

FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2625-1
FCC ID : IHDT56AX2
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang

Sporton International Inc. (Kunshan)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA610618-02	Rev. 01	Initial issue of report.	Mar. 12, 2026

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2625-1**, 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 0mm)	Hotspot (Separation 5mm)	Body worn (Separation 5mm)	Extremity (Separation 0mm)		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	10g SAR (W/kg)		
Licensed	GSM850	0.50	1.31	1.31	2.96	1.58	3.74
	GSM1900	0.16	1.31	1.31	3.17		
	WCDMA II	0.17	1.32	1.27	2.89		
	WCDMA IV	0.17	1.29	1.38	3.40		
	WCDMA V	0.34	1.31	1.31	2.79		
	LTE Band 7	0.90	1.30	1.30	3.21		
	LTE Band 12/17	0.26	1.05	1.05			
	LTE Band 13	0.25	1.42	1.42	3.25		
	LTE Band 25/2	0.89	1.28	1.17	3.24		
	LTE Band 26/5	0.58	1.29	1.29	3.21		
	LTE Band 41/38	0.90	1.29	1.29	3.13		
	LTE Band 66/4	0.81	1.30	1.23	3.19		
	LTE Band 42	0.89	0.59	0.90	0.69		
	FR1 n2	0.94	1.29	1.29	3.13		
	FR1 n7	0.89	1.31	1.31	3.20		
	FR1 n26/5	0.68	1.30	1.30	1.68		
	FR1 n41/38	1.05	0.63	0.95	2.44		
	FR1 n66	0.91	1.30	1.29	3.15		
	FR1 n77/78	0.90	0.77	0.90	2.49		
DTS	2.4GHz WLAN	0.57	0.63	0.97		1.58	
NII	5GHz WLAN	1.20	0.62	1.19	2.90	1.58	3.74
DSS	Bluetooth	0.11	0.13	0.13		1.58	
Date of Testing:		2026/01/20 ~ 2026/02/18					

Remark:

- This device supports LTE B5 / B17 / B4 / B38 and B26 / B12 / B66 / B41. Since the supported frequency span for LTE B5 / B17 / B4 / B38 falls completely within the support's frequency span for LTE B26 / B12 / B66 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B26 / B12 / B66 / B41.
- This device supports 5G NR n5 / n38 / n78 and n26 / n41 / n77. Since the supported frequency span for 5G NR n5 / n38 / n78 falls completely within the support's frequency span for n26 / n41 / n77, both 5G NR bands have the same target power, and both 5G NR bands share the same transmission path; therefore, SAR was only assessed for n26 / n41 / n77.

Declaration of Conformity:

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

Comments and Explanations:

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

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

2. Administration Data

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory			
Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR01-KS	CN1257	314309

Applicant	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

Manufacturer	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- 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 616217 D04 SAR for laptop and tablets v01r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2625-1
FCC ID	IHDT56AX2
IMEI Code	Sample 1: 357576700009515/357576700009523, 357576700009531/357576700009549 357576700009499/357576700009507 Sample 2: 357903410045292/35790341004530 Sample 3: 358845850017217/35884585001722
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz 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 Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC: ASK

GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark:	
1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5G NR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation. 2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. 3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only). 4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12. 5. This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 6. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the MediaTek TA-SAR 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. 7. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, body-worn, hotspot, extremity exposure condition. For WLAN when transmit simultaneous with WWAN/BT and Proximity sensors trigger, power reduction will be activated to body-worn and extremity exposure conditions. 8. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively. 9. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. 10. The device has two headsets with only supplier different, so headset 1 was chosen to perform full SAR testing. 11. There are three samples, the difference between them refer to the XT2625-1_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, so sample 1 was chosen to perform full SAR testing and sample 2/3 for worst case verification. 12. This device has NFC function and the NFC SAR report will be separately submitted. 13. 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
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	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
	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
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	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
	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	IHDT56AX2							
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 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz							
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz							
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM							
LTE Voice / Data requirements	Voice and Data							
LTE Release Version	R15							
CA Support	Supported, Uplink and Downlink							
LTE MPR permanently built-in by design	Table 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 Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 2 carriers in the uplink.							

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 25 MHz		Bandwidth 30 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20850	2510	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704	23060	704	23060	704
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23130	711	23130	711
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5	
M	23230		782		23255		784.5		23280		787	
H	23255		784.5		23280		787		23305		789.5	
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709		23805		711.5	
M	23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23800		711	
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26790	824
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	838.5

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				

<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 17			Yes	Yes		
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Head	Bodyworn	Hotspot	Extremity	Sensor off	Default
		ECI2	ECI3	ECI7	ECI6	ECI4	Tune-up Limit
LTE Band 12(17)	Ant 0	24	24	24	24	24	24
LTE Band 25(2)	Ant 0	24	19.5	18.2	22.1	24	24
LTE Band 25(2)	Ant 4	16.3	16.4	13.9	19.8	22	22
LTE Band 26(5)	Ant 0	24	23.1	23.1	24	24	24
LTE Band 26(5)	Ant 4	24	24	24	24	24	24
LTE Band 66(4)	Ant 0	24	19.7	17.7	21.8	24	24
LTE Band 66(4) PA (Reference Designator)	Ant 0	24	19.7	17.7	21.8	24	24
LTE Band 66(4)	Ant 4	16.9	17.4	15.1	19.5	22	22
LTE Band 41(38)	Ant 4	20.3	17.9	16.1	23.8	24	24

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/7/12
LTE Anchor Bands for n5	LTE B2
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n66	LTE B2/7/12
LTE Anchor Bands for n38	LTE B2/5/66
LTE Anchor Bands for n41	LTE B2/12/5/66
LTE Anchor Bands for n78	LTE B2/4/5/7/12/38/66

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	
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
M 376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H 381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5

NR Band 5									
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz			
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 165300	826.5	165800	829	166300	831.5	166800	834		
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 26									
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz			
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 163300	816.5	163800	819	164300	821.5	164800	824		
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 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 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	515000	2575	515500	2577.5	516000	2580	516500	2582.5	517000	2585	518000	2590
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	523000	2615	522500	2612.5	522000	2610	521500	2607.5	521000	2605	520000	2600

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
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78																								
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	652662	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

<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											
FR1 n26	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	Head ECI2	Bodyworn ECI3	Hotspot ECI7	Extremity ECI6	Sensor off ECI4	Default Tune-up Limit
FR1 n26(5)	Ant 0	24	24	24	24	24	24
FR1 n26(5)	Ant 4	24	24	24	24	24	24
FR1 n41(38)	Ant 4	18.5	17.8	15.5	21.4	24	24
FR1 n77(78)	Ant 5	15.9	17.1	15.6	20.8	24	24
FR1 n77(78)	Ant 1	20.5	20.5	20.5	20.5	20.5	20.5
FR1 n77(78)	Ant 2	19.9	19.9	19.9	19.9	19.9	20.5
FR1 n77(78)	Ant 8	20.9	20.9	20.9	20.9	20.9	22.5

5. TA-SAR feature for RF Exposure compliance

WWAN bands and mmWave are all enabled with MediaTek TA-SAR feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Note that WLAN/BT operations are not enabled with TA-SAR feature.

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements MediaTek TA-SAR 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, for SAR (transmit frequency $\leq 6\text{GHz}$). 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.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

The P_{limit} values correspond to SAR_{design_target}. The power will be fixed at the static reduce power level at different exposure conditions for RF exposure compliance. For the GSM (TDD) P_{limit} power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.

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 TA-SAR algorithm. SAR char will be entered via the MediaTek's NV suggestion to enable the TA-SAR 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 ECI

<SAR Characterization>

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

SPLSR_Group (Antenna Group):

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

<SAR design target and uncertainty>

Item	Uncertainty dB (k=2)
Total uncertainty	1.5

To account for total uncertainty, SAR_{design_target} should be determined as:

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

The TA-SAR 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.

TA-SAR allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit.

<Plimit for supported technologies and bands >

Band	Antenna	Head ECI2	Bodyworn ECI3	Extremity ECI6	Hotspot ECI7	Sensor off ECI4	Pmax*
GSM850	Ant 0	28.6	22.9	24.8	22.9	31.8	24.5
GSM1900	Ant 0	31.4	20.1	21.8	20.1	30.5	22.5
WCDMA II	Ant 0	31.8	19.4	21.6	17.5	30.2	23.0
WCDMA IV	Ant 0	31.7	18.9	20.9	17.0	29.9	23.0
WCDMA V	Ant 0	28.7	22.1	23.0	22.1	30.5	23.0
LTE Band 2 (Reference Designator)	Ant 0	31.2	18.5	21.1	17.2	28.3	23.0
LTE Band 4 (Reference Designator)	Ant 4	16.4	17.1	19.2	14.5	26.0	23.0
LTE Band 7	Ant 1	27.9	20.0	21.3	20.0	28.4	23.0
LTE Band 7 (Reference Designator)	Ant 4	16.7	15.0	20.2	12.2	25.1	23.0
LTE Band 12(17)	Ant 0	31.4	23.9	23.0	23.9	23.0	23.0
LTE Band 12	Ant 4	28.3	29.2	23.0	27.6	23.0	23.0
LTE Band 13	Ant 0	30.2	23.0	23.0	23.0	30.3	23.0
LTE Band 25(2)	Ant 0	31.2	18.5	21.1	17.2	28.3	23.0
LTE Band 25(2)	Ant 4	15.3	15.4	18.8	12.9	23.7	21.0
LTE Band 26(5)	Ant 0	31.2	22.1	23.0	22.1	23.0	23.0
LTE Band 26(5)	Ant 4	24.8	24.5	23.0	23.0	28.8	23.0
LTE Band 66(4)	Ant 0	31.4	18.7	20.8	16.7	27.1	23.0
LTE Band 66(4) (Reference Designator)	Ant 0	31.4	18.7	20.8	16.7	27.1	23.0
LTE Band 66(4)	Ant 4	15.9	16.4	18.5	14.1	26.0	21.0
LTE Band 66 (Reference Designator)	Ant 4	15.9	16.4	18.5	14.1	26.0	21.0
LTE Band 38 (Reference Designator)	Ant 1	28.3	18.7	21.0	18.7	27.2	21.0
LTE Band 41(38)	Ant 4	17.3	14.9	20.8	13.1	26.5	21.0
LTE Band 42	Ant 5	18.1	15.7	19.7	14.2	30.4	21.0
FR1 n2	Ant 0	33.0	20.1	22.1	18.7	30.4	23.0
FR1 n2 (Reference Designator)	Ant 0	33.0	20.1	22.1	18.7	30.4	23.0
FR1 n2	Ant 4	14.7	16.1	18.7	12.3	23.1	21.0
FR1 n2 (Reference Designator)	Ant 4	14.7	16.1	18.7	12.3	23.1	23.0
FR1 n7	Ant 1	27.8	20.9	21.8	20.9	29.4	23.0
FR1 n7 PA (Reference Designator)	Ant 4	16.6	16.3	21.0	14.6	25.1	23.0
FR1 n26(5)	Ant 0	31.5	23.0	23.0	23.0	23.0	23.0
FR1 n26(5)	Ant 4	24.2	24.7	23.0	23.2	29.6	23.0
FR1 n66	Ant 0	31.3	18.7	21.5	18.0	29.6	23.0
FR1 n66 (Reference Designator)	Ant 0	31.3	18.7	21.5	18.0	29.6	23.0
FR1 n66	Ant 4	16.2	18.9	19.7	15.8	26.8	21.0
FR1 n66 (Reference Designator)	Ant 4	16.2	18.9	19.7	15.8	26.8	23.0
FR1 n41(38)	Ant 4	17.5	16.8	20.4	14.5	25.8	23.0
FR1 n77(78)	Ant 5	14.9	16.1	19.8	14.6	25.9	23.0
FR1 n77(78)	Ant 1	30.6	23.1	19.5	22.0	19.5	19.5
FR1 n77(78)	Ant 2	24.7	20.2	19.5	19.9	19.5	19.5
FR1 n77(78)	Ant 8	32.0	20.4	21.5	18.9	21.5	21.5

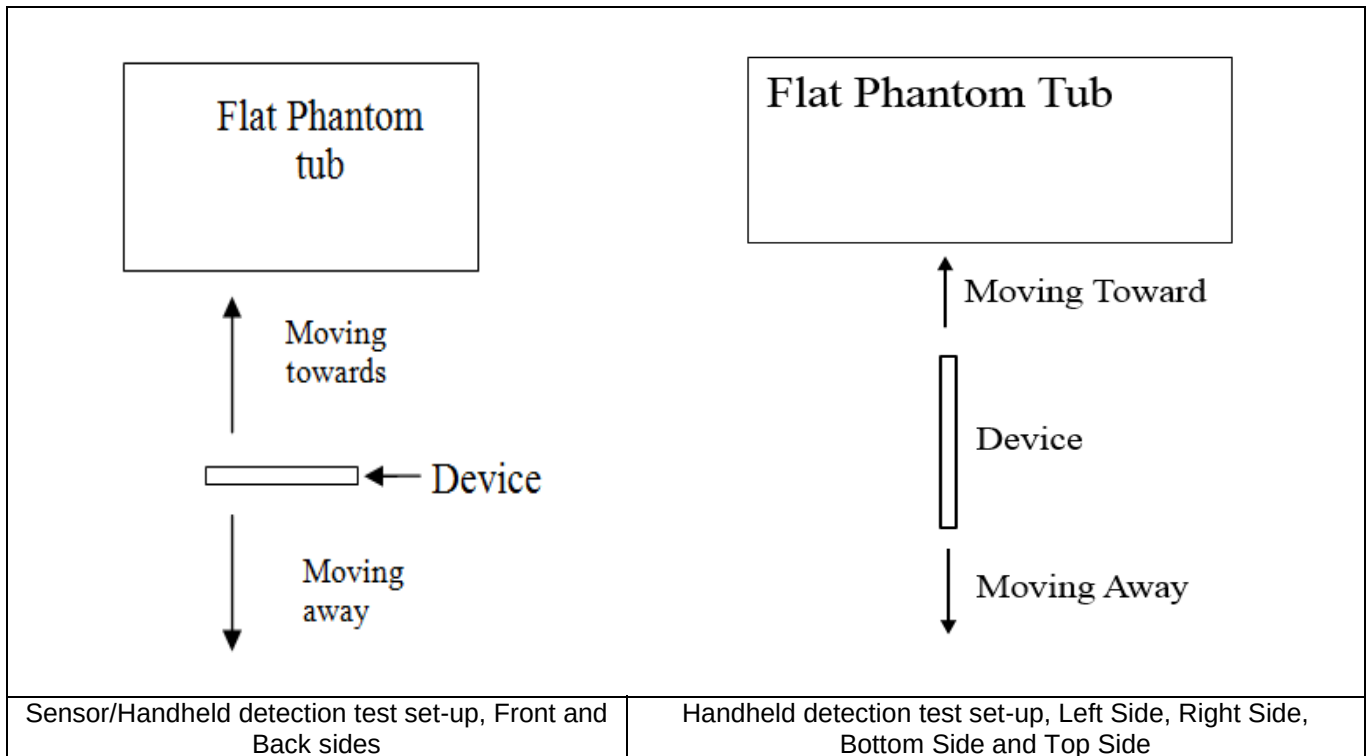
Note:

- 1) *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1.0 dB device uncertainty.
- 2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).
- 3) The max allowed output power is the Plimit + 1.0 dB device 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 (5825MHz) and lowest (835MHz) frequency 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.
3. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
4. The sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s). When front or back body worn condition is detected reduced power will be active.
5. 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.
6. 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	15	21	20	25

<Handheld for ANT 0>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	8	13	15	20	6	11	13	18

<Handheld for ANT1>

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	6	11	11	17	8	13	11	16

<Handheld for ANT 5>

Proximity Sensor Triggering Distance (mm)							
Position	Front		Back		Top Side		
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving away
Minimum	6	11	6	11	8		13

<Handheld for ANT 4>

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	12	10	15	6	11	15	20

<Handheld for ANT 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	6	11	8	13	7	13	11	16

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.

