.782	1.085
	FR1 n77 (27O)	100M	BPSK	1	1	Front	16mm	Ant 5	DSI 4	661334	3920.01	23.66	24.00	1.081	100.0	1.000	-0.14	0.198	0.214
	FR1 n77 (27O)	100M	BPSK	135	69	Front	16mm	Ant 5	DSI 4	661334	3920.01	23.50	24.00	1.122	100.0	1.000	0.05	0.156	0.175
	FR1 n77 (27O)	100M	BPSK	1	1	Back	16mm	Ant 5	DSI 4	661334	3920.01	23.66	24.00	1.081	100.0	1.000	0.08	0.188	0.203
	FR1 n77 (27O)	100M	BPSK	135	69	Back	16mm	Ant 5	DSI 4	661334	3920.01	23.50	24.00	1.122	100.0	1.000	0.11	0.161	0.181
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 5	DSI 3	661334	3920.01	19.24	21.00	1.500	100.0	1.000	-0.13	0.173	0.260
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 5	DSI 3	661334	3920.01	19.21	21.00	1.510	100.0	1.000	0.09	0.204	0.308
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	661334	3920.01	19.24	21.00	1.500	100.0	1.000	-0.05	0.458	0.687
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	650000	3750	19.13	21.00	1.538	100.0	1.000	0.04	0.461	0.709
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	655668	3835.02	19.18	21.00	1.521	100.0	1.000	-0.13	0.461	0.701
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 5	DSI 3	662000	3930	19.17	21.00	1.524	100.0	1.000	0.01	0.441	0.672
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	661334	3920.01	19.21	21.00	1.510	100.0	1.000	0.14	0.543	0.820
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	650000	3750	19.11	21.00	1.545	100.0	1.000	-0.17	0.530	0.819
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	655668	3835.02	19.17	21.00	1.524	100.0	1.000	-0.10	0.440	0.671
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	662000	3930	19.10	21.00	1.549	100.0	1.000	0.1	0.434	0.672
	FR1 n77 (27O)	100M	BPSK	270	0	Back	5mm	Ant 5	DSI 3	661334	3920.01	19.16	21.00	1.528	100.0	1.000	-0.12	0.524	0.801
	FR1 n77 (27O)_HPUE	100M	BPSK	135	69	Back	5mm	Ant 5	DSI 3	650000	3750	22.25	24.00	1.496	50.0	1.000	0.01	0.529	0.791
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 4	DSI 4	633332	3499.98	23.35	24.00	1.161	100.0	1.000	0.10	0.165	0.192
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	16mm	Ant 4	DSI 4	633332	3499.98	22.98	24.00	1.265	100.0	1.000	-0.15	0.141	0.178
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 4	DSI 4	633332	3499.98	23.35	24.00	1.161	100.0	1.000	0.04	0.189	0.219
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	16mm	Ant 4	DSI 4	633332	3499.98	22.98	24.00	1.265	100.0	1.000	0.06	0.157	0.199
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 4	DSI 3	633332	3499.98	17.42	18.60	1.312	100.0	1.000	-0.06	0.156	0.205
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 4	DSI 3	633332	3499.98	17.40	18.60	1.318	100.0	1.000	-0.14	0.191	0.252
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	633332	3499.98	17.42	18.60	1.312	100.0	1.000	0.06	0.552	0.724
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	633332	3499.98	17.40	18.60	1.318	100.0	1.000	0.02	0.559	0.737
	FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	633332	3499.98	20.06	21.60	1.426	50.0	1.000	0.01	0.510	0.727
	FR1 n77 (27O)	100M	BPSK	1	1	Front	16mm	Ant 4	DSI 4	661334	3920.01	23.40	24.00	1.148	100.0	1.000	0.05	0.148	0.170
	FR1 n77 (27O)	100M	BPSK	1	1	Back	16mm	Ant 4	DSI 4	661334	3920.01	23.40	24.00	1.148	100.0	1.000	-0.09	0.126	0.145
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 4	DSI 3	661334	3920.01	17.47	18.60	1.297	100.0	1.000	-0.19	0.114	0.148
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 4	DSI 3	661334	3920.01	17.44	18.60	1.306	100.0	1.000	-0.06	0.111	0.145
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	661334	3920.01	17.47	18.60	1.297	100.0	1.000	-0.01	0.397	0.515
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	650000	3750	17.29	18.60	1.352	100.0	1.000	-0.07	0.488	0.660
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	655668	3835.02	17.31	18.60	1.346	100.0	1.000	0.18	0.424	0.571
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	662000	3930	17.39	18.60	1.321	100.0	1.000	0.01	0.411	0.543
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	661334	3920.01	17.44	18.60	1.306	100.0	1.000	-0.10	0.490	0.640
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	650000	3750	17.22	18.60	1.374	100.0	1.000	0.04	0.435	0.598
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	655668	3835.02	17.36	18.60	1.330	100.0	1.000	-0.17	0.422	0.561
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 4	DSI 3	662000	3930	17.30	18.60	1.349	100.0	1.000	0.15	0.401	0.541
	FR1 n77 (27O)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 4	DSI 3	650000	3750	19.69	21.60	1.552	50.0	1.000	0.01	0.415	0.644
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	661334	3920.01	22.12	22.40	1.067	100.0	1.000	0.16	0.806	0.860
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	650000	3750	21.58	22.40	1.208	100.0	1.000	0.03	0.873	1.055
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	655668	3835.02	22.03	22.40	1.089	100.0	1.000	0.00	0.892	0.971
	FR1 n77 (27O)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	662000	3930	21.99	22.40	1.099	100.0	1.000	0.05	0.798	0.877
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 3	661334	3920.01	21.63	22.40	1.194	100.0	1.000	0.17	0.746	0.891
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 3	650000	3750	21.56	22.40	1.213	100.0	1.000	-0.17	0.904	1.097
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 3	655668	3835.02	21.58	22.40	1.208	100.0	1.000	-0.07	0.738	0.892
	FR1 n77 (27O)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 3	662000	3930	21.61	22.40	1.199	100.0	1.000	0.01	0.750	0.899
	FR1 n77 (27O)	100M	BPSK	270	0	Front	5mm	Ant 8	DSI 3	661334	3920.01	21.60	22.40	1.202	100.0	1.000	-0.17	0.695	0.835
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	661334	3920.01	22.12	22.40	1.067	100.0	1.000	0.11	0.783	0.835
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	650000	3750	21.58	22.40	1.208	100.0	1.000	0.16	0.886	1.070
43	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	655668	3835.02	22.03	22.40	1.089	100.0	1.000	-0.10	1.070	1.165
	FR1 n77 (27O)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	662000	3930	21.99	22.40	1.099	100.0	1.000	0.06	0.921	1.012
	FR1 n77 (27O)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 3	661334	3920.01	21.63	22.40	1.194	100.0	1.000	-0.13	0.721	0.861



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	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 3	650000	3750	21.56	22.40	1.213	100.0	1.000	0.17	0.886	1.075
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 3	655668	3835.02	21.58	22.40	1.208	100.0	1.000	0.14	0.799	0.965
	FR1 n77 (270)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 3	662000	3930	21.61	22.40	1.199	100.0	1.000	0.03	0.801	0.960
	FR1 n77 (270)	100M	BPSK	270	0	Back	5mm	Ant 8	DSI 3	661334	3920.01	21.60	22.40	1.202	100.0	1.000	0.03	0.683	0.821
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	655668	3835.02	24.83	25.40	1.140	50.0	1.000	-0.04	1.010	1.151
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	633332	3499.98	21.69	22.40	1.178	100.0	1.000	0.10	0.987	1.163
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 8	DSI 3	633332	3499.98	21.66	22.40	1.186	100.0	1.000	-0.14	0.954	1.131
	FR1 n77 (27Q)	100M	BPSK	270	0	Front	5mm	Ant 8	DSI 3	633332	3499.98	21.68	22.40	1.180	100.0	1.000	-0.15	0.977	1.153
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 8	DSI 3	633332	3499.98	21.69	22.40	1.178	100.0	1.000	0.06	0.931	1.097
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 8	DSI 3	633332	3499.98	21.66	22.40	1.186	100.0	1.000	0.05	0.962	1.141
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 8	DSI 3	633332	3499.98	21.68	22.40	1.180	100.0	1.000	0.07	0.945	1.115
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Front	5mm	Ant 8	DSI 3	633332	3499.98	24.55	25.40	1.216	50.0	1.000	0.13	0.931	1.132

MIMO SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25	40M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 3	376500	1882.5	18.79	20.40	1.449	100.0	1.000	0.01	0.241	0.349
	FR1 n25	40M	BPSK	108	54	Front	5mm	Ant 6+1	DSI 3	376500	1882.5	18.76	20.40	1.459	100.0	1.000	-0.01	0.255	0.372
	FR1 n25	40M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 3	376500	1882.5	18.79	20.40	1.449	100.0	1.000	-0.05	0.438	0.635
	FR1 n25	40M	BPSK	108	54	Back	5mm	Ant 6+1	DSI 3	376500	1882.5	18.76	20.40	1.459	100.0	1.000	0.13	0.535	0.781
	FR1 n25	40M	BPSK	216	0	Back	5mm	Ant 6+1	DSI 3	376500	1882.5	18.70	20.40	1.479	100.0	1.000	-0.03	0.476	0.704
	FR1 n25	40M	BPSK	1	1	Front	16mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	-0.03	0.132	0.165
	FR1 n25	40M	BPSK	108	54	Front	16mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	0.05	0.108	0.136
	FR1 n25	40M	BPSK	1	1	Back	16mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	0.09	0.124	0.155
	FR1 n25	40M	BPSK	108	54	Back	16mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	0.01	0.101	0.127
	FR1 n30	10M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 3	462000	2310	23.37	24.00	1.156	100.0	1.000	-0.07	0.110	0.127
	FR1 n30	10M	BPSK	25	14	Front	5mm	Ant 6+1	DSI 3	462000	2310	23.35	24.00	1.161	100.0	1.000	0.13	0.115	0.134
	FR1 n30	10M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 3	462000	2310	23.37	24.00	1.156	100.0	1.000	0.04	0.551	0.637
	FR1 n30	10M	BPSK	25	14	Back	5mm	Ant 6+1	DSI 3	462000	2310	23.35	24.00	1.161	100.0	1.000	0.09	0.619	0.719
	FR1 n30	10M	BPSK	50	0	Back	5mm	Ant 6+1	DSI 3	462000	2310	23.32	24.00	1.169	100.0	1.000	-0.18	0.585	0.684
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 6+1	DSI 3	349000	1745	19.44	20.00	1.138	100.0	1.000	0.01	0.890	1.013
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 6+1	DSI 3	349000	1745	19.40	20.00	1.148	100.0	1.000	0.07	0.860	0.987
	FR1 n66	45M	BPSK	240	0	Front	5mm	Ant 6+1	DSI 3	349000	1745	19.34	20.00	1.164	100.0	1.000	0.08	0.860	1.001
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 6+1	DSI 3	349000	1745	19.44	20.00	1.138	100.0	1.000	0.00	0.970	1.104
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 6+1	DSI 3	349000	1745	19.40	20.00	1.148	100.0	1.000	0.15	0.950	1.091
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant 6+1	DSI 3	349000	1745	19.34	20.00	1.164	100.0	1.000	0.02	0.900	1.048
	FR1 n66	45M	BPSK	1	1	Front	16mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	0.18	0.555	0.652
	FR1 n66	45M	BPSK	120	60	Front	16mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	-0.03	0.501	0.605
	FR1 n66	45M	BPSK	1	1	Back	16mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	0.03	0.477	0.560
	FR1 n66	45M	BPSK	120	60	Back	16mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	0.09	0.423	0.511
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 7+5	DSI 3	633332	3499.98	21.50	23.40	1.549	100.0	1.000	0.11	0.221	0.342
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 7+5	DSI 3	633332	3499.98	21.46	23.40	1.563	100.0	1.000	0.17	0.245	0.383
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 7+5	DSI 3	633332	3499.98	21.50	23.40	1.549	100.0	1.000	-0.08	0.725	1.123
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 7+5	DSI 3	633332	3499.98	21.46	23.40	1.563	100.0	1.000	0.04	0.712	1.113
	FR1 n77 (27Q)	100M	BPSK	270	0	Back	5mm	Ant 7+5	DSI 3	633332	3499.98	21.41	23.40	1.581	100.0	1.000	0.18	0.711	1.124
	FR1 n77 (27Q)_PC1.5	100M	BPSK	1	1	Back	5mm	Ant 7+5	DSI 3	633332	3499.98	24.55	26.40	1.531	50.0	1.000	-0.07	0.737	1.128
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 7+5	DSI 4	633332	3499.98	26.07	27.00	1.239	100.0	1.000	0.17	0.215	0.266
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 7+5	DSI 4	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0.01	0.191	0.240
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	5mm	Ant 4+5	DSI 3	633332	3499.98	17.03	18.80	1.503	100.0	1.000	-0.01	0.151	0.227
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	5mm	Ant 4+5	DSI 3	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.02	0.199	0.300
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	5mm	Ant 4+5	DSI 3	633332	3499.98	17.03	18.80	1.503	100.0	1.000	-0.02	0.552	0.830
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	5mm	Ant 4+5	DSI 3	633332	3499.98	17.02	18.80	1.507	100.0	1.000	0.03	0.551	0.830
	FR1 n77 (27Q)_PC1.5	100M	BPSK	135	69	Back	5mm	Ant 4+5	DSI 3	633332	3499.98	20.15	21.80	1.462	50.0	1.000	-0.13	0.510	0.746
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	16mm	Ant 4+5	DSI 4	633332	3499.98	26.07	27.00	1.239	100.0	1.000	0.09	0.162	0.201
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	16mm	Ant 4+5	DSI 4	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0.02	0.141	0.177



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	FR1 n77 (27Q)	100M	BPSK	1	1	Back	16mm	Ant 4+5	DSI 4	633332	3499.98	26.07	27.00	1.239	100.0	1.000	-0.04	0.183	0.227
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	16mm	Ant 4+5	DSI 4	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0.17	0.153	0.192

CA SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 5	10M	QPSK	1	49	Back	5mm	Ant 0	DSI 3	20476+20575	831.6+841.5	22.92	24.00	1.282	100.0	1.000	0.08	0.932	1.195
	LTE Band 5	10M	QPSK	1	49	Back	5mm	Ant 1	DSI 3	20476+20575	831.6+841.5	23.30	24.00	1.175	100.0	1.000	0.01	0.752	0.884
	LTE Band 48	20M	QPSK	1	99	Back	5mm	Ant 5	DSI 3	55830+56028	3609+3628.8	23.28	24.00	1.180	62.9	1.006	0.03	0.718	0.852
	LTE Band 48	20M	QPSK	1	99	Back	5mm	Ant 7	DSI 3	55830+56028	3609+3628.8	23.41	24.00	1.146	62.9	1.006	-0.08	0.743	0.857
	FR1 n77 (27Q) HPUE	100M	BPSK	1	272	Back	5mm	Ant 7	DSI 3	655336+662000	3830.04+3930	23.23	24.10	1.222	50.0	1.000	-0.09	0.742	0.906
	FR1 n77 (27Q)	100M	BPSK	1	272	Back	5mm	Ant 5	DSI 3	655336+662000	3830.04+3930	19.87	21.00	1.297	100.0	1.000	0.05	0.558	0.724
	FR1 n77 (27Q)	100M	BPSK	1	272	Back	5mm	Ant 4	DSI 3	655336+662000	3830.04+3930	17.13	18.60	1.403	100.0	1.000	-0.03	0.722	1.013
	FR1 n77 (27Q)	100M	BPSK	1	272	Back	5mm	Ant 8	DSI 3	652668+659332	3790.02+3889.98	21.35	22.40	1.274	100.0	1.000	0.05	0.834	1.063

<Spot check>

Plot No	Band	BW	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850					GPRS 4 Tx slots	Back	5mm	Ant 0	DSI 3	251	848.8	26.95	28.10	1.303	100.0	1.000	0.11	0.984	1.282
44	GSM850					GPRS 4 Tx slots	Back	5mm	Ant 0	DSI 3	251	848.8	26.36	28.10	1.493	100.0	1.000	-0.02	0.649	0.969
	LTE Band 25	20M	QPSK	1	0		Back	5mm	Ant 1	DSI 3	26140	1860	16.05	16.40	1.084	100.0	1.000	-0.12	1.180	1.279
45	LTE Band 25	20M	QPSK	1	0		Back	5mm	Ant 1	DSI 3	26140	1860	15.93	16.40	1.114	100.0	1.000	-0.01	0.877	0.977
	FR1 n41	100M	BPSK	135	69		Back	5mm	Ant 2	DSI 3	518598	2592.99	21.40	22.30	1.230	100.0	1.000	0.17	1.040	1.279
46	FR1 n41	100M	BPSK	135	69		Back	5mm	Ant 2	DSI 3	518598	2592.99	21.45	22.30	1.216	100.0	1.000	0.03	0.925	1.125
	LTE Band 41_HPUE	20M	QPSK	1	0		Back	5mm	Ant 6	DSI 3	40185	2549.5	22.91	24.80	1.545	42.9	1.009	-0.05	0.760	1.185
47	LTE Band 41_HPUE	20M	QPSK	1	0		Back	5mm	Ant 6	DSI 3	40185	2549.5	22.84	24.80	1.570	42.9	1.009	-0.02	0.579	0.917
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 3	42590	3500	19.67	21.30	1.455	62.9	1.006	-0.02	0.532	0.779
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 3	42590	3500	19.63	21.30	1.469	62.9	1.006	-0.02	0.397	0.587
	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 7	DSI 3	42190	3460	20.89	22.30	1.384	62.9	1.006	0.01	0.911	1.268
48	LTE Band 42 (27Q)	20M	QPSK	1	0		Back	5mm	Ant 7	DSI 3	42190	3460	20.86	22.30	1.393	62.9	1.006	-0.01	0.791	1.108
	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 4	DSI 3	645332	3679.98	18.67	20.50	1.524	100.0	1.000	0.02	0.738	1.125
	FR1 n48	40M	BPSK	1	1		Back	5mm	Ant 4	DSI 3	645332	3679.98	18.50	20.50	1.585	100.0	1.000	0.03	0.605	0.959
	FR1 n48	40M	BPSK	1	1		Front	5mm	Ant 8	DSI 3	645332	3679.98	22.36	24.10	1.493	100.0	1.000	-0.02	0.858	1.281
49	FR1 n48	40M	BPSK	1	1		Front	5mm	Ant 8	DSI 3	645332	3679.98	22.40	24.10	1.479	100.0	1.000	-0.1	0.678	1.003
	LTE Band 48	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 3	55340	3560	19.89	21.60	1.483	62.9	1.006	0.12	0.735	1.097
50	LTE Band 48	20M	QPSK	1	0		Back	5mm	Ant 5	DSI 3	55340	3560	19.92	21.60	1.472	62.9	1.006	-0.04	0.734	1.087

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	2.4GHz WLAN	802.11b 1Mbps	Back	5mm	Ant 3+6(3)	DSI 3	1	2412	18.34	20.00	1.466	97.7	1.024	-0.14	0.737	1.106
51	2.4GHz WLAN	802.11b 1Mbps	Back	5mm	Ant 3+6(3)	DSI 3	1	2412	18.34	20.00	1.466	97.7	1.024	0.04	0.668	1.003
	5.8GHz WLAN	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5(5)	DSI 3	155	5775	15.89	17.00	1.291	99.6	1.004	0.10	0.918	1.190
52	5.8GHz WLAN	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5(5)	DSI 3	155	5775	15.91	17.00	1.285	99.6	1.004	-0.13	0.795	1.026

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)
	WLAN6GHz	802.11be-EHT320 MCS0	Back	5mm	Ant 5+4(5)	DSI 3	127	6585	16.53	18.0	1.403	99.6	1.004	0.05	0.634	0.893	4.440
53	WLAN6GHz	802.11be-EHT320 MCS0	Back	5mm	Ant 5+4(5)	DSI 3	127	6585	16.73	18.0	1.340	99.6	1.004	-0.13	0.537	0.722	4.010

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Back	5mm	Ant 3	DSI 3	39	2441	18.37	20.00	1.455	76.8	1.084	0.01	0.395	0.623
54	Bluetooth	1Mbps	Back	5mm	Ant 3	DSI 3	39	2441	18.79	20.00	1.321	76.8	1.084	-0.08	0.526	0.753

**16.4 Product Specific SAR**

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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 30	10M	QPSK	1	0	Front	0mm	Ant 2	DSI 6	27710	2310	23.07	24.00	1.239	0.01	1.730	2.143
	LTE Band 30	10M	QPSK	25	0	Front	0mm	Ant 2	DSI 6	27710	2310	22.98	24.00	1.265	-0.03	1.400	1.771
	LTE Band 30	10M	QPSK	50	0	Front	0mm	Ant 2	DSI 6	27710	2310	22.97	24.00	1.268	0.06	1.390	1.763
	LTE Band 30	10M	QPSK	1	0	Back	0mm	Ant 2	DSI 6	27710	2310	23.07	24.00	1.239	-0.16	1.470	1.821
	LTE Band 30	10M	QPSK	25	0	Back	0mm	Ant 2	DSI 6	27710	2310	22.98	24.00	1.265	0.00	1.190	1.505
55	LTE Band 30	10M	QPSK	1	0	Bottom Side	0mm	Ant 2	DSI 6	27710	2310	23.07	24.00	1.239	-0.09	1.980	2.453
	LTE Band 30	10M	QPSK	25	0	Bottom Side	0mm	Ant 2	DSI 6	27710	2310	22.98	24.00	1.265	-0.14	1.670	2.113
	LTE Band 30	10M	QPSK	50	0	Bottom Side	0mm	Ant 2	DSI 6	27710	2310	22.97	24.00	1.268	0.10	1.680	2.130
	LTE Band 30	10M	QPSK	1	0	Back	12mm	Ant 1	DSI 4	27710	2310	23.02	24.00	1.253	-0.05	0.405	0.507
	LTE Band 30	10M	QPSK	1	0	Left Side	11mm	Ant 1	DSI 4	27710	2310	23.02	24.00	1.253	0.04	0.378	0.474
	LTE Band 30	10M	QPSK	1	0	Top Side	6mm	Ant 1	DSI 4	27710	2310	23.02	24.00	1.253	0.11	0.189	0.237
	LTE Band 30	10M	QPSK	1	0	Left Side	0mm	Ant 1	DSI 6	27710	2310	22.10	23.20	1.288	-0.02	1.180	1.520
	LTE Band 30	10M	QPSK	25	0	Left Side	0mm	Ant 1	DSI 6	27710	2310	22.07	23.20	1.297	0.14	0.958	1.243
	LTE Band 30	10M	QPSK	1	0	Top Side	0mm	Ant 1	DSI 6	27710	2310	22.10	23.20	1.288	-0.07	1.880	2.421
	LTE Band 30	10M	QPSK	25	0	Top Side	0mm	Ant 1	DSI 6	27710	2310	22.07	23.20	1.297	0.11	1.500	1.946
	LTE Band 30	10M	QPSK	50	0	Top Side	0mm	Ant 1	DSI 6	27710	2310	21.97	23.20	1.327	0.01	1.450	1.924
	LTE Band 30	10M	QPSK	1	0	Back Left	0mm	Ant 1	DSI 6	27710	2310	22.10	23.20	1.288	-0.13	1.100	1.417
	LTE Band 30	10M	QPSK	25	0	Back Left	0mm	Ant 1	DSI 6	27710	2310	22.07	23.20	1.297	0.09	0.811	1.052
	LTE Band 30	10M	QPSK	1	0	Back Top	0mm	Ant 1	DSI 6	27710	2310	22.10	23.20	1.288	0.07	1.280	1.649
	LTE Band 30	10M	QPSK	25	0	Back Top	0mm	Ant 1	DSI 6	27710	2310	22.07	23.20	1.297	-0.17	1.120	1.453
	LTE Band 30	10M	QPSK	1	0	Back	6mm	Ant 6	DSI 4	27710	2310	21.55	23.00	1.396	0.08	0.421	0.588
	LTE Band 30	10M	QPSK	1	0	Right Side	9mm	Ant 6	DSI 4	27710	2310	21.55	23.00	1.396	-0.14	0.378	0.528
	LTE Band 30	10M	QPSK	1	0	Right Side	0mm	Ant 6	DSI 6	27710	2310	19.13	20.00	1.222	0.08	1.850	2.261
	LTE Band 30	10M	QPSK	25	0	Right Side	0mm	Ant 6	DSI 6	27710	2310	19.05	20.00	1.245	0.08	1.490	1.855
	LTE Band 30	10M	QPSK	50	0	Right Side	0mm	Ant 6	DSI 6	27710	2310	19.04	20.00	1.247	-0.18	1.570	1.958
	LTE Band 30	10M	QPSK	1	0	Back Right	0mm	Ant 6	DSI 6	27710	2310	19.13	20.00	1.222	0.04	1.570	1.919
	LTE Band 30	10M	QPSK	25	0	Back Right	0mm	Ant 6	DSI 6	27710	2310	19.05	20.00	1.245	-0.06	1.420	1.768

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n14_HPUE	10M	BPSK	1	1	Back	12mm	Ant 1	DSI 4	158600	793	26.35	27.00	1.161			-0.18	0.232	0.269
	FR1 n14_HPUE	10M	BPSK	25	14	Back	12mm	Ant 1	DSI 4	158600	793	26.28	27.00	1.18			0.18	0.211	0.249
	FR1 n14_HPUE	10M	BPSK	1	1	Back Left	0mm	Ant 1	DSI 6	158600	793	26.35	27.00	1.161			0.02	1.680	1.950
	FR1 n14_HPUE	10M	BPSK	25	14	Back Left	0mm	Ant 1	DSI 6	158600	793	26.28	27.00	1.18			0.01	1.610	1.900
56	FR1 n14_HPUE	10M	BPSK	1	1	Back Top	0mm	Ant 1	DSI 6	158600	793	26.35	27.00	1.161			0.07	1.830	2.125
	FR1 n14_HPUE	10M	BPSK	25	14	Back Top	0mm	Ant 1	DSI 6	158600	793	26.28	27.00	1.18			0.02	1.790	2.112
	FR1 n14_HPUE	10M	BPSK	50	0	Back Top	0mm	Ant 1	DSI 6	158600	793	25.86	26.50	1.159			0.08	1.640	1.901
	FR1 n14_HPUE	10M	BPSK	1	1	Left Side	0mm	Ant 0	DSI 6	158600	793	26.32	27.00	1.169			-0.08	0.701	0.819
	FR1 n14_HPUE	10M	BPSK	25	14	Left Side	0mm	Ant 0	DSI 6	158600	793	26.26	27.00	1.186			-0.07	0.645	0.765
	FR1 n25	40M	BPSK	1	1	Right Side	0mm	Ant 6	DSI 6	376500	1882.5	21.48	21.70	1.052			0.08	1.780	1.873
	FR1 n25	40M	BPSK	108	54	Right Side	0mm	Ant 6	DSI 6	376500	1882.5	21.42	21.70	1.067			0.02	2.020	2.155
71	FR1 n25	40M	BPSK	216	0	Right Side	0mm	Ant 6	DSI 6	376500	1882.5	21.32	21.70	1.091			0.00	2.050	2.237
	FR1 n25	40M	BPSK	1	1	Back Right	0mm	Ant 6	DSI 6	376500	1882.5	21.48	21.70	1.052			-0.17	1.440	1.515
	FR1 n25	40M	BPSK	108	54	Back Right	0mm	Ant 6	DSI 6	376500	1882.5	21.42	21.70	1.067			0.12	1.670	1.782
	FR1 n25	40M	BPSK	216	0	Right Side	9mm	Ant 6	DSI 6	376500	1882.5	21.32	22.00	1.169			0.01	0.501	0.586
	FR1 n25	40M	BPSK	108	54	Back	6mm	Ant 6	DSI 6	376500	1882.5	21.42	22.00	1.143			-0.09	0.548	0.626
	FR1 n30	10M	BPSK	1	1	Front	0mm	Ant 2	DSI 6	462000	2310	23.40	24.00	1.148			-0.02	1.500	1.722
	FR1 n30	10M	BPSK	25	14	Front	0mm	Ant 2	DSI 6	462000	2310	23.38	24.00	1.153			-0.19	1.660	1.914
	FR1 n30	10M	BPSK	1	1	Back	0mm	Ant 2	DSI 6	462000	2310	23.40	24.00	1.148			0.11	1.410	1.619
	FR1 n30	10M	BPSK	25	14	Back	0mm	Ant 2	DSI 6	462000	2310	23.38	24.00	1.153			0.10	1.380	1.591
	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	Ant 2	DSI 6	462000	2310	23.40	24.00	1.148			-0.01	1.640	1.883
	FR1 n30	10M	BPSK	25	14	Bottom Side	0mm	Ant 2	DSI 6	462000	2310	23.38	24.00	1.153			0.11	1.820	2.098
	FR1 n30	10M	BPSK	50	0	Bottom Side	0mm	Ant 2	DSI 6	462000	2310	23.31	24.00	1.172			-0.17	1.710	2.004
	FR1 n30	10M	BPSK	1	1	Back	12mm	Ant 1	DSI 4	462000	2310	23.36	24.00	1.159			-0.18	0.451	0.523
	FR1 n30	10M	BPSK	1	1	Left Side	11mm	Ant 1	DSI 4	462000	2310	23.36	24.00	1.159			0.00	0.428	0.496
	FR1 n30	10M	BPSK	1	1	Top Side	6mm	Ant 1	DSI 4	462000	2310	23.36	24.00	1.159			0.09	0.211	0.245
	FR1 n30	10M	BPSK	1	1	Left Side	0mm	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.14	1.300	1.879
	FR1 n30	10M	BPSK	25	14	Left Side	0mm	Ant 1	DSI 6	462000	2310	21.38	23.00	1.452			0.17	1.360	1.975
57	FR1 n30	10M	BPSK	1	1	Top Side	0mm	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.04	2.190	3.165
	FR1 n30	10M	BPSK	25	14	Top Side	0mm	Ant 1	DSI 6	462000	2310	21.38	23.00	1.452			0.17	2.120	3.078
	FR1 n30	10M	BPSK	50	0	Top Side	0mm	Ant 1	DSI 6	462000	2310	21.31	23.00	1.476			-0.07	2.010	2.967
	FR1 n30	10M	BPSK	1	1	Back Left	0mm	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.01	1.220	1.763
	FR1 n30	10M	BPSK	25	14	Back Left	0mm	Ant 1	DSI 6	462000	2310	21.38	23.00	1.452			0.19	1.180	1.713
	FR1 n30	10M	BPSK	1	1	Back Top	0mm	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.18	1.480	2.139



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	FR1 n30	10M	BPSK	25	14	Back Top	0mm	Ant 1	DSI 6	462000	2310	21.38	23.00	1.452			-0.09	1.500	2.178
	FR1 n30	10M	BPSK	50	0	Back Top	0mm	Ant 1	DSI 6	462000	2310	21.31	23.00	1.476			-0.13	1.540	2.273
	FR1 n30	10M	BPSK	1	1	Right Side	0mm	Ant 6	DSI 6	462000	2310	21.53	22.00	1.114			-0.07	1.920	2.139
	FR1 n30	10M	BPSK	25	14	Right Side	0mm	Ant 6	DSI 6	462000	2310	21.52	22.00	1.117			-0.01	1.890	2.111
	FR1 n30	10M	BPSK	50	0	Right Side	0mm	Ant 6	DSI 6	462000	2310	21.47	22.00	1.13			-0.06	1.770	2.000
	FR1 n30	10M	BPSK	1	1	Back Right	0mm	Ant 6	DSI 6	462000	2310	21.53	22.00	1.114			0.11	1.740	1.938
	FR1 n30	10M	BPSK	25	14	Back Right	0mm	Ant 6	DSI 6	462000	2310	21.52	22.00	1.117			-0.02	1.790	1.999
58	FR1 n70	15M	BPSK	1	1	Right Side	0mm	Ant 6	DSI 6	340500	1702.5	21.75	22.00	1.059			-0.02	1.730	1.832
	FR1 n70	15M	BPSK	36	22	Right Side	0mm	Ant 6	DSI 6	340500	1702.5	21.66	22.00	1.081			0.08	1.650	1.784
	FR1 n70	15M	BPSK	1	1	Back Right	0mm	Ant 6	DSI 6	340500	1702.5	21.75	22.00	1.059			0.09	1.490	1.578
	FR1 n70	15M	BPSK	36	22	Back Right	0mm	Ant 6	DSI 6	340500	1702.5	21.66	22.00	1.081			0.05	1.440	1.557
	FR1 n71_HPUE	35M	BPSK	1	1	Left Side	0mm	Ant 0	DSI 6	136100	680.5	26.37	27.00	1.156			0.07	0.703	0.813
59	FR1 n71_HPUE	35M	BPSK	90	45	Left Side	0mm	Ant 0	DSI 6	136100	680.5	26.35	27.00	1.161			0.08	0.701	0.814

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	0mm	Ant 7	DSI 6	661334	3920.01	23.38	24.00	1.153	100.0	1.000	-0.16	2.130	2.456
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	0mm	Ant 7	DSI 6	650000	3750	23.12	24.00	1.225	100.0	1.000	0.09	1.800	2.205
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	0mm	Ant 7	DSI 6	655668	3835.02	23.26	24.00	1.186	100.0	1.000	-0.04	1.830	2.170
	FR1 n77 (270)	100M	BPSK	1	1	Left Side	0mm	Ant 7	DSI 6	662000	3930	23.20	24.00	1.202	100.0	1.000	0.01	1.910	2.296
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	0mm	Ant 7	DSI 6	661334	3920.01	23.26	24.00	1.186	100.0	1.000	-0.01	2.330	2.763
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	0mm	Ant 7	DSI 6	650000	3750	22.89	24.00	1.291	100.0	1.000	0.02	1.980	2.556
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	0mm	Ant 7	DSI 6	655668	3835.02	23.05	24.00	1.245	100.0	1.000	-0.05	2.060	2.565
	FR1 n77 (270)	100M	BPSK	135	69	Left Side	0mm	Ant 7	DSI 6	662000	3930	23.03	24.00	1.250	100.0	1.000	0.16	2.100	2.625
	FR1 n77 (270)	100M	BPSK	270	0	Left Side	0mm	Ant 7	DSI 6	661334	3920.01	22.64	23.50	1.219	100.0	1.000	-0.12	2.360	2.877
	FR1 n77 (270)	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	661334	3920.01	23.38	24.00	1.153	100.0	1.000	-0.08	2.000	2.306
	FR1 n77 (270)	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	650000	3750	23.12	24.00	1.225	100.0	1.000	-0.06	1.430	1.752
	FR1 n77 (270)	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	655668	3835.02	23.26	24.00	1.186	100.0	1.000	-0.08	1.900	2.253
	FR1 n77 (270)	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	662000	3930	23.20	24.00	1.202	100.0	1.000	-0.13	1.920	2.308
	FR1 n77 (270)	100M	BPSK	135	69	Back Left	0mm	Ant 7	DSI 6	661334	3920.01	23.26	24.00	1.186	100.0	1.000	-0.10	1.650	1.957
	FR1 n77 (270)	100M	BPSK	135	69	Back Left	0mm	Ant 7	DSI 6	650000	3750	22.89	24.00	1.291	100.0	1.000	-0.15	1.450	1.872
	FR1 n77 (270)	100M	BPSK	135	69	Back Left	0mm	Ant 7	DSI 6	655668	3835.02	23.05	24.00	1.245	100.0	1.000	0.14	1.650	2.054
	FR1 n77 (270)	100M	BPSK	135	69	Back Left	0mm	Ant 7	DSI 6	662000	3930	23.03	24.00	1.250	100.0	1.000	0.12	1.600	2.000
	FR1 n77 (270)	100M	BPSK	270	0	Back Left	0mm	Ant 7	DSI 6	661334	3920.01	22.64	23.50	1.219	100.0	1.000	0.01	1.620	1.975
	FR1 n77 (270)_HPUE	100M	BPSK	270	0	Left Side	0mm	Ant 7	DSI 6	661334	3920.01	25.74	27.00	1.337	50.0	1.000	0.12	2.070	2.768
	FR1 n77 (27Q)	100M	BPSK	1	1	Left Side	0mm	Ant 7	DSI 6	633332	3499.98	23.31	24.00	1.172	100.0	1.000	-0.12	2.010	2.356
	FR1 n77 (27Q)	100M	BPSK	135	69	Left Side	0mm	Ant 7	DSI 6	633332	3499.98	23.10	24.00	1.230	100.0	1.000	-0.13	1.900	2.337
	FR1 n77 (27Q)	100M	BPSK	270	0	Left Side	0mm	Ant 7	DSI 6	633332	3499.98	22.50	23.50	1.259	100.0	1.000	0.07	1.870	2.354
	FR1 n77 (27Q)	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	633332	3499.98	23.31	24.00	1.172	100.0	1.000	0.00	2.570	3.012
	FR1 n77 (27Q)	100M	BPSK	135	69	Back Left	0mm	Ant 7	DSI 6	633332	3499.98	23.10	24.00	1.230	100.0	1.000	-0.03	2.220	2.731
	FR1 n77 (27Q)	100M	BPSK	270	0	Back Left	0mm	Ant 7	DSI 6	633332	3499.98	22.50	23.50	1.259	100.0	1.000	-0.06	2.110	2.656
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	633332	3499.98	26.24	27.00	1.191	50.0	1.000	0.11	2.430	2.894
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	6mm	Ant 5	DSI 4	633332	3499.98	23.53	24.00	1.114	100.0	1.000	-0.14	0.461	0.514
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	9mm	Ant 5	DSI 4	633332	3499.98	23.53	24.00	1.114	100.0	1.000	0.03	0.278	0.310
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	0mm	Ant 5	DSI 6	633332	3499.98	21.31	22.50	1.315	100.0	1.000	-0.13	1.720	2.262
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	0mm	Ant 5	DSI 6	633332	3499.98	21.28	22.50	1.324	100.0	1.000	-0.10	1.810	2.396
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Side	0mm	Ant 5	DSI 6	633332	3499.98	21.25	22.50	1.334	100.0	1.000	-0.07	1.790	2.388
	FR1 n77 (27Q)	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	633332	3499.98	21.31	22.50	1.315	100.0	1.000	-0.10	2.130	2.801
	FR1 n77 (27Q)	100M	BPSK	135	69	Back Right	0mm	Ant 5	DSI 6	633332	3499.98	21.28	22.50	1.324	100.0	1.000	0.01	2.050	2.714
	FR1 n77 (27Q)	100M	BPSK	270	0	Back Right	0mm	Ant 5	DSI 6	633332	3499.98	21.25	22.50	1.334	100.0	1.000	0.02	1.970	2.628
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	633332	3499.98	24.33	25.50	1.309	50.0	1.000	-0.04	2.220	2.906
	FR1 n77 (270)	100M	BPSK	1	1	Back	6mm	Ant 5	DSI 4	661334	3920.01	23.66	24.00	1.081	100.0	1.000	0.09	0.441	0.477
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	9mm	Ant 5	DSI 4	661334	3920.01	23.66	24.00	1.081	100.0	1.000	0.12	0.261	0.282
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 5	DSI 6	661334	3920.01	21.35	22.50	1.303	100.0	1.000	-0.08	1.210	1.577
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 5	DSI 6	650000	3750	21.28	22.50	1.324	100.0	1.000	0.03	1.340	1.774
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 5	DSI 6	655668	3835.02	21.31	22.50	1.315	100.0	1.000	0.19	1.170	1.539
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 5	DSI 6	662000	3930	21.12	22.50	1.374	100.0	1.000	0.12	1.190	1.635
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 5	DSI 6	661334	3920.01	21.33	22.50	1.309	100.0	1.000	-0.05	1.200	1.571