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:

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

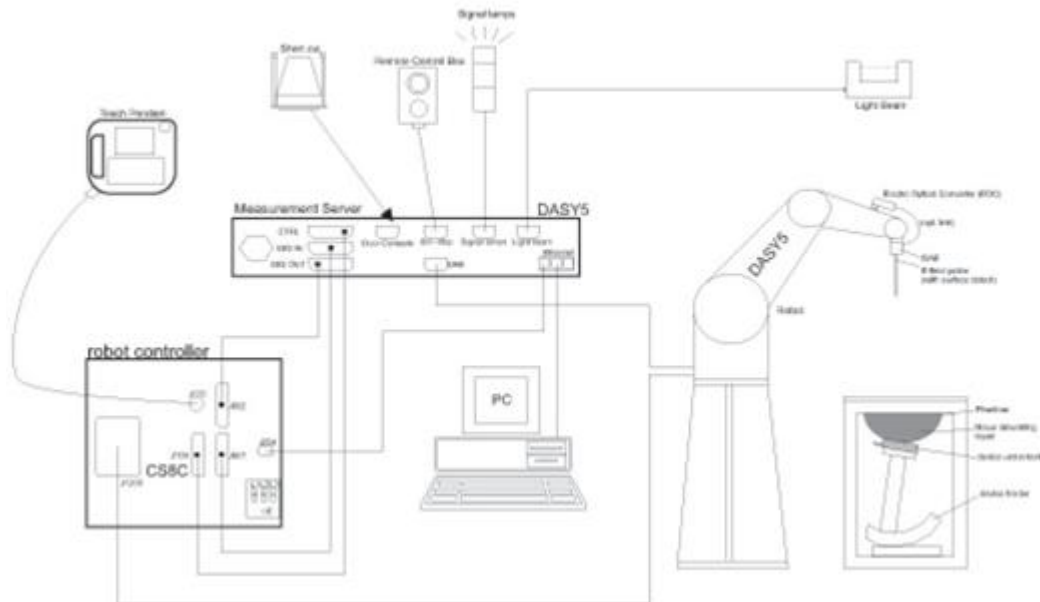
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band
- (d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/BT output power

<SAR measurement>

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

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

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

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 dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

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

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

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 <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> 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	750MHz System Validation Kit	D750V3	1087	Mar. 12, 2025	Mar. 11, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d298	Jan. 26, 2024	Jan. 24, 2026
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d170	Jun. 30, 2025	Jun. 29, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 08, 2024	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1112	Dec. 18, 2023	Dec. 15, 2026
SPEAG	3500MHz System Validation Kit	D3500V2	1037	Nov. 20, 2023	Nov. 17, 2026
SPEAG	3700MHz System Validation Kit	D3700V2	1008	Nov. 20, 2023	Nov. 17, 2026
SPEAG	3900MHz System Validation Kit	D3900V2	1048	Mar. 09, 2023	Mar. 06, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	Sep. 17, 2025	Sep. 16, 2026
SPEAG	Data Acquisition Electronics	DAE4	1649	Aug. 27, 2025	Aug. 26, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	3857	Feb. 19, 2025	Feb. 18, 2026
SPEAG	SAM Twin Phantom	SAM Twin	TP-1754	NCR	NCR
Beichuang	Thermo-Hygrometer	HTC-1	1959633	May 27, 2025	May 26, 2026
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8820C	6201563900	Jul. 02, 2025	Jul. 01, 2026
Agilent	ENA Series Network Analyzer	E5071C	MY46112129	Jul. 02, 2025	Jul. 01, 2026
SPEAG	Dielectric Probe Kit	DAK-3.5	1144	Aug. 26, 2025	Aug. 25, 2026
Anritsu	Vector Signal Generator	MG3710A	6201682672	Dec. 26, 2025	Dec. 25, 2026
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	N/A	N/A
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	NCR	NCR
Agilent	Dual Directional Coupler	778D	20500	Jul. 02, 2025	Jul. 01, 2026
Agilent	Dual Directional Coupler	11691D	MY48151020	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Meter	NRVD	102081	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	Jul. 02, 2025	Jul. 01, 2026
ARRA	Power Divider	A3200-2	N/A	NCR	NCR
MCL	Attenuation1	BW-S10W5+	N/A	NCR	NCR
R&S	BLUETOOTH TESTER	CBT	101246	Jul. 03, 2025	Jul. 02, 2026
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	Oct. 11, 2025	Oct. 10, 2026
TES	DIGITAC THERMOMETER	TYPE-K	200505600	Jul. 05, 2025	Jul. 04, 2026

Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check.
2. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
3. The justification data of dipole can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

12. System Verification

12.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.1. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.2.

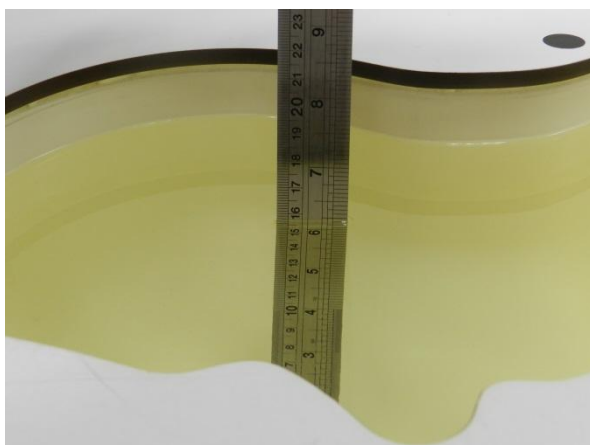


Fig 11.1 Photo of Liquid Height for Head SAR



Fig 11.2 Photo of Liquid Height for Body SAR

12.2 Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (ϵ_r)
For Head								
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	64~78%
Mineral oil	11~18%
Emulsifiers	9~15%
Additives and Salt	2~3%

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	22.6	0.891	42.897	0.89	41.9	0.11	2.38	±5.0	2026-01-30
750	22.8	0.885	42.846	0.89	41.9	-0.56	2.26	±5.0	2026-02-04
835	22.9	0.914	42.548	0.9	41.5	1.56	2.53	±5.0	2026-01-20
835	22.8	0.915	42.592	0.9	41.5	1.67	2.63	±5.0	2026-01-23
1750	22.8	1.371	40.713	1.37	40.1	0.07	1.53	±5.0	2026-02-01
1750	22.9	1.378	40.707	1.37	40.1	0.58	1.51	±5.0	2026-02-06
1900	22.6	1.448	39.099	1.4	40.0	3.43	-2.25	±5.0	2026-02-02
1900	22.6	1.455	39.221	1.4	40.0	3.93	-1.95	±5.0	2026-02-07
2450	22.7	1.757	39.3	1.8	39.2	-2.39	0.26	±5.0	2026-02-01
2600	22.7	1.9	38.885	1.96	39.0	-3.06	-0.29	±5.0	2026-02-03
2600	22.8	1.908	38.872	1.96	39.0	-2.65	-0.33	±5.0	2026-02-08
3500	22.8	2.948	37.698	2.91	37.9	1.31	-0.53	±5.0	2026-02-12
3700	22.6	3.183	37.442	3.12	37.7	2.02	-0.68	±5.0	2026-02-14
3900	22.7	3.393	37.409	3.33	37.51	1.89	-0.27	±5.0	2026-02-16
5250	22.7	4.7	36.234	4.71	35.95	-0.21	0.79	±5.0	2026-02-17
5600	22.7	5.027	35.767	5.07	35.5	-0.85	0.75	±5.0	2026-02-18
5800	22.7	5.301	35.649	5.27	35.3	0.59	0.99	±5.0	2026-02-12

12.3 System Performance Check Results

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

Date	Frequency (MHz)	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 (%)
2026-01-30	750	50.00	D750V3 - 1087	EX3DV4 - SN3857	DAE4 Sn1649	0.456	8.680	9.120	5.07	0.305	5.610	6.100	8.73
2026-02-04	750	50.00	D750V3 - 1087	EX3DV4 - SN3857	DAE4 Sn1649	0.436	8.680	8.720	0.46	0.288	5.610	5.760	2.67
2026-01-20	835	50.00	D835V2 - 4d298	EX3DV4 - SN3857	DAE4 Sn1649	0.501	9.890	10.020	1.31	0.342	6.450	6.840	6.05
2026-01-23	835	50.00	D835V2 - 4d298	EX3DV4 - SN3857	DAE4 Sn1649	0.523	9.890	10.460	5.76	0.345	6.450	6.900	6.98
2026-02-01	1750	50.00	D1750V2 - 1090	EX3DV4 - SN3857	DAE4 Sn1649	1.990	36.600	39.800	8.74	1.050	19.500	21.000	7.69
2026-02-06	1750	50.00	D1750V2 - 1090	EX3DV4 - SN3857	DAE4 Sn1649	1.820	36.600	36.400	-0.55	1.020	19.500	20.400	4.62
2026-02-02	1900	50.00	D1900V2 - 5d170	EX3DV4 - SN3857	DAE4 Sn1649	1.920	39.600	38.400	-3.03	1.050	20.900	21.000	0.48
2026-02-07	1900	50.00	D1900V2 - 5d170	EX3DV4 - SN3857	DAE4 Sn1649	2.110	39.600	42.200	6.57	1.140	20.900	22.800	9.09
2026-02-01	2450	50.00	D2450V2 - 1095	EX3DV4 - SN3857	DAE4 Sn1649	2.810	52.600	56.200	6.84	1.310	24.700	26.200	6.07
2026-02-03	2600	50.00	D2600V2 - 1112	EX3DV4 - SN3857	DAE4 Sn1649	2.780	55.100	55.600	0.91	1.290	24.800	25.800	4.03
2026-02-08	2600	50.00	D2600V2 - 1112	EX3DV4 - SN3857	DAE4 Sn1649	2.680	55.100	53.600	-2.72	1.220	24.800	24.400	-1.61
2026-02-12	3500	50.00	D3500V2 - 1037	EX3DV4 - SN3857	DAE4 Sn1649	3.380	65.400	67.600	3.36	1.300	24.700	26.000	5.26
2026-02-14	3700	50.00	D3700V2 - 1008	EX3DV4 - SN3857	DAE4 Sn1649	3.680	67.200	73.600	9.52	1.330	24.400	26.600	9.02
2026-02-16	3900	50.00	D3900V2 - 1048	EX3DV4 - SN3857	DAE4 Sn1649	3.630	69.100	72.600	5.07	1.290	24.100	25.800	7.05
2026-02-17	5250	50.00	D5GHZV2 - 1113	EX3DV4 - SN3857	DAE4 Sn1649	4.190	78.100	83.800	7.30	1.210	22.400	24.200	8.04
2026-02-18	5600	50.00	D5GHZV2 - 1113	EX3DV4 - SN3857	DAE4 Sn1649	4.220	80.000	84.400	5.50	1.220	23.000	24.400	6.09
2026-02-12	5800	50.00	D5GHZV2 - 1113	EX3DV4 - SN3857	DAE4 Sn1649	4.040	77.900	80.800	3.72	1.150	22.300	23.000	3.14

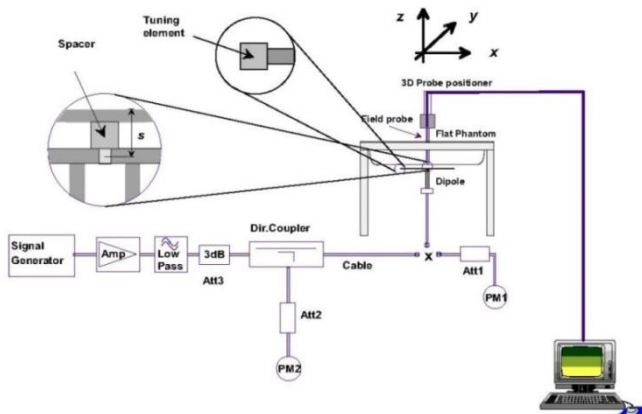


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 Ear and handset reference point

Figure 12.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M,” the left ear reference point (ERP) is marked “LE,” and the right ERP is marked “RE.” Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 12.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 12.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 12.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

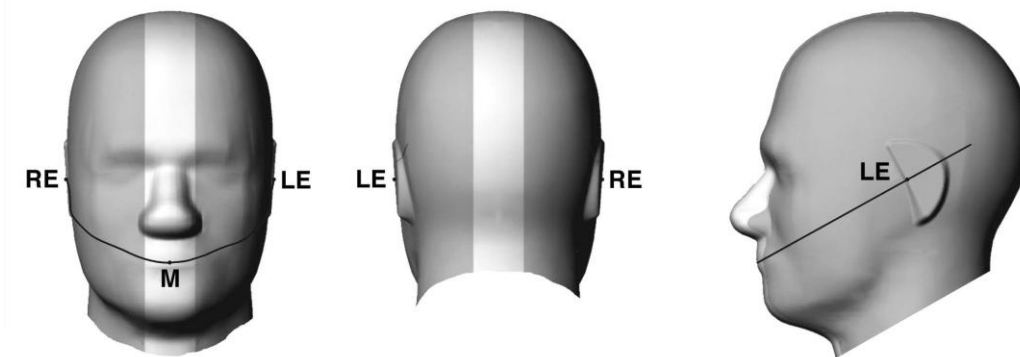


Fig 12.1.1 Front, back, and side views of SAM twin phantom

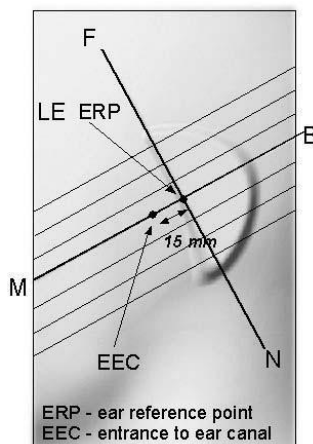


Fig 12.1.2 Close-up side view of phantom showing the ear region.

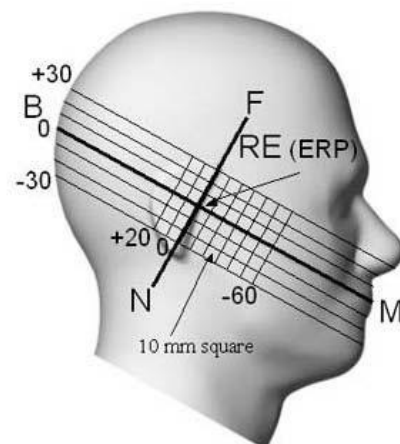


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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 12.2.1 and Figure 12.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 12.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 12.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 12.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 12.2.3. The actual rotation angles should be documented in the test report.

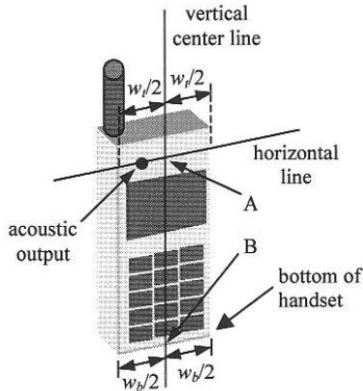


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

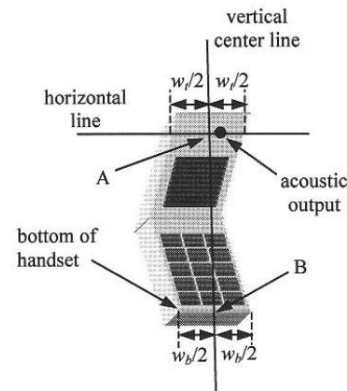


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

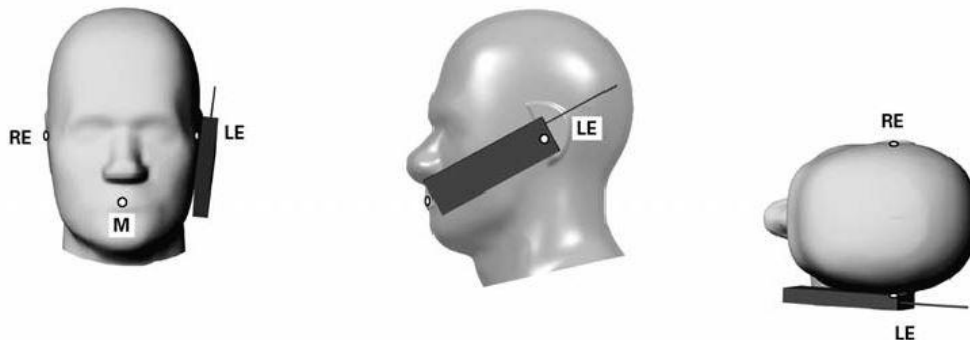


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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 12.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

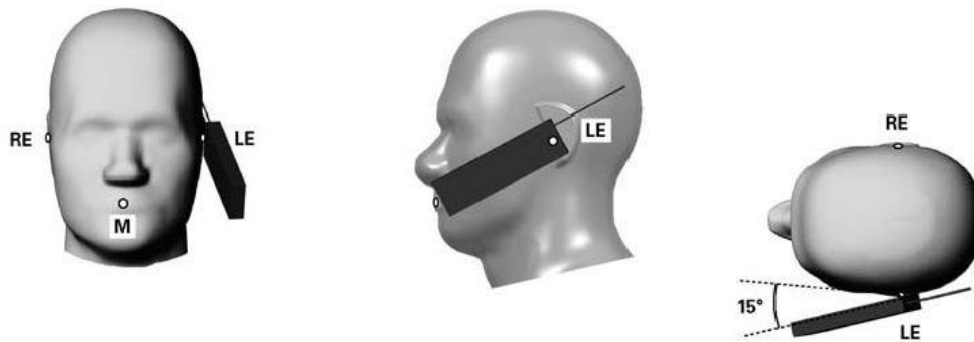


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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

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

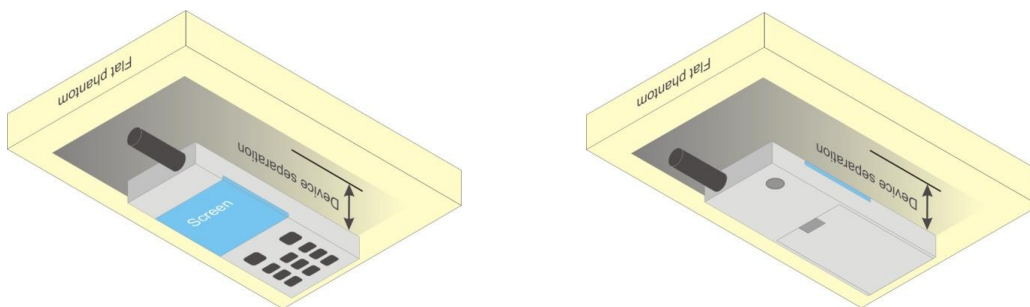


Fig 12.4 Body Worn Position

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 ($L \times W \geq 9$ cm x 5 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.