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	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 5	DSI 6	650000	3750	21.25	22.50	1.334	100.0	1.000	-0.04	1.230	1.641
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 5	DSI 6	655668	3835.02	21.30	22.50	1.318	100.0	1.000	-0.10	1.230	1.621
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 5	DSI 6	662000	3930	21.11	22.50	1.377	100.0	1.000	-0.13	1.160	1.597
	FR1 n77 (270)	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	661334	3920.01	21.35	22.50	1.303	100.0	1.000	-0.01	1.480	1.928
	FR1 n77 (270)	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	650000	3750	21.28	22.50	1.324	100.0	1.000	0.02	1.570	2.079
	FR1 n77 (270)	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	655668	3835.02	21.31	22.50	1.315	100.0	1.000	0.02	1.370	1.802
	FR1 n77 (270)	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	662000	3930	21.12	22.50	1.374	100.0	1.000	0.13	1.410	1.937
	FR1 n77 (270)	100M	BPSK	135	69	Back Right	0mm	Ant 5	DSI 6	661334	3920.01	21.33	22.50	1.309	100.0	1.000	-0.13	1.310	1.715
	FR1 n77 (270)	100M	BPSK	135	69	Back Right	0mm	Ant 5	DSI 6	650000	3750	21.25	22.50	1.334	100.0	1.000	0.04	1.360	1.814
	FR1 n77 (270)	100M	BPSK	135	69	Back Right	0mm	Ant 5	DSI 6	655668	3835.02	21.30	22.50	1.318	100.0	1.000	0.04	1.230	1.621
	FR1 n77 (270)	100M	BPSK	135	69	Back Right	0mm	Ant 5	DSI 6	662000	3930	21.11	22.50	1.377	100.0	1.000	0.01	1.210	1.666
	FR1 n77 (270)	100M	BPSK	270	0	Back Right	0mm	Ant 5	DSI 6	661334	3920.01	21.28	22.50	1.324	100.0	1.000	0.14	1.050	1.390
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	650000	3750	24.26	25.50	1.330	50.0	1.000	-0.04	1.500	1.995
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	6mm	Ant 4	DSI 4	633332	3499.98	23.35	24.00	1.161	100.0	1.000	0.05	0.565	0.656
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	6mm	Ant 4	DSI 4	633332	3499.98	22.98	24.00	1.265	100.0	1.000	-0.14	0.541	0.684
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	6mm	Ant 4	DSI 4	633332	3499.98	23.35	24.00	1.161	100.0	1.000	0.11	0.675	0.784
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	6mm	Ant 4	DSI 4	633332	3499.98	22.98	24.00	1.265	100.0	1.000	-0.05	0.663	0.839
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	633332	3499.98	20.19	21.20	1.262	100.0	1.000	0.05	2.240	2.827
60	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	633332	3499.98	20.16	21.20	1.271	100.0	1.000	-0.06	2.460	3.127
	FR1 n77 (27Q)	100M	BPSK	270	0	Top Side	0mm	Ant 4	DSI 6	633332	3499.98	20.11	21.20	1.285	100.0	1.000	-0.06	2.410	3.097
	FR1 n77 (27Q)	100M	BPSK	1	1	Back Top	0mm	Ant 4	DSI 6	633332	3499.98	20.19	21.20	1.262	100.0	1.000	0.19	1.850	2.335
	FR1 n77 (27Q)	100M	BPSK	135	69	Back Top	0mm	Ant 4	DSI 6	633332	3499.98	20.16	21.20	1.271	100.0	1.000	0.16	1.810	2.301
	FR1 n77 (27Q)	100M	BPSK	270	0	Back Top	0mm	Ant 4	DSI 6	633332	3499.98	20.11	21.20	1.285	100.0	1.000	0.04	1.890	2.429
	FR1 n77 (27Q)_HPUE	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	633332	3499.98	23.13	24.20	1.279	50.0	1.000	0.04	2.380	3.044
	FR1 n77 (270)	100M	BPSK	1	1	Back	6mm	Ant 4	DSI 4	661334	3920.01	23.40	24.00	1.148	100.0	1.000	-0.17	0.512	0.588
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	6mm	Ant 4	DSI 4	661334	3920.01	23.40	24.00	1.148	100.0	1.000	0.05	0.571	0.656
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	661334	3920.01	20.16	21.20	1.271	100.0	1.000	-0.08	1.960	2.491
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	650000	3750	20.12	21.20	1.282	100.0	1.000	0.03	2.340	3.000
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	655668	3835.02	20.11	21.20	1.285	100.0	1.000	0.02	1.870	2.403
	FR1 n77 (270)	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	662000	3930	20.00	21.20	1.318	100.0	1.000	0.11	2.010	2.649
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	661334	3920.01	20.14	21.20	1.276	100.0	1.000	0.16	1.720	2.195
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	650000	3750	20.10	21.20	1.288	100.0	1.000	-0.07	1.840	2.370
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	655668	3835.02	20.06	21.20	1.300	100.0	1.000	0.06	1.860	2.418
	FR1 n77 (270)	100M	BPSK	135	69	Top Side	0mm	Ant 4	DSI 6	662000	3930	19.91	21.20	1.346	100.0	1.000	-0.19	1.810	2.436
	FR1 n77 (270)	100M	BPSK	270	0	Top Side	0mm	Ant 4	DSI 6	661334	3920.01	20.08	21.20	1.294	100.0	1.000	0.10	1.630	2.109
	FR1 n77 (270)	100M	BPSK	1	1	Back Top	0mm	Ant 4	DSI 6	661334	3920.01	20.16	21.20	1.271	100.0	1.000	-0.08	1.860	2.364
	FR1 n77 (270)	100M	BPSK	1	1	Back Top	0mm	Ant 4	DSI 6	650000	3750	20.12	21.20	1.282	100.0	1.000	0.16	1.810	2.320
	FR1 n77 (270)	100M	BPSK	1	1	Back Top	0mm	Ant 4	DSI 6	655668	3835.02	20.11	21.20	1.285	100.0	1.000	-0.05	1.920	2.467
	FR1 n77 (270)	100M	BPSK	1	1	Back Top	0mm	Ant 4	DSI 6	662000	3930	20.00	21.20	1.318	100.0	1.000	0.16	1.770	2.333
	FR1 n77 (270)	100M	BPSK	135	69	Back Top	0mm	Ant 4	DSI 6	661334	3920.01	20.14	21.20	1.276	100.0	1.000	0.02	1.810	2.310
	FR1 n77 (270)	100M	BPSK	135	69	Back Top	0mm	Ant 4	DSI 6	650000	3750	20.10	21.20	1.288	100.0	1.000	-0.09	1.910	2.460
	FR1 n77 (270)	100M	BPSK	135	69	Back Top	0mm	Ant 4	DSI 6	655668	3835.02	20.06	21.20	1.300	100.0	1.000	-0.17	1.760	2.288
	FR1 n77 (270)	100M	BPSK	135	69	Back Top	0mm	Ant 4	DSI 6	662000	3930	19.91	21.20	1.346	100.0	1.000	0.03	1.790	2.409
	FR1 n77 (270)	100M	BPSK	270	0	Back Top	0mm	Ant 4	DSI 6	661334	3920.01	20.08	21.20	1.294	100.0	1.000	-0.08	1.640	2.122
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Top Side	0mm	Ant 4	DSI 6	650000	3750	23.09	24.20	1.291	50.0	1.000	-0.07	2.270	2.931
	FR1 n77 (27Q)	100M	BPSK	1	1	Front	0mm	Ant 8	DSI 4	633332	3499.98	21.69	22.40	1.178	100.0	1.000	-0.17	1.780	2.097
	FR1 n77 (27Q)	100M	BPSK	135	69	Front	0mm	Ant 8	DSI 4	633332	3499.98	21.66	22.40	1.186	100.0	1.000	-0.09	1.720	2.040
	FR1 n77 (27Q)	100M	BPSK	270	0	Front	0mm	Ant 8	DSI 4	633332	3499.98	21.62	22.40	1.197	100.0	1.000	0.14	1.690	2.023
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	0mm	Ant 8	DSI 4	633332	3499.98	21.69	22.40	1.178	100.0	1.000	0.12	0.857	1.010
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	0mm	Ant 8	DSI 4	633332	3499.98	21.66	22.40	1.186	100.0	1.000	-0.04	0.876	1.039
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	633332	3499.98	21.69	22.40	1.178	100.0	1.000	0.04	2.350	2.768
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	0mm	Ant 8	DSI 4	633332	3499.98	21.66	22.40	1.186	100.0	1.000	-0.07	2.100	2.491
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Side	0mm	Ant 8	DSI 4	633332	3499.98	21.62	22.40	1.197	100.0	1.000	0.03	2.130	2.550
	FR1 n77 (27Q)_HPUE	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	633332	3499.98	24.55	25.40	1.216	100.0	1.000	0.00	2.390	2.906
	FR1 n77 (270)	100M	BPSK	1	1	Front	0mm	Ant 8	DSI 4	661334	3920.01	21.66	22.40	1.186	100.0	1.000	0.10	1.690	2.004
	FR1 n77 (270)	100M	BPSK	1	1	Front	0mm	Ant 8	DSI 4	650000	3750	21.58	22.40	1.208	100.0	1.000	-0.19	1.700	2.054



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	FR1 n77 (270)	100M	BPSK	1	1	Front	0mm	Ant 8	DSI 4	655668	3835.02	21.62	22.40	1.197	100.0	1.000	0.19	1.750	2.095
	FR1 n77 (270)	100M	BPSK	1	1	Front	0mm	Ant 8	DSI 4	662000	3930	21.45	22.40	1.245	100.0	1.000	0.04	1.660	2.067
	FR1 n77 (270)	100M	BPSK	135	69	Front	0mm	Ant 8	DSI 4	661334	3920.01	21.63	22.40	1.194	100.0	1.000	0.17	1.650	1.970
	FR1 n77 (270)	100M	BPSK	135	69	Front	0mm	Ant 8	DSI 4	650000	3750	21.56	22.40	1.213	100.0	1.000	-0.08	1.710	2.074
	FR1 n77 (270)	100M	BPSK	135	69	Front	0mm	Ant 8	DSI 4	655668	3835.02	21.58	22.40	1.208	100.0	1.000	-0.15	1.710	2.066
	FR1 n77 (270)	100M	BPSK	135	69	Front	0mm	Ant 8	DSI 4	662000	3930	21.39	22.40	1.262	100.0	1.000	-0.13	1.610	2.032
	FR1 n77 (270)	100M	BPSK	270	0	Front	0mm	Ant 8	DSI 4	661334	3920.01	21.60	22.40	1.202	100.0	1.000	0.13	1.450	1.743
	FR1 n77 (270)	100M	BPSK	1	1	Back	0mm	Ant 8	DSI 4	661334	3920.01	21.66	22.40	1.186	100.0	1.000	0.18	0.648	0.769
	FR1 n77 (270)	100M	BPSK	135	69	Back	0mm	Ant 8	DSI 4	661334	3920.01	21.63	22.40	1.194	100.0	1.000	0.01	0.518	0.618
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	661334	3920.01	21.66	22.40	1.186	100.0	1.000	0.06	2.240	2.657
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	650000	3750	21.58	22.40	1.208	100.0	1.000	-0.08	2.360	2.851
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	655668	3835.02	21.62	22.40	1.197	100.0	1.000	0.14	2.310	2.765
	FR1 n77 (270)	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	662000	3930	21.45	22.40	1.245	100.0	1.000	0.01	2.150	2.677
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 8	DSI 4	661334	3920.01	21.63	22.40	1.194	100.0	1.000	-0.02	2.100	2.507
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 8	DSI 4	650000	3750	21.56	22.40	1.213	100.0	1.000	-0.14	2.200	2.669
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 8	DSI 4	655668	3835.02	21.58	22.40	1.208	100.0	1.000	0.16	1.870	2.259
	FR1 n77 (270)	100M	BPSK	135	69	Right Side	0mm	Ant 8	DSI 4	662000	3930	21.39	22.40	1.262	100.0	1.000	0.02	1.880	2.373
	FR1 n77 (270)	100M	BPSK	270	0	Right Side	0mm	Ant 8	DSI 4	661334	3920.01	21.60	22.40	1.202	100.0	1.000	-0.09	1.880	2.260
	FR1 n77 (270)_HPUE	100M	BPSK	1	1	Right Side	0mm	Ant 8	DSI 4	650000	3750	24.61	25.40	1.199	100.0	1.000	0.19	2.280	2.734

MIMO SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n25	40M	BPSK	1	1	Front	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	0.11	1.110	1.166
	FR1 n25	40M	BPSK	108	54	Front	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.14	1.670	1.777
	FR1 n25	40M	BPSK	216	0	Front	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	0.04	1.160	1.263
	FR1 n25	40M	BPSK	1	1	Left Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	0.06	1.270	1.334
	FR1 n25	40M	BPSK	108	54	Left Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.05	1.140	1.213
	FR1 n25	40M	BPSK	1	1	Top Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.03	1.720	1.806
	FR1 n25	40M	BPSK	108	54	Top Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.14	2.150	2.288
	FR1 n25	40M	BPSK	216	0	Top Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	0.06	2.180	2.374
	FR1 n25	40M	BPSK	1	1	Back Top	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.03	0.930	0.977
	FR1 n25	40M	BPSK	108	54	Back Top	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	-0.19	1.640	1.745
	FR1 n25	40M	BPSK	216	0	Back Top	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	0.17	1.690	1.840
	FR1 n25	40M	BPSK	1	1	Back Left	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.02	1.530	1.607
	FR1 n25	40M	BPSK	108	54	Back Left	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.05	1.810	1.926
	FR1 n25	40M	BPSK	216	0	Back Left	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	0.01	1.780	1.938
	FR1 n25	40M	BPSK	1	1	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.01	1.630	1.712
	FR1 n25	40M	BPSK	108	54	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.12	1.870	1.990
	FR1 n25	40M	BPSK	216	0	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	-0.04	1.900	2.069
	FR1 n25	40M	BPSK	1	1	Back Right	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.05	1.290	1.355
	FR1 n25	40M	BPSK	108	54	Back Right	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	-0.05	1.520	1.617
	FR1 n25	40M	BPSK	1	1	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.01	1.630	1.712
	FR1 n25	40M	BPSK	108	54	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	0.17	1.870	1.990
	FR1 n25	40M	BPSK	216	0	Right Side	0mm	Ant 6+1	DSI 6	376500	1882.5	24.33	24.70	1.089	100.0	1.000	0.13	1.900	2.069
	FR1 n25	40M	BPSK	1	1	Back Right	0mm	Ant 6+1	DSI 6	376500	1882.5	24.49	24.70	1.050	100.0	1.000	-0.18	1.290	1.355
	FR1 n25	40M	BPSK	108	54	Back Right	0mm	Ant 6+1	DSI 6	376500	1882.5	24.43	24.70	1.064	100.0	1.000	-0.12	1.520	1.617
	FR1 n25	40M	BPSK	1	1	Front	6mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	0.15	0.362	0.451
	FR1 n25	40M	BPSK	108	54	Front	6mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	-0.06	0.341	0.429
	FR1 n25	40M	BPSK	1	1	Back	12mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	-0.15	0.195	0.243
	FR1 n25	40M	BPSK	108	54	Back	12mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	-0.11	0.160	0.201
	FR1 n25	40M	BPSK	1	1	Left Side	11mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	-0.12	0.155	0.193
	FR1 n25	40M	BPSK	108	54	Left Side	11mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	-0.04	0.139	0.175
	FR1 n25	40M	BPSK	1	1	Right Side	6mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	0.03	0.455	0.567
	FR1 n25	40M	BPSK	108	54	Right Side	6mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	0.12	0.523	0.658