14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For HSPA+ devices supporting 16 QAM in the uplink, power measurements procedure is according to the configurations in Table C.11.1.4 of 3GPP TS 34.121-1.
4. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set Gain Factors (β_c and β_d) and parameters were set according to each
 - ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - iii. Set RMC 12.2Kbps + HSDPA mode.
 - iv. Set Cell Power = -86 dBm
 - v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
 - vi. Select HSDPA Uplink Parameters
 - vii. Set Delta ACK, Delta NACK and Delta CQI = 8
 - viii. Set Ack-Nack Repetition Factor to 3
 - ix. Set CQI Feedback Cycle (k) to 4 ms
 - x. Set CQI Repetition Factor to 2
 - xi. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

Setup Configuration

HSUPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Base Station with following setting * :
 - Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
 - Set Cell Power = -86 dBm
 - Set Channel Type = 12.2k + HSPA
 - Set UE Target Power
 - Power Ctrl Mode= Alternating bits
 - Set and observe the E-TFCI
 - Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

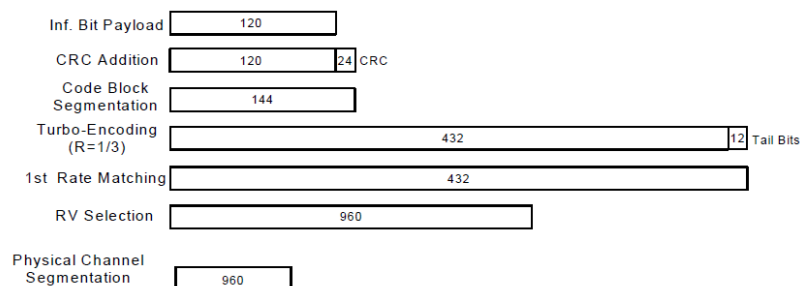


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

- i. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- ii. The RF path losses were compensated into the measurements.
- iii. A call was established between EUT and Base Station with following setting * :
 4. Call Configs = 5.2E:HSPA+:UL with 16QAM
 5. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.4, quoted from the TS 34.121-1 s5.2E
 6. Set Channel Params
 7. Set Cell Power = -86 dBm
 8. Set Channel Type = HSPA
 9. Set UE Target Power =21 dBm
 10. Power Ctrl Mode= All Up Bits
 11. Set Manual Uplink DPCH Bc/Bd = Manual
 12. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 13. Set HSPA Conn DL Channel Levels
 14. Set HS-SCCH Configs
 15. Set RB Test Mode Setup
 16. Set Common HSUPA Parameters
 17. Set Serving Grant
 18. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
- iv. The transmitted maximum output power was recorded.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{fs} = 30/15 * \beta_c$.
 Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
 Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.
 Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
 Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

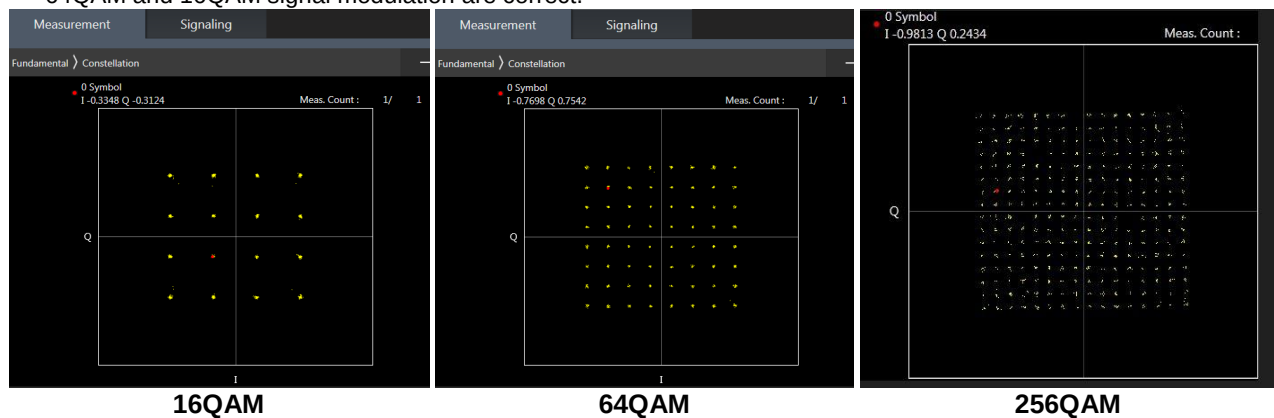
Setup Configuration
<WCDMA Conducted Power>
General Note:

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

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 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 B17 / B5 SAR test was covered by B12 / B26; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

- 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- “special subframe S” contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
- Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

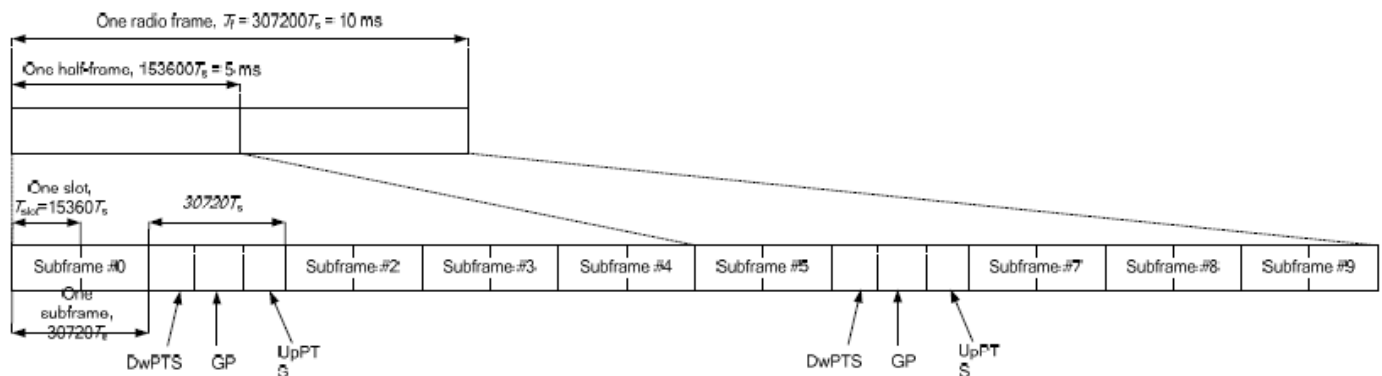


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 3

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

<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 $\frac{1}{4}$ 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_2C	Ant 0
CA_42C	Ant 5
CA_66C	Ant 0
CA_7C	Ant 1

<Intra-band>
General Note:

- The device supports intra-band uplink carrier aggregation for LTE B2/7/66/42 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- According Nov. 2017 TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- Additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

<Inter-band uplink carrier aggregation consideration>

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Inter-band	LTE TX	LTE TX
CA_2A-4A	Ant 0	Ant 4
CA_2A-5A	Ant 0	Ant 4
CA_2A-66A	Ant 0	Ant 4
CA_2A-7A	Ant 0	Ant 4
CA_4A-5A	Ant 0	Ant 4
CA_4A-7A	Ant 0	Ant 4
CA_5A-66A	Ant 4	Ant 0
CA_5A-7A	Ant 0	Ant 4

General Note:

- The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
- The product implements MediaTek TA-SAR feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6GHz). 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.
- For LTE inter-band CA mode, MediaTek TA-SAR algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. TA-SAR algorithm controls the total RF exposure based on LTE inter CA bands to not exceed FCC limit. In Part 1 Report, TA-SAR compliance was evaluated with other Radios (WLAN or BT) using standalone LTE SAR mode.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n66/n38/n41/n78 is NSA mode.
2. 5G NR n2/n5/n7/n26/n66/n38/n41/n77/n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
5. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
6. 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.
7. 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.
8. 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.
9. 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.

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

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	QPSK	≤ 1		
	16 QAM	≤ 2		
	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	Main Antenna Tx	
	LTE TX	NR TX
DC_12A_n2A	Ant 4	Ant 0
DC_12A_n41A	Ant 0	Ant 4
DC_12A_n66A	Ant 4	Ant 0
DC_12A_n78A	Ant 0	Ant 5
DC_2A_n38A	Ant 0	Ant 4
DC_2A_n41A	Ant 0	Ant 4
DC_2A_n5A	Ant 0	Ant 4
DC_2A_n66A	Ant 0	Ant 4
DC_2A_n78A	Ant 0	Ant 5
DC_2A_n7A	Ant 0	Ant 4
DC_38A_n78A	Ant 1	Ant 5
DC_4A_n2A	Ant 0	Ant 4
DC_4A_n78A	Ant 0	Ant 5
DC_4A_n7A	Ant 0	Ant 4
DC_5A_n38A	Ant 0	Ant 4
DC_5A_n41A	Ant 0	Ant 4
DC_5A_n78A	Ant 0	Ant 5
DC_5A_n7A	Ant 0	Ant 4
DC_66A_n38A	Ant 0	Ant 4
DC_66A_n41A	Ant 0	Ant 4
DC_66A_n78A	Ant 0	Ant 5
DC_66A_n7A	Ant 0	Ant 4
DC_7A_n2A	Ant 1	Ant 4
DC_7A_n66A	Ant 1	Ant 4
DC_7A_n78A	Ant 1	Ant 5

<WLAN Conducted Power>

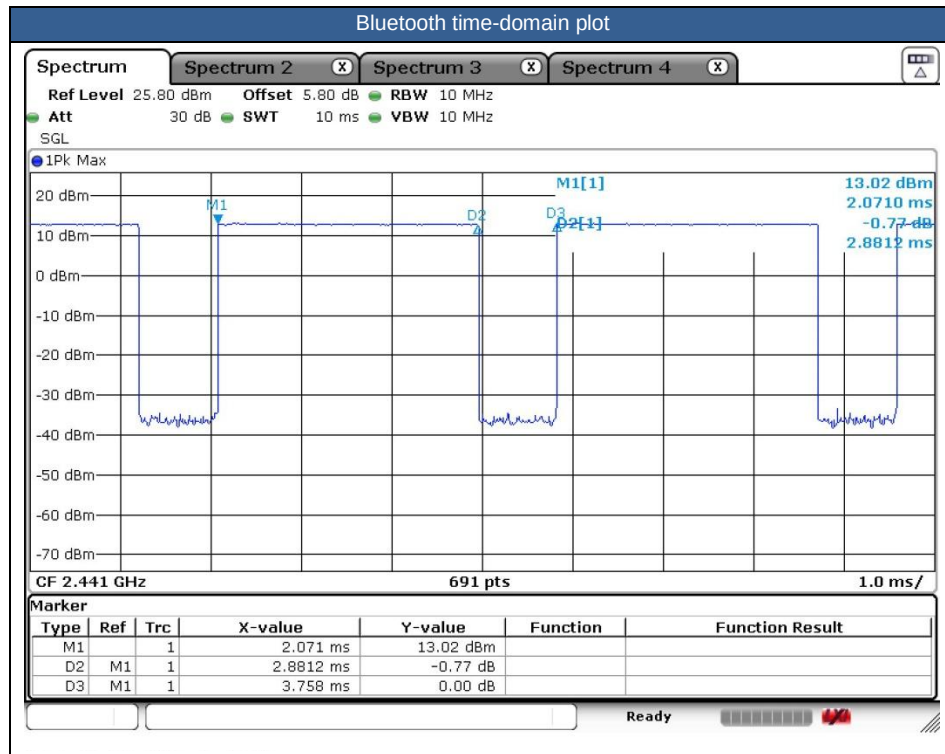
General Note:

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.¹⁸ The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.67% as following figure, for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.





15. Antenna Location

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

16. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For SAR testing of Bluetooth signal with 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 WLAN/Bluetooth: 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.
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 and proximity sensor/receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the MediaTek TA-SAR 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 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 2/4/5/7/13/25/26/66/38/41/42, 5GNR n2/n7/n5/n26/n66/n38/n41/n77/n78, WLAN 5.8GHz/WLAN 5.2GHz, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. 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.
6. Although the headset SAR is greater than 0.8 W/kg, the headset SAR verified the worst of the non-headset SAR and less than non-headset SAR, so there is no need to be tested other channels.
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. LTE B38 at Ant 1, LTE B2/66 and 5GNR n2/66 at Ant 0, LTE B4/7/66 and 5GNR n2/7/66 at Ant 4 support different PAs for same antennas. And some LTE/NR bands support PA (Reference Designator) only under ENDC& UL CA. Some LTE/NR bands support different PAs for some antennas, whether it is the maximum power of Main PA is higher than and very close to the PA (Reference Designator), for RF exposure, after verification all PAs in a same position, so the worst-case PA was chosen to perform full SAR testing to ensure the RF exposure is compliance and another PA verified the worst case.
9. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.

10. 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 $\leq 25\text{mm}$ from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.

GSM Note:

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

WCDMA Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B26 / B38 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 B5 / B17 SAR test was covered by B26 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

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

WLAN/Bluetooth Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

ECI status description:

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

This WWAN bands enabled with MediaTek TA-SAR feature which located at chapter 5. 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	PA (Reference Designator)	Trigger conditions
Head SAR	ECI2	ECI2-1	Earpiece On
Hotspot SAR	ECI7	ECI7-1	Hotspot On
Body worn SAR	ECI3	ECI3-1	Sensor On
Extremity SAR	ECI6	ECI6-1	Sensor On
Body worn/ Extremity SAR	ECI4	ECI4-1	Sensor Off



16.1 Head SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant 0	ECI 2	189	836.4	1	28.05	28.50	1.109	-0.07	0.401	0.445
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant 0	ECI 2	189	836.4	1	28.05	28.50	1.109	-0.14	0.193	0.214
01	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	ECI 2	189	836.4	1	28.05	28.50	1.109	-0.02	0.449	0.498
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant 0	ECI 2	189	836.4	1	28.05	28.50	1.109	-0.02	0.191	0.212
02	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant 0	ECI 2	661	1880	1	25.24	26.50	1.337	0.01	0.122	0.163
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant 0	ECI 2	661	1880	1	25.24	26.50	1.337	0.01	0.060	0.080
	GSM1900	GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	ECI 2	661	1880	1	25.24	26.50	1.337	0.17	0.102	0.136
	GSM1900	GPRS 4 Tx slots	Left Tilted	0mm	Ant 0	ECI 2	661	1880	1	25.24	26.50	1.337	-0.02	0.086	0.115

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	9400	1880	1	22.42	24.00	1.439	0.11	0.101	0.145
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	9400	1880	1	22.42	24.00	1.439	0.11	0.052	0.075
03	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	9400	1880	1	22.42	24.00	1.439	-0.01	0.118	0.170
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	9400	1880	1	22.42	24.00	1.439	0.12	0.084	0.121
04	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	1413	1732.6	1	22.41	24.00	1.442	0.07	0.119	0.172
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	1413	1732.6	1	22.41	24.00	1.442	0.19	0.057	0.082
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	1413	1732.6	1	22.41	24.00	1.442	0.14	0.088	0.127
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	1413	1732.6	1	22.41	24.00	1.442	0.09	0.053	0.076
05	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.57	24.00	1.39	0.08	0.246	0.342
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	4182	836.4	1	22.57	24.00	1.39	0.12	0.138	0.192
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.57	24.00	1.39	0.14	0.239	0.332
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	4182	836.4	1	22.57	24.00	1.39	0.17	0.119	0.165

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	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 4	20M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.81	17.40	1.146			0.02	0.665	0.762
	LTE Band 4	20M	QPSK	50	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.61	17.40	1.199			0.05	0.633	0.759
	LTE Band 4	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.81	17.40	1.146			0.01	0.696	0.798
06	LTE Band 4	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.61	17.40	1.199			0.07	0.678	0.813
	LTE Band 4	20M	QPSK	100	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.60	17.40	1.202			0.05	0.651	0.783
	LTE Band 4	20M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.81	17.40	1.146			-0.10	0.463	0.531
	LTE Band 4	20M	QPSK	50	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.61	17.40	1.199			0.16	0.454	0.544
	LTE Band 4	20M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.81	17.40	1.146			0.04	0.561	0.643
	LTE Band 4	20M	QPSK	50	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	16.61	17.40	1.199			0.14	0.543	0.651
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 1	ECI 2		21100	2535		1	22.93	24.00	1.279			0.08	0.165	0.211
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 1	ECI 2		21100	2535		1	21.85	23.00	1.303			0.03	0.125	0.163
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 1	ECI 2		21100	2535		1	22.93	24.00	1.279			-0.14	0.155	0.198
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 1	ECI 2		21100	2535		1	21.85	23.00	1.303			0.15	0.120	0.156
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 1	ECI 2		21100	2535		1	22.93	24.00	1.279			0.02	0.324	0.414
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 1	ECI 2		21100	2535		1	21.85	23.00	1.303			-0.08	0.257	0.335
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 1	ECI 2		21100	2535		1	22.93	24.00	1.279			-0.00	0.089	0.114
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 1	ECI 2		21100	2535		1	21.85	23.00	1.303			0.15	0.070	0.091
	LTE Band 7	20M	QPSK	1	99	Left Cheek	0mm	Ant 1	ECI 2		21100+21298	2535+2554.8		1	22.65	24.00	1.365			0.01	0.285	0.389



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	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.41	17.70	1.346			0.03	0.460	0.619
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.38	17.70	1.355			0.01	0.458	0.621
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.41	17.70	1.346			-0.09	0.655	0.882
07	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	20850	2510	TAS0 0 CID:25	1	16.38	17.70	1.355			-0.15	0.664	0.900
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21350	2560	TAS0 0 CID:25	1	16.37	17.70	1.358			-0.00	0.508	0.690
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.38	17.70	1.355			-0.11	0.549	0.744
	LTE Band 7	20M	QPSK	100	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.32	17.70	1.374			0.03	0.532	0.731
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.41	17.70	1.346			0.08	0.171	0.230
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.38	17.70	1.355			0.18	0.166	0.225
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.41	17.70	1.346			-0.17	0.224	0.302
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	16.38	17.70	1.355			-0.10	0.214	0.290
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2		23095	707.5		1	22.27	24.00	1.489			-0.02	0.125	0.186
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 0	ECI 2		23095	707.5		1	21.19	23.00	1.517			0.11	0.098	0.149
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 0	ECI 2		23095	707.5		1	22.27	24.00	1.489			0.13	0.066	0.098
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 0	ECI 2		23095	707.5		1	21.19	23.00	1.517			0.04	0.001	0.002
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 0	ECI 2		23095	707.5		1	22.27	24.00	1.489			-0.10	0.119	0.177
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 0	ECI 2		23095	707.5		1	21.19	23.00	1.517			0.18	0.098	0.149
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 0	ECI 2		23095	707.5		1	22.27	24.00	1.489			-0.12	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 0	ECI 2		23095	707.5		1	21.19	23.00	1.517			0.07	0.001	0.002
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.58	24.00	1.387			-0.09	0.182	0.252
08	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.57	24.00	1.39			-0.13	0.188	0.261
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.58	24.00	1.387			-0.02	0.173	0.240
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.57	24.00	1.39			0.11	0.171	0.238
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.58	24.00	1.387			-0.14	0.126	0.175
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.57	24.00	1.39			0.10	0.125	0.174
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.58	24.00	1.387			-0.08	0.128	0.178
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 4	ECI 2		23095	707.5	TAS0 0 CID:33	1	22.57	24.00	1.39			0.05	0.123	0.171
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 4	ECI 2		23095	707.5		2	22.57	24.00	1.39			0.03	0.098	0.136
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 4	ECI 2		23095	707.5		3	22.57	24.00	1.39			0.03	0.085	0.118
09	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2		23230	782		1	22.21	24.00	1.51			0.03	0.162	0.245
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant 0	ECI 2		23230	782		1	21.27	23.00	1.489			0.04	0.122	0.182
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant 0	ECI 2		23230	782		1	22.21	24.00	1.51			-0.18	0.087	0.131
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant 0	ECI 2		23230	782		1	21.27	23.00	1.489			0.17	0.069	0.103
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant 0	ECI 2		23230	782		1	22.21	24.00	1.51			0.14	0.159	0.240
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant 0	ECI 2		23230	782		1	21.27	23.00	1.489			-0.13	0.122	0.182
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant 0	ECI 2		23230	782		1	22.21	24.00	1.51			-0.13	0.076	0.115
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant 0	ECI 2		23230	782		1	21.27	23.00	1.489			0.11	0.060	0.089
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2		26340	1880		1	22.23	24.00	1.503			0.02	0.129	0.194
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 0	ECI 2		26340	1880		1	21.20	23.00	1.514			0.16	0.105	0.159
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 0	ECI 2		26340	1880		1	22.23	24.00	1.503			-0.01	0.055	0.083
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 0	ECI 2		26340	1880		1	21.20	23.00	1.514			0.14	0.045	0.068



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	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 0	ECI 2		26340	1880		1	22.23	24.00	1.503			0.11	0.127	0.191
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 0	ECI 2		26340	1880		1	21.20	23.00	1.514			-0.02	0.100	0.151
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 0	ECI 2		26340	1880		1	22.23	24.00	1.503			-0.13	0.086	0.129
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 0	ECI 2		26340	1880		1	21.20	23.00	1.514			0.07	0.069	0.104
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2-1	PA (Reference Designator)	18900	1880	TAS0 0 CID:35	1	22.47	24.00	1.422			0.01	0.098	0.139
	LTE Band 2	20M	QPSK	1	99	Right Cheek	0mm	Ant 0	ECI 2		18900+19098	1880+1899.8		1	22.15	24.00	1.531			0.02	0.101	0.155
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2		26340	1880		1	15.47	16.30	1.211			0.07	0.647	0.784
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 4	ECI 2		26340	1880		1	15.39	16.30	1.233			-0.09	0.518	0.639
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		26340	1880		1	15.47	16.30	1.211			-0.06	0.696	0.843
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		26140	1860		1	15.45	16.30	1.216			-0.09	0.656	0.798
10	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		26590	1905		1	15.41	16.30	1.227			0.03	0.727	0.892
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		26340	1880		1	15.39	16.30	1.233			0.13	0.564	0.695
	LTE Band 25	20M	QPSK	100	0	Right Tilted	0mm	Ant 4	ECI 2		26140	1860		1	15.40	16.30	1.23			0.02	0.601	0.739
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2		26340	1880		1	15.47	16.30	1.211			0.08	0.425	0.515
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 4	ECI 2		26340	1880		1	15.39	16.30	1.233			0.17	0.348	0.429
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2		26340	1880		1	15.47	16.30	1.211			0.03	0.527	0.638
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 4	ECI 2		26340	1880		1	15.39	16.30	1.233			-0.09	0.425	0.524
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2		26865	831.5		1	22.26	24.00	1.493			0.02	0.131	0.196
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 0	ECI 2		26865	831.5		1	21.18	23.00	1.521			0.10	0.100	0.152
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 0	ECI 2		26865	831.5		1	22.26	24.00	1.493			0.07	0.070	0.105
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 0	ECI 2		26865	831.5		1	21.18	23.00	1.521			-0.12	0.057	0.087
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 0	ECI 2		26865	831.5		1	22.26	24.00	1.493			-0.07	0.129	0.193
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 0	ECI 2		26865	831.5		1	21.18	23.00	1.521			-0.13	0.096	0.146
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 0	ECI 2		26865	831.5		1	22.26	24.00	1.493			0.11	0.059	0.088
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 0	ECI 2		26865	831.5		1	21.18	23.00	1.521			0.04	0.053	0.081
11	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2		26865	831.5		1	22.33	24.00	1.469			0.03	0.397	0.583
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 4	ECI 2		26865	831.5		1	21.27	23.00	1.489			0.06	0.299	0.445
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		26865	831.5		1	22.33	24.00	1.469			0.10	0.352	0.517
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 4	ECI 2		26865	831.5		1	21.27	23.00	1.489			0.13	0.272	0.405
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2		26865	831.5		1	22.33	24.00	1.469			0.09	0.293	0.430
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 4	ECI 2		26865	831.5		1	21.27	23.00	1.489			-0.08	0.230	0.342
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2		26865	831.5		1	22.33	24.00	1.469			-0.10	0.283	0.416
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 4	ECI 2		26865	831.5		1	21.27	23.00	1.489			-0.02	0.219	0.326
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2		132322	1745		1	22.26	24.00	1.493			0.02	0.159	0.237
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 0	ECI 2		132322	1745		1	21.25	23.00	1.496			0.16	0.125	0.187
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 0	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:31	1	22.45	24.00	1.429			-0.13	0.130	0.186
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 0	ECI 2		132322	1745		1	22.26	24.00	1.493			-0.02	0.062	0.093
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 0	ECI 2		132322	1745		1	21.25	23.00	1.496			-0.08	0.049	0.073
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 0	ECI 2		132322	1745		1	22.26	24.00	1.493			-0.09	0.109	0.163
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 0	ECI 2		132322	1745		1	21.25	23.00	1.496			-0.04	0.086	0.129
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 0	ECI 2		132322	1745		1	22.26	24.00	1.493			-0.11	0.071	0.106
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 0	ECI 2		132322	1745		1	21.25	23.00	1.496			-0.09	0.056	0.084
	LTE Band 66	20M	QPSK	1	99	Right Cheek	0mm	Ant 0	ECI 2		132322+132520	1745+1764.8		1	22.11	24.00	1.545			0.01	0.135	0.209
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.75	16.90	1.035			-0.17	0.618	0.640
	LTE Band	20M	QPSK	50	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA	132322	1745	TAS0 0	1	16.73	16.90	1.04			0.14	0.492	0.512



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	66								(Reference Designator)			CID:39										
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		132322	1745		1	15.11	16.90	1.51			-0.09	0.511	0.772
12	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.75	16.90	1.035			-0.12	0.749	0.775
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.73	16.90	1.04			-0.16	0.556	0.578
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.75	16.90	1.035			-0.14	0.455	0.471
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.73	16.90	1.04			-0.09	0.363	0.378
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.75	16.90	1.035			-0.17	0.556	0.575
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	16.73	16.90	1.04			-0.08	0.442	0.460
	LTE Band 38	20M	QPSK	1	0	Right Cheek	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	-0.11	0.101	0.143
	LTE Band 38	20M	QPSK	50	0	Right Cheek	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	0.05	0.078	0.122
	LTE Band 38	20M	QPSK	1	0	Right Tilted	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.06	0.087	0.123
	LTE Band 38	20M	QPSK	50	0	Right Tilted	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	-0.00	0.071	0.111
13	LTE Band 38	20M	QPSK	1	0	Left Cheek	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.06	0.171	0.242
	LTE Band 38	20M	QPSK	50	0	Left Cheek	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	0.10	0.128	0.200
	LTE Band 38	20M	QPSK	1	0	Left Tilted	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.12	0.043	0.061
	LTE Band 38	20M	QPSK	50	0	Left Tilted	0mm	Ant 1	ECI 2-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	0.01	0.033	0.052
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 4	ECI 2		40620	2593		1	19.25	20.30	1.274	62.9	1.006	-0.16	0.457	0.586
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 4	ECI 2		40620	2593		1	19.18	20.30	1.294	62.9	1.006	-0.18	0.371	0.483
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		40620	2593		1	19.25	20.30	1.274	62.9	1.006	0.03	0.638	0.818
14	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		39750	2506		1	19.21	20.30	1.285	62.9	1.006	0.03	0.696	0.900
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		40185	2549.5		1	19.23	20.30	1.279	62.9	1.006	0.13	0.571	0.735
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		41055	2636.5		1	19.15	20.30	1.303	62.9	1.006	0.15	0.510	0.669
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 4	ECI 2		41490	2680		1	19.18	20.30	1.294	62.9	1.006	-0.02	0.465	0.605
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		40620	2593		1	19.18	20.30	1.294	62.9	1.006	-0.02	0.623	0.811
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		39750	2506		1	19.17	20.30	1.297	62.9	1.006	-0.04	0.550	0.718
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		40185	2549.5		1	19.15	20.30	1.303	62.9	1.006	0.17	0.461	0.604
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		41055	2636.5		1	19.11	20.30	1.315	62.9	1.006	0.16	0.402	0.532
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 4	ECI 2		41490	2680		1	19.13	20.30	1.309	62.9	1.006	-0.13	0.418	0.550
	LTE Band 41	20M	QPSK	100	0	Right Tilted	0mm	Ant 4	ECI 2		40185	2549.5		1	19.15	20.30	1.303	62.9	1.006	0.02	0.421	0.552
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 4	ECI 2		40620	2593		1	19.25	20.30	1.274	62.9	1.006	0.11	0.158	0.202
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 4	ECI 2		40620	2593		1	19.18	20.30	1.294	62.9	1.006	-0.06	0.128	0.167
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 4	ECI 2		40620	2593		1	19.25	20.30	1.274	62.9	1.006	0.16	0.203	0.260
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 4	ECI 2		40620	2593		1	19.18	20.30	1.294	62.9	1.006	-0.08	0.164	0.213
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 5	ECI 2		42590	3500		1	20.47	21.10	1.156	62.9	1.006	0.09	0.474	0.551
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 5	ECI 2		42590	3500		1	20.45	21.10	1.161	62.9	1.006	-0.03	0.339	0.396
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 5	ECI 2		42590	3500		1	20.47	21.10	1.156	62.9	1.006	-0.08	0.515	0.599
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 5	ECI 2		42590	3500		1	20.45	21.10	1.161	62.9	1.006	0.02	0.419	0.489
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 5	ECI 2		42590	3500		1	20.47	21.10	1.156	62.9	1.006	0.11	0.701	0.815
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 5	ECI 2		42190	3460		1	20.45	21.10	1.161	62.9	1.006	-0.14	0.641	0.749
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 5	ECI 2		42990	3540		1	20.44	21.10	1.164	62.9	1.006	0.06	0.749	0.877



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42	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 5	ECI 2		42590	3500		1	20.45	21.10	1.161	62.9	1.006	-0.07	0.510	0.596
	LTE Band 42	20M	QPSK	100	0	Left Cheek	0mm	Ant 5	ECI 2		42590	3500		1	20.43	21.10	1.167	62.9	1.006	-0.03	0.561	0.659
15	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 5	ECI 2		42590	3500		1	20.47	21.10	1.156	62.9	1.006	0.01	0.767	0.892
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 5	ECI 2		42190	3460		1	20.45	21.10	1.161	62.9	1.006	-0.11	0.665	0.777
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 5	ECI 2		42990	3540		1	20.44	21.10	1.164	62.9	1.006	0.17	0.755	0.884
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 5	ECI 2		42590	3500		1	20.45	21.10	1.161	62.9	1.006	-0.19	0.693	0.809
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 5	ECI 2		42190	3460		1	20.41	21.10	1.172	62.9	1.006	0.02	0.621	0.732
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 5	ECI 2		42990	3540		1	20.43	21.10	1.167	62.9	1.006	0.03	0.602	0.707
	LTE Band 42	20M	QPSK	100	0	Left Tilted	0mm	Ant 5	ECI 2		42590	3500		1	20.43	21.10	1.167	62.9	1.006	-0.07	0.579	0.680
	LTE Band 42	20M	QPSK	1	99	Left Tilted	0mm	Ant 5	ECI 2		42590+ 42788	3500+ 3519.8		1	20.35	21.10	1.189	62.9	1.006	0.05	0.705	0.843