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	FR1 n25	40M	BPSK	1	1	Top Side	6mm	Ant 6+1	DSI 4	376500	1882.5	25.14	26.10	1.247	100.0	1.000	-0.10	0.717	0.894
	FR1 n25	40M	BPSK	108	54	Top Side	6mm	Ant 6+1	DSI 4	376500	1882.5	25.10	26.10	1.259	100.0	1.000	-0.03	0.686	0.864
	FR1 n30	10M	BPSK	1	1	Left Side	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	-0.11	1.150	1.329
	FR1 n30	10M	BPSK	25	14	Left Side	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.15	1.210	1.405
	FR1 n30	10M	BPSK	1	1	Top Side	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	-0.07	2.040	2.358
	FR1 n30	10M	BPSK	25	14	Top Side	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.01	1.970	2.287
	FR1 n30	10M	BPSK	50	0	Top Side	0mm	Ant 6+1	DSI 6	462000	2310	23.32	24.00	1.169	100.0	1.000	0.17	1.860	2.174
	FR1 n30	10M	BPSK	1	1	Back Left	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	0.07	1.070	1.237
	FR1 n30	10M	BPSK	25	14	Back Left	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.11	1.030	1.196
	FR1 n30	10M	BPSK	1	1	Back Top	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	0.08	1.330	1.537
	FR1 n30	10M	BPSK	25	14	Back Top	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.13	1.350	1.567
	FR1 n30	10M	BPSK	50	0	Back Top	0mm	Ant 6+1	DSI 6	462000	2310	23.32	24.00	1.169	100.0	1.000	0.10	1.390	1.625
	FR1 n30	10M	BPSK	1	1	Right Side	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	0.11	1.770	2.046
	FR1 n30	10M	BPSK	25	14	Right Side	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.13	1.740	2.020
	FR1 n30	10M	BPSK	50	0	Right Side	0mm	Ant 6+1	DSI 6	462000	2310	23.32	24.00	1.169	100.0	1.000	0.04	1.620	1.894
	FR1 n30	10M	BPSK	1	1	Back Right	0mm	Ant 6+1	DSI 6	462000	2310	23.37	24.00	1.156	100.0	1.000	0.07	1.590	1.838
	FR1 n30	10M	BPSK	25	14	Back Right	0mm	Ant 6+1	DSI 6	462000	2310	23.35	24.00	1.161	100.0	1.000	-0.03	1.640	1.904
	FR1 n66	45M	BPSK	1	1	Front	0mm	Ant 6+1	DSI 6	349000	1745	23.00	24.50	1.413	100.0	1.000	0.05	1.160	1.639
	FR1 n66	45M	BPSK	120	60	Front	0mm	Ant 6+1	DSI 6	349000	1745	22.99	24.50	1.416	100.0	1.000	-0.09	1.190	1.685
	FR1 n66	45M	BPSK	1	1	Left Side	0mm	Ant 6+1	DSI 6	349000	1745	23.00	24.50	1.413	100.0	1.000	0.13	1.040	1.470
	FR1 n66	45M	BPSK	120	60	Left Side	0mm	Ant 6+1	DSI 6	349000	1745	22.99	24.50	1.416	100.0	1.000	0.19	0.980	1.388
	FR1 n66	45M	BPSK	1	1	Top Side	0mm	Ant 6+1	DSI 6	349000	1745	23.00	24.50	1.413	100.0	1.000	0.08	1.970	2.784
	FR1 n66	45M	BPSK	120	60	Top Side	0mm	Ant 6+1	DSI 6	349000	1745	22.99	24.50	1.416	100.0	1.000	-0.03	2.080	2.945
	FR1 n66	45M	BPSK	240	0	Top Side	0mm	Ant 6+1	DSI 6	349000	1745	22.96	24.50	1.426	100.0	1.000	0.14	1.980	2.823
	FR1 n66	45M	BPSK	1	1	Back Top	0mm	Ant 6+1	DSI 6	349000	1745	23.00	24.50	1.413	100.0	1.000	0.01	1.250	1.766
	FR1 n66	45M	BPSK	120	60	Back Top	0mm	Ant 6+1	DSI 6	349000	1745	22.99	24.50	1.416	100.0	1.000	-0.14	1.250	1.770
	FR1 n66	45M	BPSK	1	1	Back Left	0mm	Ant 6+1	DSI 6	349000	1745	23.00	24.50	1.413	100.0	1.000	0.14	1.300	1.837
	FR1 n66	45M	BPSK	120	60	Back Left	0mm	Ant 6+1	DSI 6	349000	1745	22.99	24.50	1.416	100.0	1.000	0.04	1.310	1.855
	FR1 n66	45M	BPSK	240	0	Back Left	0mm	Ant 6+1	DSI 6	349000	1745	22.96	24.50	1.426	100.0	1.000	0.15	1.140	1.626
	FR1 n66	45M	BPSK	1	1	Front	6mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	0.15	0.182	0.214
	FR1 n66	45M	BPSK	120	60	Front	6mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	0.10	0.179	0.216
	FR1 n66	45M	BPSK	1	1	Back	12mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	-0.05	0.145	0.170
	FR1 n66	45M	BPSK	120	60	Back	12mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	-0.10	0.136	0.164
	FR1 n66	45M	BPSK	1	1	Left Side	11mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	-0.02	0.116	0.136
	FR1 n66	45M	BPSK	120	60	Left Side	11mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	-0.02	0.100	0.121
	FR1 n66	45M	BPSK	1	1	Top Side	6mm	Ant 6+1	DSI 4	349000	1745	25.40	26.10	1.175	100.0	1.000	0.13	0.327	0.384
	FR1 n66	45M	BPSK	120	60	Top Side	6mm	Ant 6+1	DSI 4	349000	1745	25.28	26.10	1.208	100.0	1.000	0.18	0.312	0.377
	FR1 n77 (27Q)	100M	BPSK	1	1	Right Side	0mm	Ant 7+5	DSI 6	633332	3499.98	26.07	27.00	1.239	100.0	1.000	-0.05	1.570	1.945
	FR1 n77 (27Q)	100M	BPSK	135	69	Right Side	0mm	Ant 7+5	DSI 6	633332	3499.98	26.01	27.00	1.256	100.0	1.000	-0.07	1.660	2.085
	FR1 n77 (27Q)	100M	BPSK	270	0	Right Side	0mm	Ant 7+5	DSI 6	633332	3499.98	25.43	26.50	1.279	100.0	1.000	0.14	1.640	2.098
	FR1 n77 (27Q)	100M	BPSK	1	1	Back Right	0mm	Ant 7+5	DSI 6	633332	3499.98	26.07	27.00	1.239	100.0	1.000	0.03	1.980	2.453
	FR1 n77 (27Q)	100M	BPSK	135	69	Back Right	0mm	Ant 7+5	DSI 6	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0	1.900	2.386
	FR1 n77 (27Q)	100M	BPSK	270	0	Back Right	0mm	Ant 7+5	DSI 6	633332	3499.98	25.43	26.50	1.279	100.0	1.000	-0.1	1.820	2.328
	FR1 n77 (27Q)_PC1.5	100M	BPSK	1	1	Back Right	0mm	Ant 7+5	DSI 6	633332	3499.98	29.04	30.00	1.247	50.0	1.000	0.02	2.070	2.581
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	0mm	Ant 4+5	DSI 6	633332	3499.98	21.14	22.20	1.276	100.0	1.000	0.14	2.090	2.667
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	0mm	Ant 4+5	DSI 6	633332	3499.98	21.10	22.20	1.288	100.0	1.000	-0.02	2.310	2.975
	FR1 n77 (27Q)	100M	BPSK	270	0	Top Side	0mm	Ant 4+5	DSI 6	633332	3499.98	21.01	22.20	1.315	100.0	1.000	-0.13	2.260	2.972
	FR1 n77 (27Q)	100M	BPSK	1	1	Back Top	0mm	Ant 4+5	DSI 6	633332	3499.98	21.14	22.20	1.276	100.0	1.000	-0.03	1.700	2.169
	FR1 n77 (27Q)	100M	BPSK	135	69	Back Top	0mm	Ant 4+5	DSI 6	633332	3499.98	21.10	22.20	1.288	100.0	1.000	0.12	1.660	2.138
	FR1 n77 (27Q)	100M	BPSK	270	0	Back Top	0mm	Ant 4+5	DSI 6	633332	3499.98	21.01	22.20	1.315	100.0	1.000	0.17	1.740	2.288
	FR1 n77 (27Q)_PC1.5	100M	BPSK	135	69	Top Side	0mm	Ant 4+5	DSI 6	633332	3499.98	23.96	25.20	1.330	50.0	1.000	0.06	2.230	2.966
	FR1 n77 (27Q)	100M	BPSK	1	1	Back	6mm	Ant 4+5	DSI 4	633332	3499.98	26.07	27.00	1.239	100.0	1.000	0.04	0.415	0.514
	FR1 n77 (27Q)	100M	BPSK	135	69	Back	6mm	Ant 4+5	DSI 4	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0.04	0.391	0.491
	FR1 n77 (27Q)	100M	BPSK	1	1	Top Side	6mm	Ant 4+5	DSI 4	633332	3499.98	26.07	27.00	1.239	100.0	1.000	0.02	0.525	0.650
	FR1 n77 (27Q)	100M	BPSK	135	69	Top Side	6mm	Ant 4+5	DSI 4	633332	3499.98	26.01	27.00	1.256	100.0	1.000	0.12	0.513	0.644

CA SAR

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 48	20M	QPSK	1	99	Back	0mm	Ant 5	DSI 6	55830+56028	3609+3628.8	23.28	24.00	1.180	62.9	1.006	-0.18	2.210	2.623
	FR1 n77 (270)	100M	BPSK	1	272	Left Side	0mm	Ant 7	DSI 6	655336+662000	3830.04+3930	23.14	24.00	1.219	100.0	1.000	-0.09	2.340	2.852
	FR1 n77 (270)	100M	BPSK	1	272	Back Right	0mm	Ant 5	DSI 6	650000+656664	3750+3849.96	21.46	22.50	1.271	100.0	1.000	-0.02	1.470	1.868
	FR1 n77 (270)	100M	BPSK	1	272	Top Side	0mm	Ant 4	DSI 6	650000+656664	3750+3849.96	20.11	21.20	1.285	100.0	1.000	0.05	2.240	2.878
	FR1 n77 (270)	100M	BPSK	1	272	Right Side	0mm	Ant 8	DSI 4	650000+656664	3750+3849.96	21.42	22.40	1.253	100.0	1.000	-0.06	2.140	2.681

【NFC SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)
	NFC	ASK	Front	0mm	NFC	0	13.56	-0.08	0.001
61	NFC	ASK	Back	0mm	NFC	0	13.56	0.01	0.007
	NFC	ASK	Left Side	0mm	NFC	0	13.56	-0.17	0.001
	NFC	ASK	Right Side	0mm	NFC	0	13.56	-0.09	0.001
	NFC	ASK	Top Side	0mm	NFC	0	13.56	0.14	0.001
	NFC	ASK	Bottom Side	0mm	NFC	0	13.56	0.12	0.001

<Spot check>

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n41	100M	BPSK	270	0	Top Side	0mm	Ant 1	DSI 6	518598	2592.99	21.58	22.80	1.324	100.0	1.000	0.03	2.420	3.204
62	FR1 n41	100M	BPSK	270	0	Top Side	0mm	Ant 1	DSI 6	518598	2592.99	21.67	22.80	1.297	100.0	1.000	0	1.940	2.516
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	23.44	24.00	1.138	100.0	1.000	0.17	2.210	2.515
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	23.17	24.00	1.211	100.0	1.000	0.06	1.970	2.386
	LTE Band 41_HPUE	20M	QPSK	1	0	Back Right	0mm	Ant 6	DSI 6	41055	2636.5	23.87	25.00	1.297	42.9	1.009	-0.03	2.090	2.735
63	LTE Band 41_HPUE	20M	QPSK	1	0	Back Right	0mm	Ant 6	DSI 6	41055	2636.5	23.73	25.00	1.340	42.9	1.009	0.02	1.710	2.312
	LTE Band 42 (27Q)	20M	QPSK	1	0	Back Right	0mm	Ant 5	DSI 6	42990	3540	23.14	24.00	1.219	62.9	1.006	0.12	2.490	3.054
64	LTE Band 42 (27Q)	20M	QPSK	1	0	Back Right	0mm	Ant 5	DSI 6	42990	3540	23.07	24.00	1.239	62.9	1.006	-0.04	2.020	2.518
	FR1 n25	40M	BPSK	1	1	Bottom Side	0mm	Ant 2	DSI 6	376500	1882.5	22.37	24.00	1.455	100.0	1.000	-0.01	2.200	3.201
65	FR1 n25	40M	BPSK	1	1	Bottom Side	0mm	Ant 2	DSI 6	376500	1882.5	22.49	24.00	1.416	100.0	1.000	0	2.110	2.988
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	23.44	24.00	1.138	100.0	1.000	0.17	2.210	2.515
66	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	23.17	24.00	1.211	100.0	1.000	-0.06	1.960	2.374
	FR1 n48	40M	BPSK	100	0	Top Side	0mm	Ant 4	DSI 6	641666	3624.99	19.51	20.80	1.346	100.0	1.000	0.04	2.340	3.150
67	FR1 n48	40M	BPSK	100	0	Top Side	0mm	Ant 4	DSI 6	641666	3624.99	19.72	20.80	1.282	100.0	1.000	-0.02	2.330	2.987
	FR1 n48	40M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	641666	3624.99	20.53	22.20	1.469	100.0	1.000	-0.01	1.840	2.703
	FR1 n48	40M	BPSK	1	1	Back Right	0mm	Ant 5	DSI 6	641666	3624.99	20.44	22.20	1.500	100.0	1.000	0.02	1.430	2.145
	FR1 n48	40M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	645332	3679.98	23.26	24.00	1.186	100.0	1.000	-0.11	1.960	2.325
	FR1 n48	40M	BPSK	1	1	Back Left	0mm	Ant 7	DSI 6	645332	3679.98	23.27	24.00	1.183	100.0	1.000	0.01	1.920	2.271
	FR1 n48	40M	BPSK	50	28	Right Side	0mm	Ant 8	DSI 4	645332	3679.98	19.85	20.50	1.161	100.0	1.000	-0.02	1.640	1.904
	FR1 n48	40M	BPSK	50	28	Right Side	0mm	Ant 8	DSI 4	645332	3679.98	19.81	20.50	1.172	100.0	1.000	0.09	1.990	2.332
	FR1 n48	40M	BPSK	50	28	Right Side	0mm	Ant 8	DSI 4	641666	3624.99	19.85	20.50	1.161	100.0	1.000	-0.03	1.790	2.078
	FR1 n48	40M	BPSK	50	28	Right Side	0mm	Ant 8	DSI 4	638000	3570	19.77	20.50	1.183	100.0	1.000	0.01	1.840	2.177

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	2.4GHz WLAN	802.11b 1Mbps	Back Right	0mm	Ant 3+6(3)	DSI 6	11	2462	22.07	23.50	1.390	97.7	1.024	-0.02	2.250	3.203
68	2.4GHz WLAN	802.11b 1Mbps	Back Right	0mm	Ant 3+6(3)	DSI 6	11	2462	22.68	23.50	1.208	97.7	1.024	-0.02	2.410	2.981
	5.5GHz WLAN	802.11a 6Mbps	Back Right	0mm	Ant 4+5(5)	DSI 6	144	5720	20.45	22.00	1.429	99.2	1.009	-0.15	1.430	2.062
69	5.5GHz WLAN	802.11a 6Mbps	Back Right	0mm	Ant 4+5(5)	DSI 6	144	5720	20.15	22.00	1.531	99.2	1.009	-0.01	1.080	1.668

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Measured APD (W/m ²)
	WLAN6GHz	802.11be-EHT320 MCS0	Back Top	0mm	Ant 5+4(5)	DSI 6	127	6585	16.53	18.00	1.403	99.6	1.004	0.09	0.322	0.454	7.300
70	WLAN6GHz	802.11be-EHT320 MCS0	Back Top	0mm	Ant 5+4(5)	DSI 6	127	6585	16.73	18.00	1.340	99.6	1.004	-0.05	0.174	0.234	6.840

16.5 6GHz PD Test Result

WLAN PD

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11be-EHT320 MCS0	Front	2mm	Ant 5+4(4)	31	6105	14.21	0.0625	0.289	-0.71856536	0.593	0.789
WLAN6GHz	802.11be-EHT320 MCS0	Front	9.83mm	Ant 5+4(4)	31	6105	14.21	0.25	0.341		0.111	0.245
WLAN6GHz	802.11be-EHT320 MCS0	Front	2mm	Ant 5+4(4)	191	6905	14.21	0.0625	0.422	-0.55023062	0.713	0.895
WLAN6GHz	802.11be-EHT320 MCS0	Front	8.69mm	Ant 5+4(4)	191	6905	14.21	0.25	0.479		0.145	0.289

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grid Step (λ)	Scaling Factor for Measurement Uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
01	WLAN6GHz	802.11be-EHT320 MCS0	Front	2mm	Ant 5+4(4)	127	6585	13.42	15.00	1.439	100.00	1.000	0.0625	1.5535	-0.1	1.72	3.84	2.14	4.78
02	WLAN6GHz	802.11be-EHT320 MCS0	Back	5mm	Ant 5+4(5)	127	6585	16.73	18.00	1.340	100.00	1.000	0.0625	1.5535	0.01	0.169	0.352	0.233	0.485
03	WLAN6GHz	802.11be-EHT320 MCS0	Back Top	2mm	Ant 5+4(5)	127	6585	16.73	18.00	1.340	100.00	1.000	0.0625	1.5535	0.02	0.232	0.48	0.411	0.86

16.6 Spot check compare result

General Note: In accordance with KDB 484596 D01 v03, SAR spot check verification of the worst-case configurations with the highest SAR for each equipment class and antenna from the parent model (FCC ID: IHDT56AY1) was performed to demonstrate that the test data from the parent model remains representative of the variant model.