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2	40M	BPSK	1	1	Right Cheek	0mm	Ant 0	ECI 2		376000	1880		1	22.67	24.00	1.358	0.14	0.093	0.126
	FR1 n2	40M	BPSK	108	54	Right Cheek	0mm	Ant 0	ECI 2		376000	1880		1	22.63	24.00	1.371	0.02	0.095	0.130
	FR1 n2	40M	BPSK	108	54	Right Cheek	0mm	Ant 0	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:29	1	22.64	24.00	1.368	0.04	0.084	0.115
	FR1 n2	40M	BPSK	1	1	Right Tilted	0mm	Ant 0	ECI 2		376000	1880		1	22.67	24.00	1.358	0.12	0.054	0.073
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant 0	ECI 2		376000	1880		1	22.63	24.00	1.371	-0.09	0.051	0.070
	FR1 n2	40M	BPSK	1	1	Left Cheek	0mm	Ant 0	ECI 2		376000	1880		1	22.67	24.00	1.358	-0.17	0.083	0.113
	FR1 n2	40M	BPSK	108	54	Left Cheek	0mm	Ant 0	ECI 2		376000	1880		1	22.63	24.00	1.371	0.17	0.085	0.117
	FR1 n2	40M	BPSK	1	1	Left Tilted	0mm	Ant 0	ECI 2		376000	1880		1	22.67	24.00	1.358	0.02	0.076	0.103
	FR1 n2	40M	BPSK	108	54	Left Tilted	0mm	Ant 0	ECI 2		376000	1880		1	22.63	24.00	1.371	0.01	0.076	0.104
	FR1 n2	40M	BPSK	1	1	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.59	15.70	1.291	-0.14	0.601	0.776
	FR1 n2	40M	BPSK	108	54	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	-0.17	0.623	0.848
	FR1 n2	40M	BPSK	216	0	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	0.16	0.552	0.751
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant 4	ECI 2		376000	1880		1	14.46	15.70	1.33	-0.16	0.573	0.762
	FR1 n2	40M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.59	15.70	1.291	-0.17	0.674	0.870
16	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	0.05	0.689	0.938
	FR1 n2	40M	BPSK	216	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	0.13	0.633	0.862
	FR1 n2	40M	BPSK	1	1	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.59	15.70	1.291	0.15	0.398	0.514
	FR1 n2	40M	BPSK	108	54	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	0.08	0.398	0.542
	FR1 n2	40M	BPSK	1	1	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.59	15.70	1.291	0.17	0.477	0.616
	FR1 n2	40M	BPSK	108	54	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	14.36	15.70	1.361	0.19	0.492	0.670
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880		2	14.36	15.70	1.361	0.02	0.605	0.823
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	376000	1880		3	14.36	15.70	1.361	0.03	0.601	0.818
	FR1 n7	50M	BPSK	1	1	Right Cheek	0mm	Ant 1	ECI 2		507000	2535		1	23.32	24.00	1.169	-0.11	0.175	0.205
	FR1 n7	50M	BPSK	135	68	Right Cheek	0mm	Ant 1	ECI 2		507000	2535		1	23.31	24.00	1.172	-0.15	0.202	0.237
	FR1 n7	50M	BPSK	1	1	Right Tilted	0mm	Ant 1	ECI 2		507000	2535		1	23.32	24.00	1.169	-0.15	0.153	0.179
	FR1 n7	50M	BPSK	135	68	Right Tilted	0mm	Ant 1	ECI 2		507000	2535		1	23.31	24.00	1.172	-0.16	0.181	0.212
	FR1 n7	50M	BPSK	1	1	Left Cheek	0mm	Ant 1	ECI 2		507000	2535		1	23.32	24.00	1.169	0.07	0.305	0.357
	FR1 n7	50M	BPSK	135	68	Left Cheek	0mm	Ant 1	ECI 2		507000	2535		1	23.31	24.00	1.172	0.02	0.364	0.427
	FR1 n7	50M	BPSK	1	1	Left Tilted	0mm	Ant 1	ECI 2		507000	2535		1	23.32	24.00	1.169	-0.01	0.094	0.110
	FR1 n7	50M	BPSK	135	68	Left Tilted	0mm	Ant 1	ECI 2		507000	2535		1	23.31	24.00	1.172	-0.08	0.103	0.121
	FR1 n7	50M	BPSK	1	1	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.53	17.60	1.279	0.14	0.583	0.746
	FR1 n7	50M	BPSK	135	68	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.48	17.60	1.294	0.06	0.557	0.721
17	FR1 n7	50M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.53	17.60	1.279	0.07	0.693	0.886
	FR1 n7	50M	BPSK	135	68	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.48	17.60	1.294	-0.04	0.642	0.831
	FR1 n7	50M	BPSK	270	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.46	17.60	1.3	0.08	0.583	0.758
	FR1 n7	50M	BPSK	1	1	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.53	17.60	1.279	-0.19	0.213	0.272
	FR1 n7	50M	BPSK	135	68	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.48	17.60	1.294	0.10	0.196	0.254



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	FR1 n7	50M	BPSK	1	1	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.53	17.60	1.279	0.00	0.284	0.363
	FR1 n7	50M	BPSK	135	68	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	16.48	17.60	1.294	-0.10	0.248	0.321
	FR1 n26	20M	BPSK	1	1	Right Cheek	0mm	Ant 0	ECI 2		166300	831.5		1	22.58	24.00	1.387	-0.02	0.109	0.151
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant 0	ECI 2		166300	831.5		1	22.48	24.00	1.419	0.02	0.130	0.184
	FR1 n26	20M	BPSK	1	1	Right Tilted	0mm	Ant 0	ECI 2		166300	831.5		1	22.58	24.00	1.387	0.19	0.064	0.089
	FR1 n26	20M	BPSK	50	28	Right Tilted	0mm	Ant 0	ECI 2		166300	831.5		1	22.48	24.00	1.419	0.12	0.075	0.106
	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant 0	ECI 2		166300	831.5		1	22.58	24.00	1.387	-0.12	0.101	0.140
	FR1 n26	20M	BPSK	50	28	Left Cheek	0mm	Ant 0	ECI 2		166300	831.5		1	22.48	24.00	1.419	0.00	0.126	0.179
	FR1 n26	20M	BPSK	1	1	Left Tilted	0mm	Ant 0	ECI 2		166300	831.5		1	22.58	24.00	1.387	-0.02	0.058	0.080
	FR1 n26	20M	BPSK	50	28	Left Tilted	0mm	Ant 0	ECI 2		166300	831.5		1	22.48	24.00	1.419	-0.11	0.071	0.101
	FR1 n26	20M	BPSK	1	1	Right Cheek	0mm	Ant 4	ECI 2		166300	831.5		1	22.58	24.00	1.387	0.10	0.405	0.562
18	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant 4	ECI 2		166300	831.5		1	22.55	24.00	1.396	-0.07	0.488	0.681
	FR1 n26	20M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2		166300	831.5		1	22.58	24.00	1.387	0.02	0.324	0.449
	FR1 n26	20M	BPSK	50	28	Right Tilted	0mm	Ant 4	ECI 2		166300	831.5		1	22.55	24.00	1.396	0.02	0.413	0.577
	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant 4	ECI 2		166300	831.5		1	22.58	24.00	1.387	0.16	0.275	0.381
	FR1 n26	20M	BPSK	50	28	Left Cheek	0mm	Ant 4	ECI 2		166300	831.5		1	22.55	24.00	1.396	0.04	0.357	0.498
	FR1 n26	20M	BPSK	1	1	Left Tilted	0mm	Ant 4	ECI 2		166300	831.5		1	22.58	24.00	1.387	-0.13	0.258	0.358
	FR1 n26	20M	BPSK	50	28	Left Tilted	0mm	Ant 4	ECI 2		166300	831.5		1	22.55	24.00	1.396	0.18	0.328	0.458
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant 4	ECI 2		166300	831.5		2	22.55	24.00	1.396	0.05	0.219	0.306
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant 4	ECI 2		166300	831.5		3	22.55	24.00	1.396	0.06	0.208	0.290
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.64	24.00	1.368	-0.10	0.112	0.153
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.60	24.00	1.38	0.02	0.128	0.177
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant 0	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:25	1	22.62	24.00	1.374	-0.04	0.122	0.168
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.64	24.00	1.368	-0.09	0.071	0.097
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.60	24.00	1.38	0.11	0.061	0.084
	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.64	24.00	1.368	0.10	0.108	0.148
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.60	24.00	1.38	-0.05	0.094	0.130
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.64	24.00	1.368	0.10	0.063	0.086
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant 0	ECI 2		349000	1745	TAS0 0 CID:34	1	22.60	24.00	1.38	-0.13	0.060	0.083
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.89	17.20	1.352	0.01	0.577	0.780
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.83	17.20	1.371	0.14	0.559	0.766
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 4	ECI 2		349000	1745	TAS1 1 CID:34	1	15.66	17.20	1.426	0.18	0.503	0.717
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.89	17.20	1.352	-0.03	0.633	0.856
19	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.83	17.20	1.371	0.04	0.660	0.905
	FR1 n66	45M	BPSK	240	0	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.82	17.20	1.374	0.01	0.571	0.785
	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.89	17.20	1.352	-0.17	0.411	0.556
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.83	17.20	1.371	0.07	0.417	0.572
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.89	17.20	1.352	0.14	0.494	0.668
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.83	17.20	1.371	-0.07	0.512	0.702
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745		2	15.83	17.20	1.371	0.05	0.605	0.829
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant 4	ECI 2-1	PA (Reference Designator)	349000	1745		3	15.83	17.20	1.371	0.02	0.601	0.824
	FR1 n41	100M	BPSK	1	1	Right Cheek	0mm	Ant 4	ECI 2		518598	2592.99		1	17.12	18.50	1.374	-0.16	0.661	0.908
	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant 4	ECI 2		518598	2592.99		1	17.09	18.50	1.384	-0.08	0.585	0.810
	FR1 n41	100M	BPSK	270	0	Right Cheek	0mm	Ant 4	ECI 2		518598	2592.99		1	17.06	18.50	1.393	-0.09	0.503	0.701
20	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2		518598	2592.99		1	17.12	18.50	1.374	-0.18	0.765	1.051
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant 4	ECI 2		518598	2592.99		1	17.09	18.50	1.384	0.11	0.645	0.893
	FR1 n41	100M	BPSK	270	0	Right Tilted	0mm	Ant 4	ECI 2		518598	2592.99		1	17.06	18.50	1.393	-0.09	0.591	0.823
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant 4	ECI 2		518598	2592.99		1	17.12	18.50	1.374	0.16	0.234	0.322
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant 4	ECI 2		518598	2592.99		1	17.09	18.50	1.384	0.03	0.200	0.277
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant 4	ECI 2		518598	2592.99		1	17.12	18.50	1.374	-0.08	0.302	0.415
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant 4	ECI 2		518598	2592.99		1	17.09	18.50	1.384	0.18	0.243	0.336
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2		518598	2592.99		2	17.12	18.50	1.374	0.03	0.700	0.962
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant 4	ECI 2		518598	2592.99		3	17.12	18.50	1.374	0.02	0.698	0.959
	FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant 5	ECI 2		656000	3840		1	14.51	15.90	1.377	-0.11	0.368	0.507
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant 5	ECI 2		656000	3840		1	14.45	15.90	1.396	-0.08	0.376	0.525
	FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant 5	ECI 2		656000	3840		1	14.51	15.90	1.377	-0.19	0.372	0.512
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant 5	ECI 2		656000	3840		1	14.45	15.90	1.396	-0.01	0.411	0.574
	FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant 5	ECI 2		656000	3840		1	14.51	15.90	1.377	0.16	0.620	0.854
21	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	ECI 2		656000	3840		1	14.45	15.90	1.396	-0.09	0.647	0.903
	FR1 n77	100M	BPSK	270	0	Left Cheek	0mm	Ant 5	ECI 2		656000	3840		1	14.38	15.90	1.419	-0.01	0.616	0.874



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	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant 5	ECI 2		656000	3840		1	14.51	15.90	1.377	0.05	0.581	0.800
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant 5	ECI 2		656000	3840		1	14.45	15.90	1.396	0.00	0.634	0.885
	FR1 n77	100M	BPSK	270	0	Left Tilted	0mm	Ant 5	ECI 2		656000	3840		1	14.38	15.90	1.419	-0.18	0.576	0.817
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	ECI 2		656000	3840		2	14.45	15.90	1.396	0.03	0.605	0.845
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 5	ECI 2		656000	3840		3	14.45	15.90	1.396	0.02	0.603	0.842
	FR1 n77	100M	BPSK	1	271	Right Cheek	0mm	Ant 1	ECI 2		656000	3840		1	20.29	20.50	1.05	-0.08	0.042	0.044
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant 1	ECI 2		656000	3840		1	20.05	20.50	1.109	0.03	0.049	0.054
	FR1 n77	100M	BPSK	1	271	Right Tilted	0mm	Ant 1	ECI 2		656000	3840		1	20.29	20.50	1.05	0.06	0.060	0.063
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant 1	ECI 2		656000	3840		1	20.05	20.50	1.109	-0.11	0.067	0.074
	FR1 n77	100M	BPSK	1	271	Left Cheek	0mm	Ant 1	ECI 2		656000	3840		1	20.29	20.50	1.05	-0.04	0.088	0.092
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 1	ECI 2		656000	3840		1	20.05	20.50	1.109	0.02	0.094	0.104
	FR1 n77	100M	BPSK	1	271	Left Tilted	0mm	Ant 1	ECI 2		656000	3840		1	20.29	20.50	1.05	-0.02	0.041	0.043
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant 1	ECI 2		656000	3840		1	20.05	20.50	1.109	0.09	0.057	0.063
	FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant 2	ECI 2		656000	3840		1	19.75	20.50	1.189	-0.11	0.246	0.292
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant 2	ECI 2		656000	3840		1	19.72	20.50	1.197	0.03	0.224	0.268
	FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant 2	ECI 2		656000	3840		1	19.75	20.50	1.189	0.11	0.140	0.166
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant 2	ECI 2		656000	3840		1	19.72	20.50	1.197	0.01	0.141	0.169
	FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant 2	ECI 2		656000	3840		1	19.75	20.50	1.189	-0.01	0.075	0.089
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 2	ECI 2		656000	3840		1	19.72	20.50	1.197	0.00	0.073	0.087
	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant 2	ECI 2		656000	3840		1	19.75	20.50	1.189	-0.09	0.054	0.064
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant 2	ECI 2		656000	3840		1	19.72	20.50	1.197	-0.06	0.052	0.062
	FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant 8	ECI 2		656000	3840		1	21.58	22.50	1.236	0.17	0.047	0.058
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant 8	ECI 2		656000	3840		1	21.47	22.50	1.268	0.18	0.034	0.043
	FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant 8	ECI 2		656000	3840		1	21.58	22.50	1.236	-0.05	0.040	0.049
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant 8	ECI 2		656000	3840		1	21.47	22.50	1.268	0.14	0.026	0.033
	FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant 8	ECI 2		656000	3840		1	21.58	22.50	1.236	0.04	0.085	0.105
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant 8	ECI 2		656000	3840		1	21.47	22.50	1.268	0.02	0.064	0.081
	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant 8	ECI 2		656000	3840		1	21.58	22.50	1.236	0.00	0.047	0.058
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant 8	ECI 2		656000	3840		1	21.47	22.50	1.268	0.10	0.026	0.033

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6	Head Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.02	0.279	0.388
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6	Head Simultaneous	1	2412	1	15.61	17.50	1.545	100.0	1.0	0.03	0.121	0.187
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6	Head Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.05	0.249	0.346
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6	Head Simultaneous	1	2412	1	15.61	17.50	1.545	100.0	1.0	0.06	0.156	0.241
22	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Head Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.01	0.411	0.571
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6	Head Simultaneous	1	2412	1	15.61	17.50	1.545	100.0	1.0	0.03	0.257	0.397
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	Head Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.02	0.390	0.542
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	Head Simultaneous	1	2412	1	15.61	17.50	1.545	100.0	1.0	0.01	0.244	0.377
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 6	Head Standalone	54	5270	1	15.43	17.00	1.435	94.68	1.056	0.02	0.317	0.480
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 6	Head Simultaneous	58	5290	1	10.89	12.50	1.449	86.15	1.161	0.03	0.009	0.015
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 6	Head Standalone	54	5270	1	15.43	17.00	1.435	94.68	1.056	0.03	0.347	0.526
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 6	Head Simultaneous	58	5290	1	10.89	12.50	1.449	86.15	1.161	0.05	0.106	0.178
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6	Head Standalone	54	5270	1	15.43	17.00	1.435	94.68	1.056	0.05	0.601	0.911
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6	Head Standalone	62	5310	1	14.76	16.50	1.493	94.68	1.056	0.03	0.521	0.821
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	Head Simultaneous	58	5290	1	10.89	12.50	1.449	86.15	1.161	0.06	0.184	0.310
23	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	54	5270	1	15.43	17.00	1.435	94.68	1.056	-0.04	0.785	1.190
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	62	5310	1	14.76	16.50	1.493	94.68	1.056	0.02	0.651	1.026
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Simultaneous	58	5290	1	10.89	12.50	1.449	86.15	1.161	0.02	0.206	0.347
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	54	5270	2	15.43	17.00	1.435	94.68	1.056	0.03	0.698	1.058
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	54	5270	3	15.43	17.00	1.435	94.68	1.056	0.05	0.685	1.038
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 6	Head Standalone	122	5610	1	15.46	16.50	1.271	86.15	1.161	0.03	0.334	0.493
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 6	Head Simultaneous	138	5690	1	10.76	12.50	1.493	86.15	1.161	0.02	0.101	0.175
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 6	Head Standalone	122	5610	1	15.46	16.50	1.271	86.15	1.161	0.01	0.460	0.679
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 6	Head Simultaneous	138	5690	1	10.76	12.50	1.493	86.15	1.161	0.05	0.117	0.203
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	Head Standalone	122	5610	1	15.46	16.50	1.271	86.15	1.161	0.06	0.571	0.843
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	Head Standalone	106	5530	1	15.41	16.50	1.285	86.15	1.161	0.02	0.501	0.747
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	Head Simultaneous	138	5690	1	10.76	12.50	1.493	86.15	1.161	0.01	0.208	0.361
24	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	122	5610	1	15.46	16.50	1.271	86.15	1.161	-0.07	0.801	1.182
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	106	5530	1	15.41	16.50	1.285	86.15	1.161	0.02	0.651	0.971
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head	138	5690	1	10.76	12.50	1.493	86.15	1.161	0.02	0.205	0.355