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	Bluetooth	Left Cheek	0mm	0.478	0.654	0.299	0.409	0.368	0.701	0.451	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	Bluetooth	Back	5mm	0.623	0.753	0.389	0.471	0.209	0.611	0.361	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	Bluetooth	Back	5mm	0.623	0.753	0.389	0.471	0.209	0.611	0.361	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	5.8GHz WLAN	Left Cheek	0mm	1.035	0.816	0.647	0.510	0.212	0.353	0.250	Pass
PCE	WLAN6GHz	Left Tilted	0mm	0.390	0.387	0.244	0.242	0.008	0.756	0.500	Pass

Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	5.8GHz WLAN	Back	5mm	1.190	1.026	0.744	0.641	0.138	0.256	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	5.8GHz WLAN	Back	5mm	1.190	1.026	0.744	0.641	0.138	0.256	0.250	Pass
PCE	WLAN6GHz	Back	5mm	0.893	0.722	0.558	0.451	0.191	0.442	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	5.5GHz WLAN	Back Right	0mm	2.062	1.668	0.516	0.417	0.191	0.485	0.250	Pass
PCE	WLAN6GHz	Back Top	0mm	0.454	0.234	0.114	0.059	0.485	0.887	0.500	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	2.4GHz WLAN	Left Cheek	0mm	1.239	1.193	0.774	0.746	0.037	0.226	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	2.4GHz WLAN	Back	5mm	1.106	1.010	0.691	0.631	0.087	0.309	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	2.4GHz WLAN	Back	5mm	1.106	1.010	0.691	0.631	0.087	0.309	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	2.4GHz WLAN	Back Right	0mm	3.203	2.981	0.801	0.745	0.069	0.199	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	GSM850	Left Cheek	0mm	0.370	0.270	0.231	0.169	0.270	0.769	0.500	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	GSM850	Back	5mm	1.282	0.969	0.801	0.606	0.244	0.199	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model	Variant Model Reported	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion

				Reported 1g SAR (W/kg)	1g SAR (W/kg)						
PCE	GSM850	Back	5mm	1.282	0.969	0.801	0.606	0.244	0.199	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n41	Bottom Side	0mm	2.515	2.386	0.629	0.597	0.051	0.371	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 66	Right Cheek	0mm	1.280	1.195	0.800	0.747	0.066	0.200	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n7	Back	5mm	1.289	1.128	0.806	0.705	0.125	0.194	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 25	Back	5mm	1.279	0.977	0.799	0.611	0.236	0.201	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n41	Top Side	0mm	3.204	2.516	0.801	0.629	0.215	0.199	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	WCDMA IV	Right Cheek	0mm	0.227	0.155	0.142	0.097	0.317	0.858	0.500	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n66	Bottom Side	5mm	1.288	1.019	0.805	0.637	0.209	0.195	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n41	Back	5mm	1.279	1.125	0.799	0.703	0.120	0.201	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n25	Bottom Side	0mm	3.201	2.988	0.800	0.747	0.067	0.200	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Left Tilted	0mm	1.285	1.143	0.803	0.714	0.111	0.197	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Back	5mm	1.125	0.959	0.703	0.599	0.148	0.297	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Back	5mm	1.125	0.959	0.703	0.599	0.148	0.297	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Top Side	0mm	3.150	2.987	0.788	0.747	0.052	0.213	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Left Cheek	0mm	1.204	0.979	0.753	0.612	0.187	0.248	0.250	Pass
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Left Cheek	0mm	1.289	1.072	0.806	0.670	0.168	0.194	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Back	5mm	0.928	0.854	0.580	0.534	0.080	0.420	0.250	Pass
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Right Side	5mm	1.130	0.980	0.706	0.613	0.133	0.294	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Back	5mm	0.779	0.587	0.487	0.367	0.246	0.513	0.263	Pass
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 48	Back	5mm	1.097	1.087	0.686	0.679	0.009	0.314	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Back Right	0mm	3.054	2.518	0.764	0.630	0.176	0.237	0.250	Pass
Equipment	Band	Position	Gap(mm)	Parent	Variant	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion

Class				Model Reported 10g SAR (W/kg)	Model Reported 10g SAR (W/kg)						
PCE	FR1 n48	Back Right	0mm	2.703	2.145	0.676	0.536	0.206	0.324	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 25	Left Cheek	0mm	1.273	1.014	0.796	0.634	0.203	0.204	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 25	Right Side	5mm	1.140	1.136	0.713	0.710	0.004	0.288	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 41_HPUE	Back	5mm	1.185	0.917	0.741	0.573	0.226	0.259	0.250	Pass
Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 41_HPUE	Back Right	0mm	2.735	2.312	0.684	0.578	0.155	0.316	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Right Cheek	0mm	1.224	0.991	0.765	0.619	0.190	0.235	0.250	Pass
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Right Cheek	0mm	1.280	1.194	0.800	0.746	0.067	0.200	0.250	Pass
Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Back	5mm	1.268	1.108	0.793	0.693	0.126	0.208	0.250	Pass
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Back	5mm	1.068	0.981	0.668	0.613	0.081	0.333	0.250	Pass
Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	LTE Band 42 (27Q)	Back	5mm	1.268	1.108	0.793	0.693	0.126	0.208	0.250	Pass

Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Back Left	0mm	2.325	2.271	0.581	0.568	0.023	0.419	0.250	Pass

Head Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Right Cheek	0mm	0.297	0.382	0.186	0.239	0.286	0.814	0.500	Pass

Hotspot Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Right Side	5mm	1.001	0.828	0.626	0.518	0.173	0.374	0.250	Pass

Body-Worn Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Front	5mm	1.281	0.989	0.801	0.618	0.228	0.199	0.250	Pass

Extremity Exposure Condition											
Equipment Class	Band	Position	Gap(mm)	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	M	d _{TERmax}	Pass Criterion
PCE	FR1 n48	Right Side	0mm	1.904	2.332	0.476	0.583	0.225	0.524	0.274	Pass

Conclusion:

Per KDB 484596 D01v03, the spot check SAR results were compared with the worst-case results of the parent model. All wireless technologies met the condition $d_{TER} \leq d_{TERmax(M)}$. Therefore, based on the guidance, SAR data reuse is justified.

16.7 Repeated SAR Measurement

【Repeat SAR 1g - FCC】

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Ratio
1st	FR1 n14_HPUE	10M_BPSK_25_14	Right Cheek	0.0	Ant 1	DSI 2	158600	793	25.27	26.20	1.239			0.04	0.977	1.211	-
2nd	FR1 n14_HPUE	10M_BPSK_25_14	Right Cheek	0.0	Ant 1	DSI 2	158600	793	25.27	26.20	1.239			-0.03	0.945	1.171	1.03
1st	LTE Band 66	20M_QPSK_1_0	Right Cheek	0mm	Ant 1	DSI 2	132572	1770	16.87	17.60	1.183			0.12	1.010	1.195	-
2nd	LTE Band 66	20M_QPSK_1_0	Right Cheek	0mm	Ant 1	DSI 2	132572	1770	16.87	17.60	1.183			-0.03	0.987	1.168	1.02
1st	FR1 n48	40M_BPSK_1_1	Right Cheek	0mm	Ant 7	DSI 2	641666	3624.99	20.58	20.90	1.076			0.03	1.110	1.194	-
2nd	FR1 n48	40M_BPSK_1_1	Right Cheek	0mm	Ant 7	DSI 2	641666	3624.99	20.58	20.90	1.076			-0.09	1.030	1.108	1.08
1st	2.4GHz WLAN	802.11b 1Mbps	Left Cheek	0mm	Ant 3+6(3)	DSI 2	11	2462	19.46	20.50	1.271	97.7	1.024	-0.02	0.917	1.193	-
2nd	2.4GHz WLAN	802.11b 1Mbps	Left Cheek	0mm	Ant 3+6(3)	DSI 2	11	2462	19.46	20.50	1.271	97.7	1.024	-0.07	0.903	1.175	1.02
1st	FR1 n7	50M_BPSK_1_1	Back	5mm	Ant 1	DSI 7	507000	2535	17.45	18.30	1.216			0	0.928	1.128	-
2nd	FR1 n7	50M_BPSK_1_1	Back	5mm	Ant 1	DSI 7	507000	2535	17.45	18.30	1.216			-0.02	0.911	1.108	1.02
1st	FR1 n25	40M_BPSK_108_54	Left Cheek	0.0	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			0.01	1.010	1.154	-
2nd	FR1 n25	40M_BPSK_108_54	Left Cheek	0.0	Ant 6	DSI 2	376500	1882.5	21.42	22.00	1.143			0.05	0.991	1.133	1.02
1st	FR1 n30	10M_BPSK_25_14	Right Tilted	0.0	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			0.00	1.060	1.234	-
2nd	FR1 n30	10M_BPSK_25_14	Right Tilted	0.0	Ant 1	DSI 2	462000	2310	22.34	23.00	1.164			-0.03	1.020	1.187	1.04
1st	FR1 n77	100M_BPSK_1_1	Left Cheek	0.0	Ant 5	DSI 2	633332	3500	21.08	21.50	1.101			-0.03	1.170	1.289	-
2nd	FR1 n77	100M_BPSK_1_1	Left Cheek	0.0	Ant 5	DSI 2	633332	3500	21.08	21.50	1.101			0.01	1.080	1.190	1.08

【Repeat SAR 10g - FCC】

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Ratio
1st	FR1 n25	40M_BPSK_1_1	Bottom Side	0mm	Ant 2	DSI 6	376500	1882.5	22.49	24.00	1.416			0	2.110	2.988	-
2nd	FR1 n25	40M_BPSK_1_1	Bottom Side	0mm	Ant 2	DSI 6	376500	1882.5	22.49	24.00	1.416			-0.04	2.040	2.889	1.03
1st	FR1 n48	40M_BPSK_100_0	Top Side	0mm	Ant 4	DSI 6	641666	3624.99	19.72	20.80	1.282			-0.02	2.330	2.987	-
2nd	FR1 n48	40M_BPSK_100_0	Top Side	0mm	Ant 4	DSI 6	641666	3624.99	19.72	20.80	1.282			-0.09	2.250	2.885	1.04
1st	2.4GHz WLAN	802.11b 1Mbps	Back Right	0mm	Ant 3+6(3)	DSI 6	11	2462	22.68	23.50	1.208	97.7	1.024	-0.02	2.410	2.981	-
2nd	2.4GHz WLAN	802.11b 1Mbps	Back Right	0mm	Ant 3+6(3)	DSI 6	11	2462	22.68	23.50	1.208	97.7	1.024	0.05	2.330	2.882	1.03
1st	FR1 n30	10M_BPSK_1_1	Top Side	0.0	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.04	2.190	3.165	-
2nd	FR1 n30	10M_BPSK_1_1	Top Side	0.0	Ant 1	DSI 6	462000	2310	21.40	23.00	1.445			-0.09	2.100	3.035	1.04
1st	FR1 n77	100M_BPSK_1_1	Back Left	0.0	Ant 7	DSI 6	633332	3500	23.31	24.00	1.172			0.00	2.570	3.012	-
2nd	FR1 n77	100M_BPSK_1_1	Back Left	0.0	Ant 7	DSI 6	633332	3500	23.31	24.00	1.172			0.02	2.420	2.837	1.06

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, only one repeated measurement is required.
3. 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.



16.8 Power Class 2 and Power Class 3 Linearity

General Note:

This device support Power Class 2 and Power Class 3 operations for FR1 n77. The highest available duty cycle for Power Class 2 operation 50% for 5GNR using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

【Head】

FR1 n77 (270) _Ant 7 (n77 part 270)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	20.3	23.3
Reported 1g SAR (W/kg)	1.156	1.086
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	107.15	106.90
Linearity SAR (W/kg)	1.15	
% deviation from Expected Linearity		-5.84%
FR1 n77 (270) _Ant 5 (n77 part 270)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.5	24.5
Reported 1g SAR (W/kg)	0.839	0.792
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	0.84	
% deviation from Expected Linearity		-5.38%
FR1 n77 (270) _Ant 8 (n77 part 270)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	24.0	27.0
Reported 1g SAR (W/kg)	0.264	0.284
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.26	
% deviation from Expected Linearity		7.83%
FR1 n77 (27Q) _Ant 4 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	18.3	21.3
Reported 1g SAR (W/kg)	1.221	1.206
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	67.61	67.45
Linearity SAR (W/kg)	1.22	
% deviation from Expected Linearity		-0.99%
FR1 n77 (27Q) _Ant 5 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.5	24.5
Reported 1g SAR (W/kg)	1.289	1.231
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	1.29	
% deviation from Expected Linearity		-4.28%
FR1 n77 (27Q) _Ant 7 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	20.3	23.3
Reported 1g SAR (W/kg)	0.937	0.958
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	107.15	106.90



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Linearity SAR (W/kg)	0.93	
% deviation from Expected Linearity		2.48%
FR1 n77 (27Q)_Ant 8 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	24.0	27.0
Reported 1g SAR (W/kg)	0.299	0.271
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.30	
% deviation from Expected Linearity		-9.15%

【Hotspot】

FR1 n77 (27O)_Ant 4 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	18.6	21.6
Reported 1g SAR (W/kg)	0.660	0.622
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	72.44	72.27
Linearity SAR (W/kg)	0.66	
% deviation from Expected Linearity		-5.54%
FR1 n77 (27O)_Ant 5 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.0	24.0
Reported 1g SAR (W/kg)	0.820	0.791
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.82	
% deviation from Expected Linearity		-3.31%
FR1 n77 (27O)_Ant 7 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.1	24.1
Reported 1g SAR (W/kg)	0.915	0.886
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	128.82	128.52
Linearity SAR (W/kg)	0.91	
% deviation from Expected Linearity		-2.94%
FR1 n77 (27O)_Ant 8 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	19.2	22.2
Reported 1g SAR (W/kg)	1.060	0.997
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	83.18	82.98
Linearity SAR (W/kg)	1.06	
% deviation from Expected Linearity		-5.72%
FR1 n77 (27Q)_Ant 4 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	18.6	21.6
Reported 1g SAR (W/kg)	0.737	0.727
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	72.44	72.27
Linearity SAR (W/kg)	0.74	
% deviation from Expected Linearity		-1.12%
FR1 n77 (27Q)_Ant 5 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.0	24.0
Reported 1g SAR (W/kg)	1.111	1.085



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Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	1.11	
% deviation from Expected Linearity		-2.11%
FR1 n77 (27Q)_Ant 7 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.1	24.1
Reported 1g SAR (W/kg)	1.192	1.158
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	128.82	128.52
Linearity SAR (W/kg)	1.19	
% deviation from Expected Linearity		-2.63%
FR1 n77 (27Q)_Ant 8 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	19.2	22.2
Reported 1g SAR (W/kg)	1.231	1.198
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	83.18	82.98
Linearity SAR (W/kg)	1.23	
% deviation from Expected Linearity		-2.45%

[Body_worn]

FR1 n77 (27Q)_Ant 4 (n77 part 27Q)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	18.6	21.6
Reported 1g SAR (W/kg)	0.660	0.644
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	72.44	72.27
Linearity SAR (W/kg)	0.66	
% deviation from Expected Linearity		-2.19%
FR1 n77 (27Q)_Ant 5 (n77 part 27Q)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.0	24.0
Reported 1g SAR (W/kg)	0.820	0.791
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.82	
% deviation from Expected Linearity		-3.31%
FR1 n77 (27Q)_Ant 7 (n77 part 27Q)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.1	24.1
Reported 1g SAR (W/kg)	0.915	0.859
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	128.82	128.52
Linearity SAR (W/kg)	0.91	
% deviation from Expected Linearity		-5.90%
FR1 n77 (27Q)_Ant 8 (n77 part 27Q)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	22.4	25.4
Reported 1g SAR (W/kg)	1.165	1.151
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	173.78	173.37
Linearity SAR (W/kg)	1.16	
% deviation from Expected Linearity		-0.97%
FR1 n77 (27Q)_Ant 4 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	18.6	21.6



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Reported 1g SAR (W/kg)	0.737	0.727
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	72.44	72.27
Linearity SAR (W/kg)	0.74	
% deviation from Expected Linearity		-1.12%
FR1 n77 (27Q)_Ant 5 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.0	24.0
Reported 1g SAR (W/kg)	1.111	1.085
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	1.11	
% deviation from Expected Linearity		-2.11%
FR1 n77 (27Q)_Ant 7 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.1	24.1
Reported 1g SAR (W/kg)	1.115	1.158
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	128.82	128.52
Linearity SAR (W/kg)	1.11	
% deviation from Expected Linearity		4.10%
FR1 n77 (27Q)_Ant 8 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	22.4	25.4
Reported 1g SAR (W/kg)	1.163	1.132
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	173.78	173.37
Linearity SAR (W/kg)	1.16	
% deviation from Expected Linearity		-2.44%

【Extremity】

FR1 n77 (27O)_Ant 4 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.2	24.2
Reported 10g SAR (W/kg)	3.000	2.931
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	131.83	131.51
Linearity SAR (W/kg)	2.99	
% deviation from Expected Linearity		-2.06%
FR1 n77 (27O)_Ant 5 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	22.5	25.5
Reported 10g SAR (W/kg)	2.079	1.995
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41
Linearity SAR (W/kg)	2.07	
% deviation from Expected Linearity		-3.81%
FR1 n77 (27O)_Ant 7 (n77 part 27O)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	24.0	27.0
Reported 10g SAR (W/kg)	2.877	2.768
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	2.87	
% deviation from Expected Linearity		-3.56%



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FR1 n77 (27Q)_Ant 4 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	21.2	24.2
Reported 10g SAR (W/kg)	3.127	3.044
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	131.83	131.51
Linearity SAR (W/kg)	3.12	
% deviation from Expected Linearity		-2.42%
FR1 n77 (27Q)_Ant 5 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	22.5	25.5
Reported 10g SAR (W/kg)	2.801	2.906
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41
Linearity SAR (W/kg)	2.79	
% deviation from Expected Linearity		3.99%
FR1 n77 (27Q)_Ant 7 (FCC)	Power Class 3	Power Class 2
Max Tune Up Power (dBm)	24.0	27.0
Reported 10g SAR (W/kg)	3.012	2.894
Duty Cycle (%)	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	3.00	
% deviation from Expected Linearity		-3.69%

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
2.	WWAN + 5GHz WLAN	Yes	Yes	Yes	Yes
3.	WWAN + 6GHz WLAN	Yes	Yes		Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + 802.15.4ab	Yes	Yes	Yes	Yes
6.	5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
7.	6GHz WLAN + Bluetooth	Yes	Yes		Yes
8.	5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
9.	6GHz WLAN + 2.4GHz WLAN	Yes	Yes		Yes
10.	WWAN + 802.15.4ab	Yes	Yes	Yes	Yes
11.	WWAN + 5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
12.	WWAN + 6GHz WLAN + Bluetooth	Yes	Yes		Yes
13.	WWAN +5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
14.	WWAN +6GHz WLAN + 2.4GHz WLAN	Yes	Yes		Yes
15.	WWAN + 2.4GHz WLAN + 802.15.4ab	Yes	Yes	Yes	Yes
16.	WWAN + 2.4GHz WLAN+NFC				Yes
17.	WWAN + 5GHz WLAN+NFC				Yes
18.	WWAN + 6GHz WLAN+NFC				Yes
19.	WWAN + Bluetooth + NFC				Yes
20.	WAN + 802.15.4ab + NFC				Yes
21.	5GHz WLAN + Bluetooth + NFC				Yes
22.	6GHz WLAN + Bluetooth + NFC				Yes
23.	5GHz WLAN + 2.4GHz WLAN + NFC				Yes
24.	6GHz WLAN + 2.4GHz WLAN + NFC				Yes
25.	2.4GHz WLAN + 802.15.4ab + NFC				Yes
26.	WWAN +5GHz WLAN + Bluetooth + NFC				Yes
27.	WWAN +6GHz WLAN + Bluetooth + NFC				Yes
28.	WWAN +5GHz WLAN + 2.4GHz WLAN+NFC				Yes
29.	WWAN +6GHz WLAN + 2.4GHz WLAN+NFC				Yes
30.	WWAN + 2.4GHz WLAN + 802.15.4ab+NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed SAR exposure limit. Therefore, simultaneous transmission compliance between 4G+5G NR operations within an antenna group is demonstrated in the Part 2 Report during algorithm validation.
- This device WLAN 2.4GHz support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only). WLAN 6GHz has no hotspot function.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz cannot transmit simultaneously.
- According to the EUT characteristic, UWB (802.15.4ab) and WLAN 5GHz/6GHz cannot transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- For Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.