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						Simultaneous											
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	122	5610	2	15.46	16.50	1.271	86.15	1.161	0.05	0.568	0.838
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Standalone	122	5610	3	15.46	16.50	1.271	86.15	1.161	0.06	0.625	0.922
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 6	Head Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.02	0.293	0.439
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 6	Head Simultaneous	155	5775	1	12.96	14.50	1.426	86.15	1.161	0.03	0.086	0.142
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 6	Head Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.05	0.320	0.479
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 6	Head Simultaneous	155	5775	1	12.96	14.50	1.426	86.15	1.161	0.06	0.094	0.156
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6	Head Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.00	0.555	0.831
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 6	Head Standalone	165	5825	1	17.82	19.50	1.472	97.46	1.026	0.01	0.556	0.840
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	Head Simultaneous	155	5775	1	12.96	14.50	1.426	86.15	1.161	0.01	0.164	0.272
25	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	Head Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	-0.07	0.801	1.199
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	Head Standalone	165	5825	1	17.82	19.50	1.472	97.46	1.026	0.05	0.698	1.054
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 6	Head Simultaneous	155	5775	1	12.96	14.50	1.426	86.15	1.161	0.05	0.216	0.358
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	Head Standalone	157	5785	2	17.86	19.50	1.459	97.46	1.026	0.02	0.725	1.085
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	Head Standalone	157	5785	3	17.86	19.50	1.459	97.46	1.026	0.05	0.723	1.082

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.02	0.034	0.050
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.01	0.042	0.062
26	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.03	0.075	0.110
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.03	0.069	0.101

16.2 Hotspot SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
27	GSM850	GPRS 4 Tx slots	Front	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	0.16	0.541	0.655
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	-0.15	1.080	1.308
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	128	824.2	1	26.03	26.90	1.222	0.08	1.040	1.271
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	251	848.8	1	26.03	26.90	1.222	-0.03	1.060	1.295
	GSM850	GPRS 4 Tx slots	Left Side	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	0.18	0.171	0.207
	GSM850	GPRS 4 Tx slots	Right Side	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	-0.11	0.350	0.424
	GSM850	GPRS 4 Tx slots	Top Side	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	-0.11	0.058	0.070
	GSM850	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	189	836.4	1	26.07	26.90	1.211	-0.15	0.822	0.995
	GSM850	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	128	824.2	1	26.03	26.90	1.222	0.13	0.860	1.051
	GSM850	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	251	848.8	1	26.03	26.90	1.222	-0.12	0.922	1.127
28	GSM1900	GPRS 4 Tx slots	Front	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	-0.04	0.289	0.351
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	0.00	1.040	1.265
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	512	1850.2	1	23.21	24.10	1.227	-0.09	1.040	1.276
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 7	810	1909.8	1	23.15	24.10	1.245	0.02	1.050	1.307
	GSM1900	GPRS 4 Tx slots	Left Side	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	0.12	0.104	0.126
	GSM1900	GPRS 4 Tx slots	Right Side	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	-0.14	0.076	0.092
	GSM1900	GPRS 4 Tx slots	Top Side	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	0.11	0.001	0.001
	GSM1900	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	661	1880	1	23.25	24.10	1.216	0.13	0.920	1.119
	GSM1900	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	512	1850.2	1	23.21	24.10	1.227	-0.05	0.890	1.092
	GSM1900	GPRS 4 Tx slots	Bottom Side	5mm	Ant 0	ECI 7	810	1909.8	1	23.15	24.10	1.245	0.09	0.991	1.234

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	-0.13	0.344	0.424
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	0.09	0.789	0.973
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9262	1852.4	1	17.50	18.50	1.259	-0.00	0.834	1.050
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9538	1907.6	1	17.46	18.50	1.271	0.09	0.782	0.994
	WCDMA II	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	-0.02	0.111	0.137
	WCDMA II	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	-0.10	0.083	0.102
	WCDMA II	RMC 12.2Kbps	Top Side	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	-0.03	0.001	0.001
	WCDMA II	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9400	1880	1	17.59	18.50	1.233	0.15	0.994	1.226
	WCDMA II	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9262	1852.4	1	17.50	18.50	1.259	0.01	1.050	1.322
	WCDMA II	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9538	1907.6	1	17.46	18.50	1.271	0.19	0.964	1.221
	WCDMA II	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9262	1852.4	2	17.50	18.50	1.259	0.02	0.980	1.234
	WCDMA II	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9262	1852.4	3	17.50	18.50	1.259	0.03	0.962	1.211
	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	0.17	0.318	0.373
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	-0.14	0.783	0.918
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1312	1712.4	1	17.25	18.00	1.189	-0.18	0.783	0.931
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1513	1752.6	1	17.28	18.00	1.18	-0.12	0.881	1.040
	WCDMA IV	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	-0.18	0.081	0.095
	WCDMA IV	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	0.13	0.082	0.096
	WCDMA IV	RMC 12.2Kbps	Top Side	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	-0.11	0.001	0.001
	WCDMA IV	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1413	1732.6	1	17.31	18.00	1.172	0.19	0.976	1.144
	WCDMA IV	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1312	1712.4	1	17.25	18.00	1.189	0.03	0.964	1.146
	WCDMA IV	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1513	1752.6	1	17.28	18.00	1.18	0.03	1.090	1.286
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	-0.02	0.508	0.574
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	0.14	1.050	1.186
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4132	826.4	1	22.43	23.10	1.167	0.03	0.908	1.060
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	1	22.46	23.10	1.159	0.05	1.130	1.310
	WCDMA V	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	0.10	0.169	0.191
	WCDMA V	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	-0.07	0.327	0.370
	WCDMA V	RMC 12.2Kbps	Top Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	0.10	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.57	23.10	1.13	0.05	0.863	0.975
	WCDMA V	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4132	826.4	1	22.43	23.10	1.167	-0.12	0.789	0.921
	WCDMA V	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4233	846.6	1	22.46	23.10	1.159	-0.11	0.991	1.149



【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	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 4	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			0.15	0.193	0.203
	LTE Band 4	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			0.09	0.154	0.164
	LTE Band 4	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			0.16	0.335	0.352
	LTE Band 4	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			-0.03	0.268	0.286
	LTE Band 4	20M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			0.03	0.035	0.037
	LTE Band 4	20M	QPSK	50	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			-0.11	0.028	0.030
	LTE Band 4	20M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			0.07	0.021	0.022
	LTE Band 4	20M	QPSK	50	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			0.05	0.017	0.018
32	LTE Band 4	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			0.16	0.439	0.462
	LTE Band 4	20M	QPSK	50	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			-0.05	0.343	0.366
	LTE Band 4	20M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.28	15.50	1.052			-0.08	0.012	0.013
	LTE Band 4	20M	QPSK	50	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	20175	1732.5	TASO 0 CID:37	1	15.22	15.50	1.067			-0.07	0.010	0.011
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			-0.03	0.461	0.616
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			0.16	0.371	0.502
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			0.11	0.872	1.166
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 7		20850	2510		1	19.71	21.00	1.346			0.11	0.771	1.038
33	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 7		21350	2560		1	19.68	21.00	1.355			0.02	0.960	1.301
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			0.10	0.700	0.946
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 7		20850	2510		1	19.68	21.00	1.355			-0.04	0.616	0.835
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 7		21350	2560		1	19.64	21.00	1.368			-0.04	0.763	1.044
	LTE Band 7	20M	QPSK	100	0	Back	5mm	Ant 1	ECI 7		21100	2535		1	19.66	21.00	1.361			-0.06	0.692	0.942
	LTE Band 7	20M	QPSK	1	0	Left Side	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			0.19	0.366	0.489
	LTE Band 7	20M	QPSK	50	0	Left Side	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			-0.08	0.293	0.396
	LTE Band 7	20M	QPSK	1	0	Right Side	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			-0.01	0.070	0.094
	LTE Band 7	20M	QPSK	50	0	Right Side	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			-0.10	0.051	0.069
	LTE Band 7	20M	QPSK	1	0	Top Side	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			0.05	0.030	0.040
	LTE Band 7	20M	QPSK	50	0	Top Side	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			0.04	0.025	0.034
	LTE Band 7	20M	QPSK	1	0	Bottom Side	5mm	Ant 1	ECI 7		21100	2535		1	19.74	21.00	1.337			0.18	0.495	0.662
	LTE Band 7	20M	QPSK	50	0	Bottom Side	5mm	Ant 1	ECI 7		21100	2535		1	19.69	21.00	1.352			0.00	0.393	0.531
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 7		21350+21152	2560+2540.2		1	19.41	21.00	1.442			0.01	0.809	1.167
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			0.05	0.141	0.168
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			0.02	0.139	0.168
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			-0.07	0.525	0.627
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			0.00	0.513	0.620
	LTE Band 7	20M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			0.16	0.138	0.165
	LTE Band 7	20M	QPSK	50	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			0.11	0.137	0.165
	LTE Band 7	20M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			-0.03	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			0.06	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			0.02	0.509	0.608
	LTE Band 7	20M	QPSK	50	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			-0.10	0.502	0.606
	LTE Band 7	20M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.43	13.20	1.194			0.17	0.007	0.008
	LTE Band 7	20M	QPSK	50	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	21100	2535	TASO 0 CID:25	1	12.38	13.20	1.208			-0.13	0.006	0.007
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			0.03	0.340	0.506
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			-0.12	0.270	0.410
34	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			0.04	0.703	1.047
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			-0.07	0.556	0.843
	LTE Band 12	10M	QPSK	50	0	Back	5mm	Ant 0	ECI 7		23095	707.5		1	21.14	23.00	1.535			-0.16	0.503	0.772
	LTE Band 12	10M	QPSK	1	0	Left Side	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			-0.18	0.249	0.371
	LTE Band 12	10M	QPSK	25	0	Left Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			0.05	0.200	0.303



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	LTE Band 12	10M	QPSK	1	0	Right Side	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			-0.14	0.538	0.801
	LTE Band 12	10M	QPSK	25	0	Right Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			-0.15	0.425	0.645
	LTE Band 12	10M	QPSK	50	0	Right Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.14	23.00	1.535			0.03	0.423	0.649
	LTE Band 12	10M	QPSK	1	0	Top Side	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			-0.16	0.003	0.004
	LTE Band 12	10M	QPSK	25	0	Top Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			0.15	0.003	0.005
	LTE Band 12	10M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		23095	707.5		1	22.27	24.00	1.489			0.18	0.612	0.911
	LTE Band 12	10M	QPSK	25	0	Bottom Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.19	23.00	1.517			-0.06	0.487	0.739
	LTE Band 12	10M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		23095	707.5		1	21.14	23.00	1.535			0.02	0.501	0.769
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			-0.01	0.062	0.086
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			-0.12	0.061	0.085
	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			0.02	0.154	0.214
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			-0.00	0.151	0.210
	LTE Band 12	10M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			-0.03	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Left Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			-0.08	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			0.03	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Right Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			-0.18	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			0.18	0.137	0.190
	LTE Band 12	10M	QPSK	25	0	Top Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			-0.12	0.130	0.181
	LTE Band 12	10M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.58	24.00	1.387			-0.10	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Bottom Side	5mm	Ant 4	ECI 7		23095	707.5	TASO 0 CID:33	1	22.57	24.00	1.39			0.08	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Front	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			0.09	0.448	0.676
	LTE Band 13	10M	QPSK	25	0	Front	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			0.14	0.353	0.526
35	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			0.01	0.938	1.416
	LTE Band 13	10M	QPSK	25	0	Back	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			-0.16	0.749	1.115
	LTE Band 13	10M	QPSK	50	0	Back	5mm	Ant 0	ECI 7		23230	782		1	21.25	23.00	1.496			-0.04	0.772	1.155
	LTE Band 13	10M	QPSK	1	0	Left Side	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			-0.08	0.206	0.311
	LTE Band 13	10M	QPSK	25	0	Left Side	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			0.12	0.165	0.246
	LTE Band 13	10M	QPSK	1	0	Right Side	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			-0.18	0.484	0.731
	LTE Band 13	10M	QPSK	25	0	Right Side	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			-0.08	0.387	0.576
	LTE Band 13	10M	QPSK	1	0	Top Side	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			0.07	0.003	0.005
	LTE Band 13	10M	QPSK	25	0	Top Side	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			-0.08	0.003	0.004
	LTE Band 13	10M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		23230	782		1	22.21	24.00	1.51			0.07	0.906	1.368
	LTE Band 13	10M	QPSK	25	0	Bottom Side	5mm	Ant 0	ECI 7		23230	782		1	21.27	23.00	1.489			0.04	0.716	1.066
	LTE Band 13	10M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		23230	782		1	21.25	23.00	1.496			0.02	0.721	1.079
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		23230	782		2	22.21	24.00	1.51			0.02	0.679	1.025
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		23230	782		3	22.21	24.00	1.51			0.03	0.629	0.950
	LTE Band 25	20M	QPSK	1	0	Front	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			0.18	0.335	0.430
	LTE Band 25	20M	QPSK	50	0	Front	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			0.09	0.269	0.348
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			0.03	0.757	0.973
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		26140	1860		1	17.08	18.20	1.294			-0.03	0.797	1.031
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		26590	1905		1	17.06	18.20	1.3			-0.08	0.779	1.013
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			0.05	0.611	0.791
	LTE Band 25	20M	QPSK	100	0	Back	5mm	Ant 0	ECI 7		26340	1880		1	17.04	18.20	1.306			-0.11	0.608	0.794
	LTE Band 25	20M	QPSK	1	0	Left Side	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			-0.19	0.105	0.135
	LTE Band 25	20M	QPSK	50	0	Left Side	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			-0.08	0.082	0.106
	LTE Band 25	20M	QPSK	1	0	Right Side	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			0.12	0.072	0.093