15. The equipment under test (EUT) contains the Qualcomm modems supporting 2G/3G/4G/5G technologies and WLAN/BT/ UWB (802.15.4ab) technologies. these modems are always enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure follows the FCC requirement. Smart Transmit algorithm controls the total RF exposure from all WWAN/WLAN/BT/ UWB (802.15.4ab) to not exceed FCC limit and each antenna group has controlled the total RF exposure from all transmitter to not exceed FCC limit. Therefore, in Part.1 report, it is evaluated whether the sum of the groups of each antenna does not exceed FCC limit or spatial separation is applied. In addition, each antenna needs to satisfy simultaneous transmission analysis with External radios (NFC) in this report at extremity exposure condition.
16. The maximum SAR summation is calculated based on the same configuration and test position.
17. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/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 $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - v) The SPLSR calculated results please refer to section 17.8.
18. Since the WPT will only operate on body condition, therefore, WPT transmit with WWAN/WLAN/BT UWB (802.15.4ab) only consider at hotspot / body-worn/extremity conditions, the further Sim-Tx analysis include in section 17.8.
19. The simultaneous transmission analysis, considering UWB (6489.6 MHz & 7987.2 MHz) power is very smaller and no risk, the contribution of UWB to the total TER can be neglected.

17.1 Qualcomm Smart Transmit Simultaneous Transmission Guidance

Based on Qualcomm Smart Transmit simultaneous transmission analysis guidance, If all radios are selected to be under Smart Transmit control in EFS version 19 (or higher), then RF exposure from radios are managed by Smart Transmit in the same way. No additional TER analysis is needed

Smart Transmit current implementation assumes hotspots from all active radios are collocated. Therefore, for a total of 100% exposure margin, if primary radio uses x%, then the exposure margin left for secondary radio(s) is capped to (100-x)%. Thus, the compliance equation for simultaneous active radios, such as follow,

$$x\% * A + (100-x)\% * B \leq 1.0$$

where, A is normalized time-averaged SAR exposure corresponding to “maximum of {minimum [EFS Plimit + device uncertainty; NV setting Pmax + device uncertainty]; EFS Plimit}” from primary radio, and $A \leq 1.0$; B for secondary radio(s) is

(for legacy radio or sub6 NR): normalized time-averaged SAR exposure corresponding to “maximum of {minimum [EFS Plimit + device uncertainty; NV setting Pmax + device uncertainty]; EFS Plimit } ”

and $B \leq 1.0$. As can be seen, A and B by definition is the exposure corresponding to “maximum of {minimum [EFS Plimit + device uncertainty; NV setting Pmax + device uncertainty]; EFS Plimit}”, and it is NOT defined as reported exposure

The total RF exposure in this simultaneous transmission scenario is controlled and managed within Smart Transmit operation, and the compliance is demonstrated in Part 2 test.

17.2 Sub6 Antenna Groups

The Qualcomm® Smart Transmit™ Plus2.0 of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG. This is accomplished by demonstrating below conditions for all exposure positions under each DSI for a given exposure category.

- 1) Case 1: Demonstrate that Sum of maximum reported SAR from each of the sub6 AGs and the reported normalized SAR values from radios outside Smart Transmit should be less than regulatory limits for each supported DSI. This condition must be demonstrated for all antenna combinations of sub6 AGs.
 - i. For a given DSI, obtain the highest *reported* SAR for each antenna out of all supported technologies and frequency bands. Obtain the maximum *reported* SAR for each AG by taking the maximum out of *reported* SAR for all antennas belonging to each AG.
 - ii. Demonstrate that the sum of maximum reported SAR (normalized to regulatory limit) from each of the sub6 AGs and the sum of reported SAR (normalized to regulatory limit) from all supported radios outside of Smart Transmit should be less than 1.0
- 2) Case 2: If the Case 1 is NOT met, then for a given antenna grouping scheme plus external radios/antennas (ERs) (referred to as 'configuration'), demonstrate all AG pairs, all ER pairs and all (AG, ER) pairs in the configuration meet SPLSR criteria (Section 4.3.2 (c) in FCC KDB 447498 D01 v06) for each exposure position under each supported DSI. For a given exposure position under a given DSI, prove all AG pairs, all ER pairs and all (AG, ER) pairs (if there are external radios outside Smart Transmit) in the configuration meet SPLSR.

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

Antenna Group 0 (AG0)	ANT1 & ANT4 & ANT5 & ANT6 & ANT3& ANT7
Antenna Group 1 (AG1)	ANT0 & ANT2 & ANT8

The conditions are verified through the following criterias:

- i) (SAR1 + SAR2 criteria): If SPLSR criteria is not used, then the highest reported SAR at *Plimit* for each antenna should be obtained out of all supported technologies and frequency bands for each DSI. Demonstrate that the sum of reported SAR of one antenna from each of the sub6 AGs and the sum of RF exposure from all supported radios outside of Smart Transmit should be less than the regulatory limit as given below for each DSI.
 1. Obtain the worst-case reported SAR for each antenna group (i.e., maximum *reported* SAR at *Plimit* out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and obtain the worst-case RF exposure for each external radio, and demonstrate that the sum of these RF exposures meets: $\{ [\text{max.SAR.AG0} + \text{max.SAR.AG1}] + \text{each external radio worst-case reported SAR (ex: NFC)} \} \leq 1.6$ (for 1g, or 4.0 for 10g). (each external radio worst-case reported SAR is the worst SAR in all combinations of each external radio simultaneous transmission).
- ii) (SPLSR criteria): For each antenna, obtain the highest reported SAR value at *Plimit* out of all supported technologies for each frequency band. Using these values, demonstrate for a given DSI that every antenna from one sub6 AG meets SPLSR criteria with every antenna in another sub6 AG for all frequency bands. This criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios as given below for each DSI:
 - a. SPLSR criteria should be met for all antenna pair combinations of AG0 and AG1. As it can be seen, these include all combinations of antenna groups, antennas, and frequency bands.
 - b. Obtain combined SAR per AG: Obtain the worst-case conservative combined SAR and its peak location for each AG.
 - c. Use the 'closest' peak location out of all antennas of AGj to evaluate SPLSR with other AGs in the configuration. Note, by 'closest', select the peak location out of all antennas (ϵ AGj) that is closest to the peak location of other AG where SPLSR is evaluated.
- iii) (combination of SPLSR SAR1+SAR2 criteria): If SPLSR criteria for all the combinations of sub6g antenna groups in (i) is demonstrated to show that each AG is mutually exclusive from other AGs, and if the WIFI/BT antennas supported outside of Smart Transmit do not meet SPLSR criteria, then the condition in (ii) reduces to: $\{ \text{max.SAR.AG0} + \text{worst-case reported SAR} \} \leq 1.6$ and $\{ \text{max.SAR.AG1} + \text{worst-case reported SAR} \} \leq 1.6$ for compliance demonstration (for 1g, or 4.0 for 10g).
- iv) Obtain the worst-case reported SAR for each antenna group, (i.e., maximum *reported* SAR at *Plimit* out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and WIFI/BT antennas supported Smart Transmit technology and there is no other radios in this report, and demonstrate that the sum of these RF exposures meets: $\{ [\text{max.SAR.AG0} + \text{max.SAR.AG1}] \} \leq 1.6$ (for 1g, or 4.0 for 10g).

For summed SAR results and SPLSR detailed analysis please refer to section 17.3 / 17.4/ 17.5 / 17.6 / 17.7 / 17.8 of this report. All of the combinations of sub6 antenna groups are sufficient to show that AG0 is mutually exclusive from AG1 and



that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

17.3 Head Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WWAN+BT:

AG0 maximum reported SAR:

Test Position	WWAN6GHz Ant5+4	UWB Ant5	MAX
Right Cheek	0.209	0.266	0.266
Right Tilted	0.219	0.133	0.219
Left Cheek	0.274	0.951	0.951
Left Tilted	0.39	0.292	0.390

AG1 maximum reported SAR:

Test Position	Ant0	Ant2	Ant8	MAX
Right Cheek	0.183	0.227	0.3	0.227
Right Tilted	0.138	0.182	0.095	0.182
Left Cheek	0.37	0.184	0.204	0.370
Left Tilted	0.199	0.165	0.184	0.199

Simultaneous Transmission analysis of AG0 + AG1 Worse-case:

Test Position	AG0	AG1	AG0+AG1
Right Cheek	0.266	0.227	0.49
Right Tilted	0.219	0.182	0.40
Left Cheek	0.951	0.370	1.32
Left Tilted	0.390	0.199	0.59

<WWAN DSI 2, WLAN DSI 2, Bluetooth DSI 2>

WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		WWAN6		WWAN7		WWAN8		Exposure Position	1	2	3	4	5	6	7	8
Max WWAN	Ant 0	Max WWAN	Ant 2	Max WWAN	Ant 8	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7		WWAN1 1g SAR (W/kg)	WWAN2 1g SAR (W/kg)	WWAN3 1g SAR (W/kg)	WWAN4 1g SAR (W/kg)	WWAN5 1g SAR (W/kg)	WWAN6 1g SAR (W/kg)	WWAN7 1g SAR (W/kg)	WWAN8 1g SAR (W/kg)
																Right Cheek	0.183	0.227	0.300	1.280	0.710	0.313	0.688	1.288
																Right Tilted	0.138	0.182	0.095	1.239	0.892	0.254	0.183	0.620
																Left Cheek	0.370	0.184	0.204	0.598	1.173	1.289	1.273	0.396
																Left Tilted	0.199	0.165	0.184	0.709	1.285	0.969	0.483	0.215

<WWAN DSI 2, WLAN DSI 2, Bluetooth DSI 2>

9	10	11	12	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)	1+12 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)	2+5 Summed 1g SAR (W/kg)	2+6 Summed 1g SAR (W/kg)	2+7 Summed 1g SAR (W/kg)	2+8 Summed 1g SAR (W/kg)	2+9 Summed 1g SAR (W/kg)
2.4GHz WLAN Ant 3+6 1g SAR (W/kg)	5GHz WLAN Ant 4+5 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)															
0.396	0.694	0.260	0.065	1.46	0.89	0.50	0.87	1.47	0.58	0.88	0.44	0.25	1.51	0.94	0.54	0.86	1.52	0.62
0.475	0.706	0.322	0.002	1.38	1.03	0.39	0.32	0.76	0.61	0.84	0.46	0.14	1.42	1.07	0.44	0.37	0.80	0.66
1.239	1.035	0.478	0.177	0.97	1.54	1.66	1.64	0.77	1.61	1.40	0.85	0.55	0.78	1.36	1.47	1.46	0.58	1.42
1.062	0.943	0.459	0.063	0.91	1.48	1.17	0.68	0.41	1.26	1.14	0.66	0.26	0.87	1.45	1.13	0.65	0.38	1.23

<WWAN DSI 2, WLAN DSI 2, Bluetooth DSI 2>

2+10 Summed 1g SAR (W/kg)	2+11 Summed 1g SAR (W/kg)	2+12 Summed 1g SAR (W/kg)	3+4 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	3+7 Summed 1g SAR (W/kg)	3+8 Summed 1g SAR (W/kg)	3+9 Summed 1g SAR (W/kg)	3+10 Summed 1g SAR (W/kg)	3+11 Summed 1g SAR (W/kg)	3+12 Summed 1g SAR (W/kg)	1+6 SPLSR	1+6 Case No.	1+7 SPLSR	1+7 Case No.	1+9 SPLSR	1+9 Case No.
0.92	0.49	0.29	1.58	1.01	0.61	0.99	1.59	0.70	0.99	0.56	0.37						
0.89	0.50	0.18	1.33	0.99	0.35	0.28	0.72	0.57	0.80	0.42	0.10						
1.22	0.66	0.36	0.80	1.38	1.49	1.48	0.60	1.44	1.24	0.68	0.38	0.030	Case 45	0.030	Case 47	0.020	Case 46
1.11	0.62	0.23	0.89	1.47	1.15	0.67	0.40	1.25	1.13	0.64	0.25						

17.4 Hotspot Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.
Simultaneous Transmission Evaluation of WWAN+WLAN+BT:
AG0 maximum reported SAR:

Test Position	UWB Ant5	MAX
Front	0.329	0.329
Back	0.908	0.908
Left Side	0.072	0.072
Right Side	0.304	0.304
Top Side	0.155	0.155
Bottom Side	0.072	0.072

AG1 maximum reported SAR:

Test Position	Ant0	Ant2	Ant8	MAX
Front	1.123	0.929	0.58	1.123
Back	1.282	0.929	0.617	1.282
Left Side	1.15	0.399	0.017	1.150
Right Side	0.174	0.407	1.262	0.407
Top Side	0.097	0.053	0.019	0.097
Bottom Side	1.274	1.288	0.093	1.288

Simultaneous Transmission analysis of AG0 + AG1 Worse-case:

Test Position	AG0	AG1	AG0+AG1
Front	0.329	1.123	1.45
Back	0.908	1.282	2.19
Left Side	0.072	1.150	1.22
Right Side	0.304	0.407	0.71
Top Side	0.155	0.097	0.25
Bottom Side	0.072	1.288	1.36

Note: The results marked yellow in above table refers to the detailed analysis corresponding to each position below tables.

Back				
Ant combination	AG1	AG0	AG0+AG1	SPLSR
	SAR	SAR		
Ant0-UBW Ant 5	1.282	0.908	2.19	1
Ant2-UBW Ant 5	0.929	0.908	1.84	2
Ant8-UBW Ant 5	0.617	0.908	1.53	

<WWAN DSI 7, WLAN DSI 7, Bluetooth DSI 7>

WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		WWAN6		WWAN7		WWAN8		Exposure Position	1	2	3	4	5	6	7	8
Max WWAN	Ant 0	Max WWAN	Ant 2	Max WWAN	Ant 8	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7		WWAN1	WWAN2	WWAN3	WWAN4	WWAN5	WWAN6	WWAN7	WWAN8
																	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Max WWAN	Ant 0	Max WWAN	Ant 2	Max WWAN	Ant 8	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	1.123	0.929	0.580	1.186	0.361	0.552	0.434	0.661
																Back	1.282	0.929	0.617	1.289	1.125	1.125	0.851	1.268
																Left Side	1.150	0.399	0.017	1.238	0.054	0.018	0.011	1.052
																Right Side	0.174	0.407	1.262	1.238	0.337	1.130	1.140	0.065
																Top Side	0.097	0.053	0.019	1.187	1.196	0.165	0.165	0.110
																Bottom Side	1.274	1.288	0.093	0.029	0.024	0.022	0.026	0.044

<WWAN DSI 7, WLAN DSI 7, Bluetooth DSI 7>

9	10	11	12	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)	1+12 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)	2+5 Summed 1g SAR (W/kg)	2+6 Summed 1g SAR (W/kg)	2+7 Summed 1g SAR (W/kg)	2+8 Summed 1g SAR (W/kg)	2+9 Summed 1g SAR (W/kg)	2+10 Summed 1g SAR (W/kg)
2.4GHz WLAN Ant 3+6 1g SAR (W/kg)	5GHz WLAN Ant 4+5 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	2.31	1.48	1.68	1.56	1.78	1.73	1.55	1.60	1.20	2.12	1.29	1.48	1.36	1.59	1.53	1.36
0.602	0.429	0.472	0.079	2.57	2.41	2.41	2.13	2.55	2.39	2.47	1.91	1.53	2.22	2.05	2.05	1.78	2.20	2.04	2.12
1.106	1.190	0.623	0.250																



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0.044	0.040	0.002	0.002	2.39	1.20	1.17	1.16	2.20	1.19	1.19	1.15	1.15	1.64	0.45	0.42	0.41	1.45	0.44	0.44
0.893	0.303	0.148	0.276	1.41	0.51	1.30	1.31	0.24	1.07	0.48	0.32	0.45	1.65	0.74	1.54	1.55	0.47	1.30	0.71
0.554	0.369	0.380	0.025	1.28	1.29	0.26	0.26	0.21	0.65	0.47	0.48	0.12	1.24	1.25	0.22	0.22	0.16	0.61	0.42
		0.002	0.002	1.30	1.30	1.30	1.30	1.32	1.27	1.27	1.28	1.28	1.32	1.31	1.31	1.31	1.33	1.29	1.29

<WWAN DSI 7, WLAN DSI 7, Bluetooth DSI 7>

2+11 Summed 1g SAR (W/kg)	2+12 Summed 1g SAR (W/kg)	3+4 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	3+7 Summed 1g SAR (W/kg)	3+8 Summed 1g SAR (W/kg)	3+9 Summed 1g SAR (W/kg)	3+10 Summed 1g SAR (W/kg)	3+11 Summed 1g SAR (W/kg)	3+12 Summed 1g SAR (W/kg)	1+4 SPLSR	1+4 Case No.	1+5 SPLSR	1+5 Case No.	1+6 SPLSR	1+6 Case No.	1+7 SPLSR	1+7 Case No.
1.40	1.01	1.77	0.94	1.13	1.01	1.24	1.18	1.01	1.05	0.66	0.030	Case 50			0.020	Case 51		
1.55	1.18	1.91	1.74	1.74	1.47	1.89	1.72	1.81	1.24	0.87	0.030	Case 56	0.030	Case 57	0.030	Case 58	0.030	Case 59
0.40	0.40	1.25	0.07	0.04	0.03	1.07	0.06	0.06	0.02	0.02	0.040	Case 77						
0.55	0.68	2.50	1.60	2.39	2.40	1.33	2.16	1.57	1.41	1.54								
0.43	0.08	1.21	1.21	0.18	0.18	0.13	0.57	0.39	0.40	0.04								
1.29	1.29	0.12	0.12	0.12	0.12	0.14	0.09	0.09	0.10	0.10								

<WWAN DSI 7, WLAN DSI 7, Bluetooth DSI 7>

1+8 SPLSR	1+8 Case No.	1+9 SPLSR	1+9 Case No.	1+10 SPLSR	1+10 Case No.	1+11 SPLSR	1+11 Case No.	2+4 SPLSR	2+4 Case No.	2+5 SPLSR	2+5 Case No.	2+6 SPLSR	2+6 Case No.	2+7 SPLSR	2+7 Case No.	2+8 SPLSR	2+8 Case No.	2+9 SPLSR	2+9 Case No.
0.020	Case 52	0.020	Case 53			0.010	Case 96	0.020	Case 54										
0.040	Case 60	0.030	Case 61	0.030	Case 62	0.020	Case 63	0.020	Case 64	0.020	Case 65	0.020	Case 66	0.020	Case 67	0.030	Case 68	0.020	Case 69
0.040	Case 78							0.020	Case 79										
								0.020	Case 80										

<WWAN DSI 7, WLAN DSI 7, Bluetooth DSI 7>

2+10 SPLSR	2+10 Case No.	3+4 SPLSR	3+4 Case No.	3+5 SPLSR	3+5 Case No.	3+6 SPLSR	3+6 Case No.	3+7 SPLSR	3+7 Case No.	3+8 SPLSR	3+8 Case No.	3+9 SPLSR	3+9 Case No.	3+10 SPLSR	3+10 Case No.
		0.020	Case 55												
0.030	Case 70	0.020	Case 71	0.020	Case 72	0.020	Case 73			0.030	Case 74	0.020	Case 75	0.030	Case 76
		0.040	Case 81	0.020	Case 82	0.040	Case 49	0.040	Case 83			0.030	Case 84		



17.5 Body-Worn Accessory Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

AG0 maximum reported SAR:

Test Position	WLAN6GHz Ant5+4	UWB Ant5	MAX
Front	0.315	0.329	0.329
Back	0.893	0.908	0.908

AG1 maximum reported SAR:

Test Position	Ant0	Ant2	Ant8	MAX
Front	1.057	1.278	1.281	1.278
Back	1.282	1.279	1.181	1.282

Simultaneous Transmission analysis of AG0 + AG1 Worse-case:

Test Position	AG0	AG1	AG0+AG1
Front	0.329	1.278	1.61
Back	0.908	1.282	2.19

Note: The results marked yellow in above table refers to the detailed analysis corresponding to each position below tables.

Back				
Ant combination	AG1	AG0	AG0+AG1	SPLSR
	SAR	SAR		
Ant0-WLAN6GHz Ant5+4	1.282	0.893	2.18	1
Ant0-UBW Ant 5	1.282	0.908	2.19	2
Ant2-WLAN6GHz Ant5+4	1.279	0.893	2.17	3
Ant2-UBW Ant 5	1.279	0.908	2.19	4
Ant8-WLAN6GHz Ant5+4	1.181	0.893	2.07	5
Ant8-UBW Ant 5	1.181	0.908	2.09	6

<WWAN DSI 3, WLAN DSI 3, Bluetooth DSI 3>

WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		WWAN6		WWAN7		WWAN8		Exposure Position	1	2	3	4	5	6	7	8	
WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		WWAN6		WWAN7		WWAN8			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Max WWAN	Ant 0	Max WWAN	Ant 2	Max WWAN	Ant 8	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7		Front	1.057	1.278	1.281	1.197	0.361	0.552	0.650	0.661
																Back	1.282	1.279	1.181	1.279	1.125	1.114	1.185	1.268	

<WWAN DSI 3, WLAN DSI 3, Bluetooth DSI 3>

9	10	11	12	1+4	1+5	1+6	1+7	1+9	1+10	1+11	1+12	2+4	2+5	2+6	2+7	2+8	2+9	2+10	2+11
2.4GHz WLAN Ant 3+6	5GHz WLAN Ant 4+5	Bluetooth Ant 3	Bluetooth Ant 6	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
0.602	0.365	0.472	0.079	2.25	1.42	1.61	1.71	1.66	1.42	1.53	1.14	2.49	1.64	1.83	1.93	1.94	1.88	1.64	1.75
1.106	1.190	0.623	0.250	2.56	2.41	2.40	2.47	2.39	2.47	1.91	1.53	2.56	2.40	2.39	2.46	2.55	2.38	2.47	1.90

<WWAN DSI 3, WLAN DSI 3, Bluetooth DSI 3>

2+12	3+4	3+5	3+6	3+7	3+8	3+9	3+10	3+11	3+12	1+4	1+4	1+5	1+5	1+6	1+6	1+7	1+7	1+9	1+9
Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.
1.36	2.49	1.64	1.83	1.93	1.94	1.88	1.65	1.75	1.36	0.020	Case 2			0.010	Case 3	0.020	Case 4	0.020	Case 6
1.53	2.46	2.31	2.30	2.37	2.45	2.29	2.37	1.80	1.43	0.030	Case 23	0.030	Case 24	0.030	Case 25	0.030	Case 26	0.020	Case 27

<WWAN DSI 3, WLAN DSI 3, Bluetooth DSI 3>

1+10	1+10	1+11	1+11	2+4	2+4	2+5	2+5	2+6	2+6	2+7	2+7	2+8	2+8	2+9	2+9	2+10	2+10	2+11	2+11
SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.
0.030	Case 28	0.020	Case 29	0.030	Case 30	0.030	Case 31	0.030	Case 32	0.040	Case 33	0.040	Case 34	0.030	Case 35	0.030	Case 36	0.020	Case 37

<WWAN DSI 3, WLAN DSI 3, Bluetooth DSI 3>

3+4	3+4	3+5	3+5	3+6	3+6	3+7	3+7	3+8	3+8	3+9	3+9	3+10	3+10	3+11	3+11
SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.	SPLSR	Case No.
0.030	Case 15	0.020	Case 16	0.020	Case 17	0.030	Case 18	0.020	Case 19	0.030	Case 20	0.020	Case 21	0.020	Case 22
0.030	Case 38	0.030	Case 39	0.030	Case 40	0.040	Case 41	0.040	Case 42	0.030	Case 43	0.040	Case 44	0.020	Case 5

Sensor off

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

AG0 maximum reported SAR:

Test Position	WLAN6GHz	Ant5+4	MAX
Front	0.138		0.138
Back	0.214		0.214

AG1 maximum reported SAR:

Test Position	Ant0	Ant2	MAX
Front	0.468	0.895	0.895
Back	0.319	0.648	0.648

Simultaneous Transmission analysis of AG0 + AG1 Worse-case:

Test Position	AG0	AG1	AG0+AG1
Front	0.138	0.895	1.03
Back	0.214	0.648	0.86

<WWAN DSI 4, WLAN DSI 4>

WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		Exposure Position	1	2	3	4	5	6	7	1+2	1+3	1+4	1+5
											WWAN1 1g SAR (W/kg)	WWAN2 1g SAR (W/kg)	WWAN3 1g SAR (W/kg)	WWAN4 1g SAR (W/kg)	WWAN5 1g SAR (W/kg)	2.4GHz WLAN Ant 3+6 1g SAR (W/kg)	5GHz WLAN Ant 4+5 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Max WWAN	Ant 0	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	0.468	0.222	0.362	0.336	0.379	0.540	0.407	0.69	0.83	0.80	0.85
										Back	0.319	0.376	0.295	0.273	0.387	0.249	0.356	0.70	0.61	0.59	0.71
Max WWAN	Ant 2	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	0.895	0.222	0.362	0.336	0.379	0.540	0.407	1.12	1.26	1.23	1.27
										Back	0.648	0.376	0.295	0.273	0.387	0.249	0.356	1.02	0.94	0.92	1.04

17.6 Product Specific Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT+NFC:

AG0 maximum reported SAR:

Test Position	WLAN6GHz Ant5+4	UWB Ant5	MAX
Front	0.366	0.628	0.628
Back	0.246	0.393	0.393
Back Top	0.454		0.454
Back Right	0.297	0.411	0.411
Left Side	0.015	0.043	0.043
Right Side	0.201	0.454	0.454
Top Side	0.284	0.068	0.284
Bottom Side		0.048	0.048

AG1 maximum reported SAR:

Test Position	Ant0	Ant2	Ant8	MAX
Front	1.532	3.194	1.292	3.194
Back	2.006	2.837	0.504	2.837
Back Top				0.000
Back Right				0.000
Left Side				0.000
Right Side			1.904	0.000
Top Side				0.000
Bottom Side	2.515	3.201		3.201

Simultaneous Transmission analysis of AG0 + AG1 Worse-case:

Test Position	AG0	AG1	AG0+AG1
Front	0.628	3.194	3.82
Back	0.393	2.837	3.23
Back Top	0.454	0.000	0.45
Back Right	0.411	0.000	0.41
Left Side	0.043	0.000	0.04
Right Side	0.454	0.000	0.45
Top Side	0.284	0.000	0.28
Bottom Side	0.048	3.201	3.25

<WWAN DSI 6, WLAN DSI 6, Bluetooth DSI 6, NFC>

WWAN1		WWAN2		WWAN3		WWAN4		WWAN5		WWAN6		Exposure Position	1	2	3	4	5	6	7	8	9	1+2+9 Summed 10g SAR (W/kg)	1+3+9 Summed 10g SAR (W/kg)	1+4+9 Summed 10g SAR (W/kg)
													WWAN1	WWAN2	WWAN3	WWAN4	WWAN5	WWAN6	2.4GHz WLAN Ant 3+6	5GHz WLAN Ant 4+5	NFC			
													10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)			
Max WWAN	Ant 0	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	1.532	2.455			1.154	1.892	1.519	1.947	0.000	3.99	1.53	1.53
												Back	2.006								0.005	2.01	2.01	2.01
												Back Top		3.172	2.472				2.301	1.658		3.17	2.47	
												Back Left		3.070				3.012				3.07		
												Back Right				3.054	2.735		3.203	2.062				3.05
												Left Side	0.819	2.236				3.160			0.000	3.01	0.00	0.00
												Right Side		0.067		2.403	2.328		1.621	1.325	0.000	0.07	0.00	2.40
												Top Side		3.204	3.150		2.185		2.633	1.230	0.000	3.20	3.15	0.00
												Bottom Side	2.515								0.000	2.52	2.52	2.52
Max WWAN	Ant 2	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	3.194	2.455			1.154	1.892	1.519	1.947	0.000	5.65	3.19	3.19
												Back	2.837								0.005	2.84	2.84	2.84
												Back Top a		3.172	2.472				2.301	1.658		3.17	2.47	
												Back Left		3.070				3.012				3.07		
												Back Right				3.054	2.735		3.203	2.062				3.05



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												Left Side		2.236				3.160			0.000	2.24	0.00	0.00
												Right Side		0.067		2.403	2.328		1.621	1.325	0.000	0.07	0.00	2.40
												Top Side		3.204	3.150		2.185		2.633	1.230	0.000	3.20	3.15	0.00
												Bottom Side	3.201								0.000	3.20	3.20	3.20
Max WWAN	Ant 8	Max WWAN	Ant 1	Max WWAN	Ant 4	Max WWAN	Ant 5	Max WWAN	Ant 6	Max WWAN	Ant 7	Front	1.292	2.455			1.154	1.892	1.519	1.947	0.000	3.75	1.29	1.29
												Back	0.504								0.005	0.51	0.51	0.51
												Back Top		3.172	2.472				2.301	1.658		3.17	2.47	
												Back Left		3.070				3.012				3.07		
												Back Right				3.054	2.735		3.203	2.062				3.05
												Left Side		2.236				3.160			0.000	2.24	0.00	0.00
												Right Side	1.904	0.067		2.403	2.328		1.621	1.325	0.000	1.97	1.90	4.31
												Top Side		3.204	3.150		2.185		2.633	1.230	0.000	3.20	3.15	0.00
												Bottom Side									0.000	0.00	0.00	0.00

<WWAN DSI 6, WLAN DSI 6, Bluetooth DSI 6, NFC>

1+5+9 Summed 10g SAR (W/kg)	1+6+9 Summed 10g SAR (W/kg)	1+7+9 Summed 10g SAR (W/kg)	1+8+9 Summed 10g SAR (W/kg)	1+2+9 SPLSR	1+2+9 Case No.	1+4+9 SPLSR	1+4+9 Case No.	1+5+9 SPLSR	1+5+9 Case No.	1+6+9 SPLSR	1+6+9 Case No.	1+7+9 SPLSR	1+7+9 Case No.	1+8+9 SPLSR	1+8+9 Case No.
2.69	3.42	3.05	3.48												
2.01	2.01	2.01	2.01												
		2.30	1.66												
	3.01														
2.74		3.20	2.06												
0.00	3.98	0.00	0.00												
2.33	0.00	1.62	1.33												
2.19	0.00	2.63	1.23												
2.52	2.52	2.52	2.52												
4.35	5.09	4.71	5.14	0.080	Case 99			0.070	Case 100	0.070	Case 101	0.070	Case 102	0.080	Case 103
2.84	2.84	2.84	2.84												
		2.30	1.66												
	3.01														
2.74		3.20	2.06												
0.00	3.16	0.00	0.00												
2.33	0.00	1.62	1.33												
2.19	0.00	2.63	1.23												
3.20	3.20	3.20	3.20												
2.45	3.18	2.81	3.24												
0.51	0.51	0.51	0.51												
		2.30	1.66												
	3.01														
2.74		3.20	2.06												
0.00	3.16	0.00	0.00												
4.23	1.90	3.53	3.23			0.080	Case 104	0.100	Case 105						
2.19	0.00	2.63	1.23												
0.00	0.00	0.00	0.00												

17.7 Total Exposure Ratio

Body worn			TER
1	2	1+2	
Max 1g SAR	WPT SAR	Summed SAR	
(W/Kg)	(W/Kg)	(W/Kg)	Reported SAR/1.6
1.53	0.000000434	1.53	0.96

Hotspot			TER
1	2	1+2	
Max 1g SAR	WPT SAR	Summed SAR	
(W/Kg)	(W/Kg)	(W/Kg)	Reported SAR/1.6
1.59	0.000000434	1.59	0.99

Extremity			TER
1	2	1+2	
Max 10g SAR	WPT SAR	Summed SAR	
(W/Kg)	(W/Kg)	(W/Kg)	Reported SAR/4
3.99	0.000000255	3.99	1.00

17.8 SPLSR Evaluation and Analysis

General Note:

- When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
- $SPLSR = (SAR_1 + SAR_2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
- Per April 2022 TCB Workshop, instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.

Head

Case 45	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Left Cheek at 0mm	0.370	47.4	250.4	-178.0	81.3	1.66	0.03	Not required
	Max WWAN Ant 5	Left Cheek at 0mm	1.289	41.4	331.4	-174.5				

Case 47	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Left Cheek at 0mm	0.370	49.0	248.2	-177.9	80.5	1.64	0.03	Not required
	Max WWAN Ant 6	Left Cheek at 0mm	1.273	52.5	328.5	-173.8				

Case 46	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Left Cheek at 0mm	0.370	49.0	248.2	-177.9	89.4	1.61	0.02	Not required
	2.4GHz WLAN Ant 3+6	Left Cheek at 0mm	1.239	22.1	333.4	-174.3				

6E&UWB

Hotspot

No.1	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back		1.282	5mm	16.3	-62.5	-207	141.8	2.19	0.02	Not required
Ant5+4			0.908	5mm	-50.2	62.7	-207				

No.2	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant2	Back		0.781	5mm	-47.5	-75	-207	137.7	1.69	0.02	Not required
Ant5+4			0.908	5mm	-50.2	62.7	-207				

Body worn

No.1	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back		1.282	5mm	16.3	-62.5	-207	143.4	2.18	0.02	Not required
Ant5+4			0.893	5mm	-50.2	64.5	-207				

No.2	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back		1.282	5mm	16.3	-62.5	-207	141.8	2.19	0.02	Not required
Ant5			0.908	5mm	-50.2	62.7	-207				

No.3	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant2	Back		1.279	5mm	-46.6	-67.8	-207	132.3	2.17	0.02	Not required
Ant5+4			0.893	5mm	-50.2	64.5	-207				

No.4	Position	SAR	1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant2	Back		1.279	5mm	-46.6	-67.8	-207	130.5	2.19	0.02	Not required
Ant5			0.908	5mm	-50.2	62.7	-207				



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No.5	Position	SAR 1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Ant8	Back	1.181	5mm	-66.5	-41.2	-207	106.9	2.07	0.03	Not required
Ant5+4		0.893	5mm	-50.2	64.5	-207				
No.6	Position	SAR 1g SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Ant8	Back	1.181	5mm	-66.5	-41.2	-207	105.2	2.09	0.03	Not required
Ant5		0.908	5mm	-50.2	62.7	-207				

Case 50	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 50	Max WWAN Ant 0	Front at 5mm	1.123	-66.0	-58.8	-207.0	137.7	2.31	0.03	Not required
	Max WWAN Ant 1	Front at 5mm	1.186	-40.2	76.5	-207.0				
Case 56	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 56	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	135.1	2.57	0.03	Not required
	Max WWAN Ant 1	Back at 5mm	1.289	2.5	72.3	-207.0				
Case 77	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 77	Max WWAN Ant 0	Left Side at 5mm	1.150	-23.8	-26.9	-207.0	92.9	2.39	0.04	Not required
	Max WWAN Ant 1	Left Side at 5mm	1.238	-24.5	66.0	-207.0				
Case 57	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 57	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	148.6	2.41	0.03	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-31.6	78.6	-207.0				
Case 51	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 51	Max WWAN Ant 0	Front at 5mm	1.123	-55.2	-64.0	-207.0	139.8	1.68	0.02	Not required
	Max WWAN Ant 5	Front at 5mm	0.552	4.9	62.2	-207.0				
Case 58	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 58	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	141.7	2.41	0.03	Not required
	Max WWAN Ant 5	Back at 5mm	1.125	-52.1	62.0	-207.0				
Case 59	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 59	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	122.0	2.13	0.03	Not required
	Max WWAN Ant 6	Back at 5mm	0.851	-54.7	37.2	-207.0				
Case 52	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 52	Max WWAN Ant 0	Front at 5mm	1.123	-66.0	-58.8	-207.0	118.9	1.78	0.02	Not required
	Max WWAN Ant 7	Front at 5mm	0.661	-62.5	60.0	-207.0				
Case 60	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
Case 60	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	97.6	2.55	0.04	Not required
	Max WWAN Ant 7	Back at 5mm	1.268	-7.6	32.6	-207.0				
Case 78	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant	Left Side at 5mm	1.150	-23.1	-32.4	-207.0	72.9	2.20	0.04	Not required