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	LTE Band 25	20M	QPSK	50	0	Right Side	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			0.01	0.058	0.075
	LTE Band 25	20M	QPSK	1	0	Top Side	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			-0.16	0.002	0.003
	LTE Band 25	20M	QPSK	50	0	Top Side	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			0.06	0.002	0.003
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		26340	1880		1	17.11	18.20	1.285			-0.01	0.946	1.216
36	LTE Band 25	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		26140	1860		1	17.08	18.20	1.294			0.02	0.990	1.281
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		26590	1905		1	17.06	18.20	1.3			-0.14	0.957	1.244
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		26340	1880		1	17.08	18.20	1.294			0.14	0.761	0.985
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		26140	1860		1	17.05	18.20	1.303			0.13	0.793	1.033
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		26590	1905		1	17.06	18.20	1.3			-0.12	0.728	0.946
	LTE Band 25	20M	QPSK	100	0	Bottom Side	5mm	Ant 0	ECI 7		26340	1880		1	17.04	18.20	1.306			0.18	0.742	0.969
	LTE Band 2	20M	QPSK	1	99	Bottom Side	5mm	Ant 0	ECI 7		18900+19098	1880+1899.8		1	16.75	18.20	1.396			0.00	0.833	1.163
	LTE Band 2	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7-1	PA (Reference Designator)	18900	1880	TASO 0 CID:35	1	17.43	18.20	1.194			0.02	0.821	0.980
	LTE Band 25	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			-0.12	0.183	0.252
	LTE Band 25	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			-0.04	0.149	0.206
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			-0.07	0.389	0.536
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			0.09	0.312	0.432
	LTE Band 25	20M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			-0.07	0.039	0.054
	LTE Band 25	20M	QPSK	50	0	Left Side	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			-0.05	0.031	0.043
	LTE Band 25	20M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			-0.03	0.023	0.032
	LTE Band 25	20M	QPSK	50	0	Right Side	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			-0.15	0.019	0.026
	LTE Band 25	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			0.02	0.406	0.559
	LTE Band 25	20M	QPSK	50	0	Top Side	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			-0.17	0.326	0.451
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7		26340	1880		1	12.51	13.90	1.377			0.01	0.001	0.001
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5mm	Ant 4	ECI 7		26340	1880		1	12.49	13.90	1.384			0.06	0.001	0.001
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			-0.15	0.528	0.640
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			0.19	0.416	0.633
37	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			0.03	1.060	1.286
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			-0.16	0.830	1.262
	LTE Band 26	15M	QPSK	75	0	Back	5mm	Ant 0	ECI 7		26865	831.5		1	21.19	23.00	1.517			-0.17	0.840	1.274
	LTE Band 26	15M	QPSK	1	0	Left Side	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			-0.13	0.181	0.220
	LTE Band 26	15M	QPSK	36	0	Left Side	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			0.08	0.143	0.218
	LTE Band 26	15M	QPSK	1	0	Right Side	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			-0.10	0.362	0.439
	LTE Band 26	15M	QPSK	36	0	Right Side	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			0.06	0.286	0.435
	LTE Band 26	15M	QPSK	1	0	Top Side	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			-0.06	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	Top Side	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			-0.08	0.001	0.002
	LTE Band 26	15M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		26865	831.5		1	22.26	23.10	1.213			0.12	0.822	0.997
	LTE Band 26	15M	QPSK	36	0	Bottom Side	5mm	Ant 0	ECI 7		26865	831.5		1	21.18	23.00	1.521			-0.08	0.641	0.975
	LTE Band 26	15M	QPSK	75	0	Bottom Side	5mm	Ant 0	ECI 7		26865	831.5		1	21.19	23.00	1.517			0.02	0.635	0.963
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			-0.18	0.161	0.237
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			-0.18	0.124	0.185
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			0.02	0.424	0.623
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			-0.17	0.331	0.493
	LTE Band 26	15M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			0.15	0.058	0.085
	LTE Band 26	15M	QPSK	36	0	Left Side	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			-0.05	0.045	0.067
	LTE Band 26	15M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			-0.14	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	Right Side	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			-0.01	0.001	0.001



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	LTE Band 26	15M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			0.17	0.410	0.602
	LTE Band 26	15M	QPSK	36	0	Top Side	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			0.07	0.246	0.366
	LTE Band 26	15M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7		26865	831.5		1	22.33	24.00	1.469			0.11	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	Bottom Side	5mm	Ant 4	ECI 7		26865	831.5		1	21.27	23.00	1.489			-0.00	0.001	0.001
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			-0.04	0.337	0.391
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			0.15	0.268	0.312
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			0.08	0.845	0.981
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		132072	1720		1	17.03	17.70	1.167			-0.17	0.868	1.013
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 7		132572	1770		1	17.02	17.70	1.169			0.17	0.799	0.934
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			0.16	0.675	0.786
	LTE Band 66	20M	QPSK	100	0	Back	5mm	Ant 0	ECI 7		132322	1745		1	17.03	17.70	1.167			-0.11	0.675	0.788
	LTE Band 66	20M	QPSK	1	0	Left Side	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			-0.09	0.090	0.104
	LTE Band 66	20M	QPSK	50	0	Left Side	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			0.07	0.072	0.084
	LTE Band 66	20M	QPSK	1	0	Right Side	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			0.07	0.087	0.101
	LTE Band 66	20M	QPSK	50	0	Right Side	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			-0.01	0.068	0.079
	LTE Band 66	20M	QPSK	1	0	Top Side	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			0.02	0.014	0.016
	LTE Band 66	20M	QPSK	50	0	Top Side	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			0.12	0.001	0.001
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		132322	1745		1	17.05	17.70	1.161			-0.08	1.100	1.277
38	LTE Band 66	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		132072	1720		1	17.03	17.70	1.167			0.02	1.110	1.295
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7		132572	1770		1	17.02	17.70	1.169			-0.04	1.070	1.251
	LTE Band 66	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		132322	1745		1	17.04	17.70	1.164			-0.08	0.878	1.022
	LTE Band 66	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		132072	1720		1	16.95	17.70	1.189			-0.18	0.884	1.051
	LTE Band 66	20M	QPSK	50	0	Bottom Side	5mm	Ant 0	ECI 7		132572	1770		1	16.99	17.70	1.178			-0.05	0.855	1.007
	LTE Band 66	20M	QPSK	100	0	Bottom Side	5mm	Ant 0	ECI 7		132322	1745		1	17.03	17.70	1.167			0.16	0.871	1.016
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5mm	Ant 0	ECI 7-1	PA (Reference Designator)	132072	1720	TASO 0 CID:31	1	16.89	17.70	1.205			0.15	0.848	1.022
	LTE Band 66	20M	QPSK	1	99	Bottom Side	5mm	Ant 0	ECI 7		132072+132270	1720+1739.8		1	16.81	17.70	1.227			0.01	0.971	1.191
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			0.04	0.237	0.242
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			-0.15	0.189	0.193
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			-0.12	0.410	0.419
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			-0.03	0.441	0.451
	LTE Band 66	20M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			-0.18	0.043	0.044
	LTE Band 66	20M	QPSK	50	0	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			-0.02	0.034	0.035
	LTE Band 66	20M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			-0.18	0.025	0.026
	LTE Band 66	20M	QPSK	50	0	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			-0.05	0.021	0.021
	LTE Band 66	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7		132322	1745		1	14.05	15.10	1.274			0.08	0.435	0.554
	LTE Band 66	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			0.04	0.558	0.570
	LTE Band 66	20M	QPSK	50	0	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			-0.18	0.421	0.431
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.01	15.10	1.021			0.03	0.015	0.015
	LTE Band 66	20M	QPSK	50	0	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	132322	1745	TASO 0 CID:39	1	15.00	15.10	1.023			0.14	0.012	0.012
	LTE Band 38	20M	QPSK	1	0	Front	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.15	0.627	0.732
	LTE Band 38	20M	QPSK	50	0	Front	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	0.08	0.510	0.605
39	LTE Band 38	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.07	1.100	1.285
	LTE Band 38	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	0.12	0.841	0.998
	LTE Band 38	20M	QPSK	100	0	Back	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	20.96	21.70	1.186	62.9	1.006	-0.18	0.911	1.087
	LTE Band 38	20M	QPSK	1	0	Left Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.18	0.469	0.548
	LTE Band 38	20M	QPSK	50	0	Left Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TASO 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	-0.17	0.387	0.459



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	LTE Band 38	20M	QPSK	1	0	Right Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.12	0.125	0.146
	LTE Band 38	20M	QPSK	50	0	Right Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	0.16	0.089	0.106
	LTE Band 38	20M	QPSK	1	0	Top Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.05	0.001	0.001
	LTE Band 38	20M	QPSK	50	0	Top Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	-0.12	0.001	0.001
	LTE Band 38	20M	QPSK	1	0	Bottom Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.13	0.658	0.769
	LTE Band 38	20M	QPSK	50	0	Bottom Side	5mm	Ant 1	ECI 7-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	0.13	0.571	0.678
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	-0.18	0.091	0.128
	LTE Band 41	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	-0.12	0.080	0.114
40	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	0.05	0.350	0.494
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	0.14	0.282	0.402
	LTE Band 41	20M	QPSK	1	0	Left Side	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	0.18	0.104	0.147
	LTE Band 41	20M	QPSK	50	0	Left Side	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	-0.02	0.084	0.120
	LTE Band 41	20M	QPSK	1	0	Right Side	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	0.08	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Right Side	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	0.11	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Top Side	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	-0.06	0.291	0.411
	LTE Band 41	20M	QPSK	50	0	Top Side	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	-0.07	0.234	0.333
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5mm	Ant 4	ECI 7		40620	2593		1	14.63	16.10	1.403	62.9	1.006	-0.01	0.007	0.010
	LTE Band 41	20M	QPSK	50	0	Bottom Side	5mm	Ant 4	ECI 7		40620	2593		1	14.59	16.10	1.416	62.9	1.006	0.08	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	0.03	0.090	0.133
	LTE Band 42	20M	QPSK	50	0	Front	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	0.16	0.071	0.106
41	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	-0.12	0.398	0.588
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	0.07	0.390	0.580
	LTE Band 42	20M	QPSK	1	0	Left Side	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	0.10	0.013	0.019
	LTE Band 42	20M	QPSK	50	0	Left Side	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	-0.06	0.011	0.016
	LTE Band 42	20M	QPSK	1	0	Right Side	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	0.09	0.028	0.041
	LTE Band 42	20M	QPSK	50	0	Right Side	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	-0.02	0.022	0.033
	LTE Band 42	20M	QPSK	1	0	Top Side	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	0.12	0.210	0.310
	LTE Band 42	20M	QPSK	50	0	Top Side	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	-0.01	0.165	0.245
	LTE Band 42	20M	QPSK	1	0	Bottom Side	5mm	Ant 5	ECI 7		42590	3500		1	15.53	17.20	1.469	62.9	1.006	-0.09	0.005	0.007
	LTE Band 42	20M	QPSK	50	0	Bottom Side	5mm	Ant 5	ECI 7		42590	3500		1	15.50	17.20	1.479	62.9	1.006	0.04	0.005	0.007
	LTE Band 42	20M	QPSK	1	99	Back	5mm	Ant 5	ECI 7		42590+42788	3500+3519.8		1	15.35	17.20	1.531	62.9	1.006	0.03	0.356	0.548

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	-0.06	0.285	0.402
	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	0.14	0.288	0.408
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	0.05	0.639	0.900
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	0.09	0.660	0.935
	FR1 n2	40M	BPSK	216	0	Back	5mm	Ant 0	ECI 7		376000	1880		1	18.12	19.70	1.439	-0.03	0.538	0.774
	FR1 n2	40M	BPSK	1	1	Left Side	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	-0.15	0.096	0.135
	FR1 n2	40M	BPSK	108	54	Left Side	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	0.12	0.096	0.136
	FR1 n2	40M	BPSK	1	1	Right Side	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	0.08	0.075	0.106
	FR1 n2	40M	BPSK	108	54	Right Side	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	-0.07	0.076	0.108
	FR1 n2	40M	BPSK	1	1	Top Side	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	-0.01	0.001	0.001
	FR1 n2	40M	BPSK	108	54	Top Side	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	0.12	0.001	0.001
42	FR1 n2	40M	BPSK	1	1	Bottom Side	5mm	Ant 0	ECI 7		376000	1880		1	18.21	19.70	1.409	-0.02	0.913	1.286
	FR1 n2	40M	BPSK	108	54	Bottom Side	5mm	Ant 0	ECI 7		376000	1880		1	18.19	19.70	1.416	-0.03	0.834	1.181
	FR1 n2	40M	BPSK	216	0	Bottom Side	5mm	Ant 0	ECI 7		376000	1880		1	18.12	19.70	1.439	-0.10	0.783	1.127
	FR1 n2	40M	BPSK	1	1	Bottom Side	5mm	Ant 0	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.15	19.70	1.429	0.17	0.877	1.253
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	-0.02	0.213	0.280



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	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.17	0.207	0.291
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	0.04	0.380	0.500
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.02	0.398	0.560
	FR1 n2	40M	BPSK	1	1	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	-0.14	0.045	0.059
	FR1 n2	40M	BPSK	108	54	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.09	0.040	0.056
	FR1 n2	40M	BPSK	1	1	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	0.19	0.017	0.022
	FR1 n2	40M	BPSK	108	54	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.12	0.019	0.027
	FR1 n2	40M	BPSK	108	54	Top Side	5mm	Ant 4	ECI 7		376000	1880		1	11.97	13.30	1.358	0.10	0.323	0.439
	FR1 n2	40M	BPSK	1	1	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	0.14	0.447	0.588
	FR1 n2	40M	BPSK	108	54	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.02	0.468	0.658
	FR1 n2	40M	BPSK	1	1	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	12.11	13.30	1.315	0.01	0.001	0.001
	FR1 n2	40M	BPSK	108	54	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	11.82	13.30	1.406	0.06	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	0.18	0.452	0.589
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	-0.14	0.521	0.688
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	-0.16	0.881	1.148
43	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	0.07	0.992	1.310
	FR1 n7	50M	BPSK	270	0	Back	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	-0.08	0.850	1.123
	FR1 n7	50M	BPSK	1	1	Left Side	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	-0.05	0.391	0.509
	FR1 n7	50M	BPSK	135	68	Left Side	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	-0.06	0.432	0.571
	FR1 n7	50M	BPSK	1	1	Right Side	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	0.02	0.096	0.125
	FR1 n7	50M	BPSK	135	68	Right Side	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	-0.14	0.103	0.136
	FR1 n7	50M	BPSK	1	1	Top Side	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	0.19	0.035	0.046
	FR1 n7	50M	BPSK	135	68	Top Side	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	0.01	0.038	0.050
	FR1 n7	50M	BPSK	1	1	Bottom Side	5mm	Ant 1	ECI 7		507000	2535		1	20.75	21.90	1.303	-0.12	0.587	0.765
	FR1 n7	50M	BPSK	135	68	Bottom Side	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	-0.13	0.709	0.937
	FR1 n7	50M	BPSK	270	0	Bottom Side	5mm	Ant 1	ECI 7		507000	2535		1	20.69	21.90	1.321	0.11	0.577	0.762
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 1	ECI 7		507000	2535		2	20.69	21.90	1.321	0.02	0.980	1.295
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 1	ECI 7		507000	2535		3	20.69	21.90	1.321	0.03	0.956	1.263
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	0.02	0.140	0.179
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	-0.06	0.142	0.185
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	0.06	0.481	0.615
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	-0.01	0.472	0.615
	FR1 n7	50M	BPSK	1	1	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	-0.12	0.129	0.165
	FR1 n7	50M	BPSK	135	68	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	0.14	0.130	0.169
	FR1 n7	50M	BPSK	1	1	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	0.18	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	-0.08	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	0.01	0.465	0.595
	FR1 n7	50M	BPSK	135	68	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	0.14	0.434	0.566
	FR1 n7	50M	BPSK	1	1	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.53	15.60	1.279	-0.13	0.008	0.010
	FR1 n7	50M	BPSK	135	68	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	507000	2535	TAS0 0 CID:14	1	14.45	15.60	1.303	-0.06	0.008	0.010
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.04	0.374	0.519
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	-0.15	0.425	0.603
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.06	0.782	1.085
44	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	-0.08	0.919	1.304
	FR1 n26	20M	BPSK	100	0	Back	5mm	Ant 0	ECI 7		166300	831.5		1	22.03	23.50	1.403	-0.11	0.864	1.212
	FR1 n26	20M	BPSK	1	1	Left Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.15	0.151	0.209
	FR1 n26	20M	BPSK	50	28	Left Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	0.00	0.161	0.228
	FR1 n26	20M	BPSK	1	1	Right Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.18	0.288	0.399
	FR1 n26	20M	BPSK	50	28	Right Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	0.12	0.306	0.434
	FR1 n26	20M	BPSK	1	1	Top Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.18	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Top Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	0.01	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Bottom Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.14	0.608	0.843
	FR1 n26	20M	BPSK	50	28	Bottom Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.48	24.00	1.419	0.12	0.627	0.890
	FR1 n26	20M	BPSK	100	0	Bottom Side	5mm	Ant 0	ECI 7		166300	831.5		1	22.03	23.50	1.403	0.03	0.601	0.843
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.15	0.128	0.178
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	0.17	0.158	0.221
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.04	0.333	0.462
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	0.02	0.428	0.597
	FR1 n26	20M	BPSK	1	1	Left Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.04	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Left Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	0.16	0.001	0.001