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	Max WWAN Ant 7	Left Side at 5mm	1.052	-23.6	40.5	-207.0				
Case 53	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.123	-55.2	-64.0	-207.0	138.5	1.73	0.02	Not required
	2.4GHz WLAN Ant 3+6	Front at 5mm	0.602	15.0	55.4	-207.0				
Case 61	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	147.5	2.39	0.03	Not required
	2.4GHz WLAN Ant 3+6	Back at 5mm	1.106	-57.9	65.4	-207.0				
Case 62	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.2	-62.1	-207.0	125.2	2.47	0.03	Not required
	5GHz WLAN Ant 4+5	Back at 5mm	1.190	-53.7	41.8	-207.0				
Case 63	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.3	-62.5	-207.0	149.8	1.91	0.02	Not required
	Bluetooth Ant 3	Back at 5mm	0.623	-31.5	79.5	-207.0				
Case 96	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.123	-55.5	-64.0	-207.0	153.3	1.60	0.01	Not required
	Bluetooth Ant 3	Front at 5mm	0.472	2.5	77.9	-207.0				
Case 54	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	0.929	-3.2	-68.9	-207.0	157.1	2.12	0.02	Not required
	Max WWAN Ant 1	Front at 5mm	1.186	-53.3	80.0	-207.0				
Case 64	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-24.9	-77.2	-207.0	152.0	2.22	0.02	Not required
	Max WWAN Ant 1	Back at 5mm	1.289	2.5	72.3	-207.0				
Case 79	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Left Side at 5mm	0.399	-34.9	-72.7	-207.0	139.6	1.64	0.02	Not required
	Max WWAN Ant 1	Left Side at 5mm	1.238	-21.0	66.2	-207.0				
Case 80	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Right Side at 5mm	0.407	-37.0	40.6	-207.0	101.3	1.65	0.02	Not required
	Max WWAN Ant 1	Right Side at 5mm	1.238	-21.4	-59.5	-207.0				
Case 65	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-47.5	-75.0	-207.0	154.4	2.05	0.02	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-31.6	78.6	-207.0				
Case 66	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-47.5	-75.0	-207.0	137.0	2.05	0.02	Not required
	Max WWAN Ant 5	Back at 5mm	1.125	-52.3	61.9	-207.0				
Case 67	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-47.0	-77.2	-207.0	114.7	1.78	0.02	Not required
	Max WWAN Ant	Back at 5mm	0.851	-54.7	37.2	-207.0				



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Case 68	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-24.9	-77.2	-207.0	111.2	2.20	0.03	Not required
	Max WWAN Ant 7	Back at 5mm	1.268	-7.6	32.6	-207.0				
Case 69	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-47.5	-75.0	-207.0	140.8	2.04	0.02	Not required
	2.4GHz WLAN Ant 3+6	Back at 5mm	1.106	-57.9	65.4	-207.0				
Case 70	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	0.929	-47.5	-75.0	-207.0	117.0	2.12	0.03	Not required
	5GHz WLAN Ant 4+5	Back at 5mm	1.190	-53.7	41.8	-207.0				
Case 55	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Front at 5mm	0.580	21.8	-33.7	-207.0	136.3	1.77	0.02	Not required
	Max WWAN Ant 1	Front at 5mm	1.186	-53.3	80.0	-207.0				
Case 71	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-69.4	-31.8	-207.0	127.0	1.91	0.02	Not required
	Max WWAN Ant 1	Back at 5mm	1.289	0.5	74.2	-207.0				
Case 81	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Right Side at 5mm	1.262	-21.1	42.0	-207.0	101.5	2.50	0.04	Not required
	Max WWAN Ant 1	Right Side at 5mm	1.238	-21.4	-59.5	-207.0				
Case 72	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-68.9	-33.4	-207.0	118.3	1.74	0.02	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-32.0	79.0	-207.0				
Case 82	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Right Side at 5mm	1.262	-21.3	42.8	-207.0	93.2	1.60	0.02	Not required
	Max WWAN Ant 4	Right Side at 5mm	0.337	-36.7	-49.1	-207.0				
Case 73	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-68.9	-33.4	-207.0	96.3	1.74	0.02	Not required
	Max WWAN Ant 5	Back at 5mm	1.125	-58.7	62.4	-207.0				
Case 49	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Right Side at 5mm	1.262	-21.1	42.0	-207.0	102.4	2.39	0.04	Not required
	Max WWAN Ant 5	Right Side at 5mm	1.130	-25.9	-60.3	-207.0				
Case 83	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Right Side at 5mm	1.262	-21.1	42.0	-207.0	82.8	2.40	0.04	Not required
	Max WWAN Ant 6	Right Side at 5mm	1.140	-25.3	-40.7	-207.0				
Case 74	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-68.9	-33.4	-207.0	85.0	1.89	0.03	Not required
	Max WWAN Ant	Back at 5mm	1.268	-19.8	36.0	-207.0				



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Case 75	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-68.9	-33.4	-207.0	99.4	1.72	0.02	Not required
	2.4GHz WLAN Ant 3+6	Back at 5mm	1.106	-57.9	65.4	-207.0				
Case 84	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Right Side at 5mm	1.262	-21.1	42.0	-207.0	104.6	2.16	0.03	Not required
	2.4GHz WLAN Ant 3+6	Right Side at 5mm	0.893	-32.5	-62.0	-207.0				
Case 76	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	0.617	-69.4	-31.8	-207.0	94.4	1.81	0.03	Not required
	5GHz WLAN Ant 4+5	Back at 5mm	1.190	-49.4	60.5	-207.0				
Case 2	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.057	-66.0	-58.8	-207.0	135.8	2.25	0.02	Not required
	Max WWAN Ant 1	Front at 5mm	1.197	-64.5	77.0	-207.0				
Case 23	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.1	-62.3	-207.0	135.4	2.56	0.03	Not required
	Max WWAN Ant 1	Back at 5mm	1.279	2.3	72.4	-207.0				
Case 3	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.057	-70.0	-64.4	-207.0	155.2	1.61	0.01	Not required
	Max WWAN Ant 5	Front at 5mm	0.552	11.7	67.6	-207.0				
Case 25	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.1	-62.3	-207.0	141.6	2.40	0.03	Not required
	Max WWAN Ant 5	Back at 5mm	1.114	-52.0	61.8	-207.0				
Case 4	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.057	-66.0	-58.8	-207.0	135.2	1.71	0.02	Not required
	Max WWAN Ant 6	Front at 5mm	0.650	14.6	49.7	-207.0				
Case 26	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	12.4	-65.1	-207.0	123.9	2.47	0.03	Not required
	Max WWAN Ant 6	Back at 5mm	1.185	-63.1	33.1	-207.0				
Case 24	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.3	-62.5	-207.0	149.0	2.41	0.03	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-31.6	78.6	-207.0				
Case 6	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Front at 5mm	1.057	-66.0	-58.8	-207.0	140.0	1.66	0.02	Not required
	2.4GHz WLAN Ant 3+6	Front at 5mm	0.602	15.0	55.4	-207.0				
Case 27	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.1	-62.3	-207.0	148.0	2.39	0.02	Not required
	2.4GHz WLAN	Back at 5mm	1.106	-58.5	65.5	-207.0				



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	Ant 3+6									
Case 28	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.1	-62.3	-207.0	139.2	2.47	0.03	Not required
	5GHz WLAN Ant 4+5	Back at 5mm	1.190	-49.4	60.5	-207.0				
Case 29	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 0	Back at 5mm	1.282	16.3	-62.5	-207.0	149.8	1.91	0.02	Not required
	Bluetooth Ant 3	Back at 5mm	0.623	-31.5	79.5	-207.0				
Case 7	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-3.3	-68.6	-207.0	149.7	2.48	0.03	Not required
	Max WWAN Ant 1	Front at 5mm	1.197	-40.2	76.5	-207.0				
Case 30	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	147.8	2.56	0.03	Not required
	Max WWAN Ant 1	Back at 5mm	1.279	1.2	72.4	-207.0				
Case 8	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-6.0	-85.0	-207.0	165.4	1.64	0.01	Not required
	Max WWAN Ant 4	Front at 5mm	0.361	-17.5	80.0	-207.0				
Case 31	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	146.8	2.40	0.03	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-31.6	78.6	-207.0				
Case 9	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-5.7	-84.6	-207.0	152.8	1.83	0.02	Not required
	Max WWAN Ant 5	Front at 5mm	0.552	11.6	67.2	-207.0				
Case 32	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	128.6	2.39	0.03	Not required
	Max WWAN Ant 5	Back at 5mm	1.114	-58.9	60.6	-207.0				
Case 10	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-3.3	-68.7	-207.0	119.7	1.93	0.02	Not required
	Max WWAN Ant 6	Front at 5mm	0.650	14.6	49.7	-207.0				
Case 33	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	101.8	2.46	0.04	Not required
	Max WWAN Ant 6	Back at 5mm	1.185	-63.1	33.1	-207.0				
Case 11	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-3.3	-68.7	-207.0	130.3	1.94	0.02	Not required
	Max WWAN Ant 7	Front at 5mm	0.661	-59.8	48.7	-207.0				
Case 34	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	107.3	2.55	0.04	Not required
	Max WWAN Ant 7	Back at 5mm	1.268	-7.9	32.6	-207.0				



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Case 12	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-5.7	-84.6	-207.0	141.5	1.88	0.02	Not required
	2.4GHz WLAN Ant 3+6	Front at 5mm	0.602	15.0	55.4	-207.0				
Case 35	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	133.4	2.38	0.03	Not required
	2.4GHz WLAN Ant 3+6	Back at 5mm	1.106	-58.5	65.5	-207.0				
Case 13	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-6.0	-85.0	-207.0	148.2	1.64	0.01	Not required
	5GHz WLAN Ant 4+5	Front at 5mm	0.365	-5.0	63.2	-207.0				
Case 36	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	127.9	2.47	0.03	Not required
	5GHz WLAN Ant 4+5	Back at 5mm	1.190	-49.4	60.5	-207.0				
Case 14	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Front at 5mm	1.278	-5.7	-84.6	-207.0	162.7	1.75	0.01	Not required
	Bluetooth Ant 3	Front at 5mm	0.472	2.5	77.9	-207.0				
Case 37	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 2	Back at 5mm	1.279	-46.8	-67.4	-207.0	147.7	1.90	0.02	Not required
	Bluetooth Ant 3	Back at 5mm	0.623	-31.5	79.5	-207.0				
Case 15	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Front at 5mm	1.281	19.3	-44.1	-207.0	134.3	2.48	0.03	Not required
	Max WWAN Ant 1	Front at 5mm	1.197	-39.7	76.5	-207.0				
Case 38	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	132.3	2.46	0.03	Not required
	Max WWAN Ant 1	Back at 5mm	1.279	2.3	72.4	-207.0				
Case 16	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Front at 5mm	1.281	19.1	-44.2	-207.0	129.5	1.64	0.02	Not required
	Max WWAN Ant 4	Front at 5mm	0.361	-17.5	80.0	-207.0				
Case 39	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	124.6	2.31	0.03	Not required
	Max WWAN Ant 4	Back at 5mm	1.125	-32.0	79.0	-207.0				
Case 17	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Front at 5mm	1.281	19.6	-44.0	-207.0	111.5	1.83	0.02	Not required
	Max WWAN Ant 5	Front at 5mm	0.552	11.6	67.2	-207.0				
Case 40	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
	Max WWAN Ant 8	Back at 5mm	1.181	-66.3	-40.9	-207.0	101.8	2.30	0.03	Not required
	Max WWAN Ant 5	Back at 5mm	1.114	-58.9	60.6	-207.0				
Case 18	Band	Position	SAR (W/kg)	SAR Peak			3D Distance	Summed	SPLSR	Simultaneous



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				Location (mm)			(mm)	SAR (W/kg)	Results	SAR	
				X	Y	Z					
	Max WWAN Ant 8	Front at 5mm	1.281	19.3	-44.1	-207.0	87.5	1.93	0.03	Not required	
	Max WWAN Ant 6	Front at 5mm	0.650	13.4	43.2	-207.0					
Case 41	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	83.9	2.37	0.04	Not required	
Max WWAN Ant 6	Back at 5mm	1.185	-76.7	42.4	-207.0						
Case 19	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Front at 5mm	1.281	19.1	-44.2	-207.0	118.5	1.94	0.02	Not required	
Max WWAN Ant 7	Front at 5mm	0.661	-60.1	44.0	-207.0						
Case 42	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	93.7	2.45	0.04	Not required	
Max WWAN Ant 7	Back at 5mm	1.268	-7.9	32.6	-207.0						
Case 20	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Front at 5mm	1.281	19.6	-44.0	-207.0	99.5	1.88	0.03	Not required	
2.4GHz WLAN Ant 3+6	Front at 5mm	0.602	15.0	55.4	-207.0						
Case 43	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	106.6	2.29	0.03	Not required	
2.4GHz WLAN Ant 3+6	Back at 5mm	1.106	-58.5	65.5	-207.0						
Case 21	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Front at 5mm	1.281	19.1	-44.2	-207.0	110.1	1.65	0.02	Not required	
5GHz WLAN Ant 4+5	Front at 5mm	0.365	-5.0	63.2	-207.0						
Case 44	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Back at 5mm	1.181	-66.2	-40.8	-207.0	102.7	2.37	0.04	Not required	
5GHz WLAN Ant 4+5	Back at 5mm	1.190	-49.4	60.5	-207.0						
Case 22	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Front at 5mm	1.281	19.6	-44.0	-207.0	123.1	1.75	0.02	Not required	
Bluetooth Ant 3	Front at 5mm	0.472	2.5	77.9	-207.0						
Case 5	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Back at 5mm	1.181	-66.3	-40.9	-207.0	125.3	1.80	0.02	Not required	
Bluetooth Ant 3	Back at 5mm	0.623	-31.5	79.5	-207.0						
Case 99	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 2	Front at 0mm	3.194	-7.1	-81.3	-207.0					162.9
	Max WWAN Ant 1	Front at 0mm	2.455	-46.3	76.8	-207.0					
	Max WWAN Ant 2	Front at 0mm	3.194	-6.9	-81.7	-207.0					
	NFC	Front at 0mm	0.000					3.19		Not required	
Max WWAN Ant 1	Front at 0mm	2.455	-46.3	76.8	-207.0						
NFC	Front at 0mm	0.000				2.46		Not required			
Case 104	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR	
	X	Y	Z								
	Max WWAN Ant 8	Right Side at 0mm	1.904	-20.6	35.3	-207.0					106.3
	Max WWAN Ant 5	Right Side at 0mm	2.403	-12.2	-70.7	-207.0					
Max WWAN Ant 8	Right Side at 0mm	1.904	-21.1	36.3	-207.0	1.90		Not required			



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	NFC	Right Side at 0mm	0.000					2.40		Not required
	Max WWAN Ant 5	Right Side at 0mm	2.403	-8.1	-72.6	-207.0				
	NFC	Right Side at 0mm	0.000							

Case 100	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR		
				X	Y	Z						
	Max WWAN Ant 2	Front at 0mm	3.194	-4.5	-81.4	-207.0		120.9		4.35	0.07	Not required
	Max WWAN Ant 6	Front at 0mm	1.154	-9.2	39.4	-207.0						
	Max WWAN Ant 2	Front at 0mm	3.194	-6.9	-81.7	-207.0				3.19		Not required
	NFC	Front at 0mm	0.000									
	Max WWAN Ant 6	Front at 0mm	1.154	-9.8	42.3	-207.0				1.15	Not required	
NFC	Front at 0mm	0.000										

Case 105	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR		
				X	Y	Z						
	Max WWAN Ant 8	Right Side at 0mm	1.904	-21.1	35.3	-207.0		83.4		4.23	0.10	Not required
	Max WWAN Ant 6	Right Side at 0mm	2.328	-28.8	-47.7	-207.0						
	Max WWAN Ant 8	Right Side at 0mm	1.904	-21.1	36.3	-207.0				1.90		Not required
	NFC	Right Side at 0mm	0.000									
	Max WWAN Ant 6	Right Side at 0mm	2.328	-28.8	-47.7	-207.0				2.33	Not required	
NFC	Right Side at 0mm	0.000										

Case 101	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR		
				X	Y	Z						
	Max WWAN Ant 2	Front at 0mm	3.194	-7.1	-81.4	-207.0		155.1		5.09	0.07	Not required
	Max WWAN Ant 7	Front at 0mm	1.892	-63.4	63.1	-207.0						
	Max WWAN Ant 2	Front at 0mm	3.194	-6.9	-81.7	-207.0				3.19		Not required
	NFC	Front at 0mm	0.000									
	Max WWAN Ant 7	Front at 0mm	1.892	-63.0	63.7	-207.0				1.89	Not required	
NFC	Front at 0mm	0.000										

Case 102	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR		
				X	Y	Z						
	Max WWAN Ant 2	Front at 0mm	3.194	-4.5	-81.4	-207.0		138.2		4.71	0.07	Not required
	2.4GHz WLAN Ant 3+6	Front at 0mm	1.519	15.0	55.4	-207.0						
	Max WWAN Ant 2	Front at 0mm	3.194	-6.9	-81.7	-207.0				3.19		Not required
	NFC	Front at 0mm	0.000									
	2.4GHz WLAN Ant 3+6	Front at 0mm	1.519	15.0	55.4	-207.0				1.52	Not required	
NFC	Front at 0mm	0.000										

Case 103	Band	Position	SAR (W/kg)	SAR Peak Location (mm)			3D Distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR		
				X	Y	Z						
	Max WWAN Ant 2	Front at 0mm	3.194	-7.1	-81.4	-207.0		148.4		5.01	0.08	Not required
	5GHz WLAN Ant 4+5	Front at 0mm	1.812	-10.8	67.0	-207.0						
	Max WWAN Ant 2	Front at 0mm	3.194	-6.9	-81.7	-207.0				3.19		Not required
	NFC	Front at 0mm	0.000									
	5GHz WLAN Ant 4+5	Front at 0mm	1.812	-10.9	67.6	-207.0				1.81	Not required	
NFC	Front at 0mm	0.000										

Test Engineer: Jordar huang, Teddy Chang, Andy Chiang, Kevin Guo and Howard Zhao

18. Uncertainty Assessment

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

Declaration of Conformity:

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

Comments and Explanations:

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

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

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

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

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

- standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity
- k is the coverage factor

Standard Uncertainty for Assumed Distribution

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

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

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

Applicable for SAR Measurements:

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

Applicable for Power Density Measurements:

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

19. References

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Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR and PD Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

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

Appendix G. Power reduction mechanism verification

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