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	FR1 n26	20M	BPSK	1	1	Right Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	-0.01	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Right Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	-0.15	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Top Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.18	0.222	0.308
	FR1 n26	20M	BPSK	50	28	Top Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	-0.09	0.307	0.429
	FR1 n26	20M	BPSK	1	1	Bottom Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.58	24.00	1.387	0.17	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Bottom Side	5mm	Ant 4	ECI 7		166300	831.5		1	22.55	24.00	1.396	-0.01	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	-0.01	0.320	0.437
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	-0.16	0.274	0.378
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	-0.06	0.712	0.972
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	-0.08	0.691	0.954
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.58	19.00	1.387	-0.11	0.605	0.839
	FR1 n66	45M	BPSK	1	1	Left Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	0.03	0.079	0.108
	FR1 n66	45M	BPSK	120	60	Left Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	-0.05	0.074	0.102
	FR1 n66	45M	BPSK	1	1	Right Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	-0.10	0.083	0.113
	FR1 n66	45M	BPSK	120	60	Right Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	0.01	0.073	0.101
	FR1 n66	45M	BPSK	1	1	Top Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	-0.07	0.014	0.019
	FR1 n66	45M	BPSK	120	60	Top Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	-0.07	0.012	0.017
45	FR1 n66	45M	BPSK	1	1	Bottom Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.65	19.00	1.365	0.07	0.949	1.295
	FR1 n66	45M	BPSK	120	60	Bottom Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.60	19.00	1.38	-0.10	0.898	1.239
	FR1 n66	45M	BPSK	240	0	Bottom Side	5mm	Ant 0	ECI 7		349000	1745	TAS0 0 CID:34	1	17.58	19.00	1.387	-0.11	0.804	1.115
	FR1 n66	45M	BPSK	1	1	Bottom Side	5mm	Ant 0	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:25	1	17.59	19.00	1.384	-0.12	0.836	1.157
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	0.07	0.227	0.272
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.02	0.245	0.298
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	-0.06	0.425	0.510
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.11	0.437	0.531
	FR1 n66	45M	BPSK	1	1	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	0.17	0.035	0.042
	FR1 n66	45M	BPSK	120	60	Left Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.01	0.039	0.047
	FR1 n66	45M	BPSK	1	1	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	-0.17	0.022	0.026
	FR1 n66	45M	BPSK	120	60	Right Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.17	0.019	0.023
	FR1 n66	45M	BPSK	120	60	Top Side	5mm	Ant 4	ECI 7		349000	1745	TAS1 1 CID:34	1	15.50	16.80	1.349	0.08	0.346	0.467
	FR1 n66	45M	BPSK	1	1	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	-0.07	0.499	0.598
	FR1 n66	45M	BPSK	120	60	Top Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.04	0.523	0.636
	FR1 n66	45M	BPSK	1	1	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	16.01	16.80	1.199	0.10	0.011	0.013
	FR1 n66	45M	BPSK	120	60	Bottom Side	5mm	Ant 4	ECI 7-1	PA (Reference Designator)	349000	1745	TAS0 0 CID:17	1	15.95	16.80	1.216	0.01	0.016	0.019
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	0.14	0.163	0.203
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	0.09	0.128	0.162
46	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	0.03	0.505	0.629
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	-0.08	0.468	0.591
	FR1 n41	100M	BPSK	1	1	Left Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	0.18	0.151	0.188
	FR1 n41	100M	BPSK	135	69	Left Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	0.15	0.154	0.194
	FR1 n41	100M	BPSK	1	1	Right Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	-0.16	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Right Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	0.18	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Top Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	-0.15	0.497	0.619
	FR1 n41	100M	BPSK	135	69	Top Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	0.03	0.381	0.481
	FR1 n41	100M	BPSK	1	1	Bottom Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.55	15.50	1.245	0.13	0.023	0.029
	FR1 n41	100M	BPSK	135	69	Bottom Side	5mm	Ant 4	ECI 7		518598	2592.99		1	14.49	15.50	1.262	0.14	0.010	0.013
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	-0.09	0.183	0.231
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	-0.01	0.205	0.265
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	0.05	0.378	0.478
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	-0.02	0.488	0.630
	FR1 n77	100M	BPSK	1	1	Left Side	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	0.18	0.017	0.022
	FR1 n77	100M	BPSK	135	69	Left Side	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	-0.09	0.015	0.019
	FR1 n77	100M	BPSK	1	1	Right Side	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	-0.04	0.057	0.072
	FR1 n77	100M	BPSK	135	69	Right Side	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	-0.05	0.062	0.080
	FR1 n77	100M	BPSK	1	1	Top Side	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	-0.08	0.277	0.350
	FR1 n77	100M	BPSK	135	69	Top Side	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	0.14	0.354	0.457
	FR1 n77	100M	BPSK	1	1	Bottom Side	5mm	Ant 5	ECI 7		656000	3840		1	14.58	15.60	1.265	0.00	0.007	0.009



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	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 5	ECI 7		656000	3840		1	14.49	15.60	1.291	0.11	0.007	0.009
	FR1 n77	100M	BPSK	1	271	Front	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	-0.12	0.435	0.457
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	-0.18	0.374	0.415
	FR1 n77	100M	BPSK	1	271	Back	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	-0.15	0.598	0.628
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	-0.17	0.547	0.607
	FR1 n77	100M	BPSK	1	271	Left Side	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	0.04	0.392	0.412
	FR1 n77	100M	BPSK	135	69	Left Side	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	-0.14	0.328	0.364
	FR1 n77	100M	BPSK	1	271	Right Side	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	-0.09	0.061	0.064
	FR1 n77	100M	BPSK	135	69	Right Side	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	-0.16	0.058	0.064
	FR1 n77	100M	BPSK	1	271	Top Side	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	-0.04	0.037	0.039
	FR1 n77	100M	BPSK	135	69	Top Side	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	0.07	0.001	0.001
	FR1 n77	100M	BPSK	1	271	Bottom Side	5mm	Ant 1	ECI 7		656000	3840		1	20.29	20.50	1.05	0.13	0.729	0.765
47	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 1	ECI 7		656000	3840		1	20.05	20.50	1.109	0.03	0.692	0.767
	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 1	ECI 7		656000	3840		2	20.05	20.50	1.109	0.02	0.681	0.755
	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 1	ECI 7		656000	3840		3	20.05	20.50	1.109	0.03	0.615	0.682
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	0.04	0.072	0.086
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	0.16	0.066	0.079
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	-0.04	0.320	0.380
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	-0.09	0.443	0.530
	FR1 n77	100M	BPSK	1	1	Left Side	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	-0.09	0.197	0.234
	FR1 n77	100M	BPSK	135	69	Left Side	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	0.07	0.200	0.239
	FR1 n77	100M	BPSK	1	1	Right Side	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	0.11	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Side	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	-0.10	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Side	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	-0.05	0.024	0.029
	FR1 n77	100M	BPSK	135	69	Top Side	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	-0.09	0.026	0.031
	FR1 n77	100M	BPSK	1	1	Bottom Side	5mm	Ant 2	ECI 7		656000	3840		1	19.75	20.50	1.189	0.04	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 2	ECI 7		656000	3840		1	19.72	20.50	1.197	0.05	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	-0.09	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	-0.15	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	-0.03	0.513	0.695
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	-0.11	0.318	0.434
	FR1 n77	100M	BPSK	1	1	Left Side	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	-0.01	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Left Side	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	-0.09	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Right Side	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	-0.03	0.101	0.137
	FR1 n77	100M	BPSK	135	69	Right Side	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	0.03	0.091	0.124
	FR1 n77	100M	BPSK	1	1	Top Side	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	-0.11	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Side	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	-0.16	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Bottom Side	5mm	Ant 8	ECI 7		656000	3840		1	18.58	19.90	1.355	0.17	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Side	5mm	Ant 8	ECI 7		656000	3840		1	18.55	19.90	1.365	0.11	0.001	0.001

【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.02	0.136	0.214
48	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.03	0.398	0.626
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.03	0.037	0.058
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.05	0.139	0.219
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.06	0.280	0.441
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	5mm	Ant 6	Hotspot Simultaneous	1	2412	1	16.03	18.00	1.574	100.0	1.0	0.01	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.02	0.101	0.175
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.03	0.302	0.525
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.05	0.129	0.224
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.10	0.052	0.090
49	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.05	0.359	0.624
	WLAN5GHz	802.11ac-VHT80 MCS0	Bottom Side	5mm	Ant 6	Hotspot Simultaneous	42	5210	1	10.25	12.00	1.496	86.15	1.161	0.02	0.013	0.023
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Hotspot Simultaneous	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.02	0.125	0.206
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Hotspot Simultaneous	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.03	0.221	0.364
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 6	Hotspot Simultaneous	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.05	0.017	0.028
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 6	Hotspot Simultaneous	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.01	0.069	0.114
50	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	Hotspot	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.14	0.379	0.624



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						Simultaneous											
	WLAN5GHz	802.11ac-VHT80 MCS0	Bottom Side	5mm	Ant 6	Hotspot Simultaneous	155	5775	1	14.48	16.00	1.419	86.15	1.161	0.02	0.025	0.041

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.05	0.035	0.051
51	Bluetooth	1Mbps	Back	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.02	0.086	0.126
	Bluetooth	1Mbps	Left Side	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.18	0.001	0.001
	Bluetooth	1Mbps	Right Side	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	-0.09	0.001	0.001
	Bluetooth	1Mbps	Top Side	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	-0.07	0.068	0.100
	Bluetooth	1Mbps	Bottom Side	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.18	0.001	0.001



16.3 Body Worn Accessory SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Headset	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant 0	ECI 3	189	836.4		1	26.07	26.90	1.211	0.05	0.541	0.655
	GSM850	GPRS 4 Tx slots	Front	14mm	Ant 0	ECI 4	189	836.4		1	28.05	28.50	1.109	0.02	0.236	0.262
52	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	189	836.4		1	26.07	26.90	1.211	-0.17	1.080	1.308
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	128	824.2		1	26.03	26.90	1.222	0.16	1.040	1.271
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	251	848.8		1	26.03	26.90	1.222	-0.03	1.060	1.295
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	189	836.4	Headset	1	26.07	26.90	1.211	0.02	1.030	1.247
	GSM850	GPRS 4 Tx slots	Back	19mm	Ant 0	ECI 4	189	836.4		1	28.05	28.50	1.109	0.03	0.233	0.258
	GSM1900	GPRS 4 Tx slots	Front	5mm	Ant 0	ECI 3	661	1880		1	23.25	24.10	1.216	-0.13	0.289	0.351
	GSM1900	GPRS 4 Tx slots	Front	14mm	Ant 0	ECI 4	661	1880		1	25.24	26.50	1.337	0.02	0.454	0.607
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	661	1880		1	23.25	24.10	1.216	0.14	1.040	1.265
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	512	1850.2		1	23.21	24.10	1.227	-0.06	1.040	1.276
53	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	810	1909.8		1	23.15	24.10	1.245	0.02	1.050	1.307
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant 0	ECI 3	810	1909.8	Headset	1	23.15	24.10	1.245	0.01	1.000	1.245
	GSM1900	GPRS 4 Tx slots	Back	19mm	Ant 0	ECI 4	661	1880		1	25.24	26.50	1.337	0.05	0.456	0.610

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Headset	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 3	9400	1880		1	18.91	20.40	1.409	0.08	0.368	0.519
	WCDMA II	RMC 12.2Kbps	Front	14mm	Ant 0	ECI 4	9400	1880		1	22.42	24.00	1.439	0.05	0.268	0.386
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9400	1880		1	18.91	20.40	1.409	0.04	0.843	1.188
54	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9262	1852.4		1	18.86	20.40	1.426	-0.03	0.891	1.271
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9538	1907.6		1	18.79	20.40	1.449	-0.16	0.835	1.210
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9262	1852.4	Headset	1	18.86	20.40	1.426	0.02	0.825	1.176
	WCDMA II	RMC 12.2Kbps	Back	19mm	Ant 0	ECI 4	9400	1880		1	22.42	24.00	1.439	0.06	0.299	0.430
	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 3	1413	1732.6		1	18.80	19.90	1.288	0.05	0.355	0.457
	WCDMA IV	RMC 12.2Kbps	Front	14mm	Ant 0	ECI 4	1413	1732.6		1	22.41	24.00	1.442	0.05	0.257	0.371
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1413	1732.6		1	18.80	19.90	1.288	0.10	0.876	1.128
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1312	1712.4		1	18.63	19.90	1.34	-0.18	0.876	1.174
55	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1513	1752.6		1	18.45	19.90	1.396	-0.04	0.986	1.376
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1513	1752.6	Headset	1	18.45	19.90	1.396	0.03	0.952	1.329
	WCDMA IV	RMC 12.2Kbps	Back	19mm	Ant 0	ECI 4	1413	1732.6		1	22.41	24.00	1.442	0.06	0.328	0.473
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1513	1752.6		2	18.45	19.90	1.396	0.02	0.905	1.263
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	1513	1752.6		3	18.45	19.90	1.396	0.03	0.906	1.265
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 3	4182	836.4		1	22.57	23.10	1.13	-0.02	0.508	0.574
	WCDMA V	RMC 12.2Kbps	Front	14mm	Ant 0	ECI 4	4182	836.4		1	22.57	24.00	1.39	0.02	0.221	0.307
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4182	836.4		1	22.57	23.10	1.13	0.14	1.050	1.186
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4132	826.4		1	22.43	23.10	1.167	0.03	0.908	1.060
56	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4233	846.6		1	22.46	23.10	1.159	0.05	1.130	1.310
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4233	846.6	Headset	1	22.46	23.10	1.159	0.02	1.010	1.171
	WCDMA V	RMC 12.2Kbps	Back	19mm	Ant 0	ECI 4	4182	836.4		1	22.57	24.00	1.39	0.05	0.251	0.349
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4233	846.6		2	22.46	23.10	1.159	0.02	0.981	1.137
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	4233	846.6		3	22.46	23.10	1.159	0.03	0.956	1.108

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	Headset	CID	Sample	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 4	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	20175	1732.5		TAS0 0 CID:37	1	17.63	18.10	1.114			-0.14	0.374	0.417
	LTE Band 4	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	20175	1732.5		TAS0 0 CID:37	1	17.58	18.10	1.127			-0.02	0.298	0.336
	LTE Band 4	20M	QPSK	1	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5			1	22.75	24.00	1.334			0.02	0.188	0.251
	LTE Band 4	20M	QPSK	50	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5			1	21.79	23.00	1.321			0.03	0.175	0.231
57	LTE Band 4	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3-1	PA	20175	1732.5		TAS0 0	1	17.63	18.10	1.114			0.16	0.648	0.722



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										(Reference Designator)					CID:37									
	LTE Band 4	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	20175	1732.5		TAS0 0 CID:37	1	17.58	18.10	1.127			-0.02	0.519	0.585	
	LTE Band 4	20M	QPSK	1	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5			1	22.75	24.00	1.334			0.02	0.173	0.231	
	LTE Band 4	20M	QPSK	50	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5			1	21.79	23.00	1.321			0.01	0.165	0.218	
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant 1	ECI 3		21100	2535			1	19.74	21.00	1.337			-0.09	0.461	0.616	
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant 1	ECI 3		21100	2535			1	19.69	21.00	1.352			0.13	0.371	0.502	
	LTE Band 7	20M	QPSK	1	0	Front	14mm	Ant 1	ECI 4		21100	2535			1	22.93	24.00	1.279			0.02	0.365	0.467	
	LTE Band 7	20M	QPSK	50	0	Front	14mm	Ant 1	ECI 4		21100	2535			1	21.85	23.00	1.303			0.06	0.345	0.450	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3		21100	2535			1	19.74	21.00	1.337			0.02	0.872	1.166	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3		20850	2510			1	19.71	21.00	1.346			0.15	0.771	1.038	
58	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3		21350	2560			1	19.68	21.00	1.355			0.02	0.960	1.301	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 3		21100	2535			1	19.69	21.00	1.352			0.08	0.700	0.946	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 3		20850	2510			1	19.68	21.00	1.355			0.17	0.616	0.835	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 3		21350	2560			1	19.64	21.00	1.368			0.15	0.763	1.044	
	LTE Band 7	20M	QPSK	100	0	Back	5mm	Ant 1	ECI 3		21100	2535			1	19.66	21.00	1.361			0.02	0.692	0.942	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3		21350	2560	Headset		1	19.68	21.00	1.355			0.01	0.913	1.237	
	LTE Band 7	20M	QPSK	1	0	Back	19mm	Ant 1	ECI 4		21100	2535			1	22.93	24.00	1.279			0.03	0.286	0.366	
	LTE Band 7	20M	QPSK	50	0	Back	19mm	Ant 1	ECI 4		21100	2535			1	21.85	23.00	1.303			0.02	0.256	0.334	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3		21350+21152	2560+2540.2			1	19.41	21.00	1.442			0.01	0.809	1.167	
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21100	2535		TAS0 0 CID:25	1	14.45	16.00	1.429			-0.16	0.168	0.240	
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21100	2535		TAS0 0 CID:25	1	14.37	16.00	1.455			0.06	0.165	0.240	
	LTE Band 7	20M	QPSK	1	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535			1	22.89	24.00	1.291			0.01	0.327	0.422	
	LTE Band 7	20M	QPSK	50	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535			1	22.81	24.00	1.315			0.02	0.305	0.401	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21100	2535		TAS0 0 CID:25	1	14.45	16.00	1.429			0.14	0.623	0.890	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	20850	2510		TAS0 0 CID:25	1	14.41	16.00	1.442			0.01	0.717	1.034	
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21350	2560		TAS0 0 CID:25	1	14.39	16.00	1.449			-0.09	0.595	0.862	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21100	2535		TAS0 0 CID:25	1	14.37	16.00	1.455			-0.05	0.609	0.886	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	20850	2510		TAS0 0 CID:25	1	14.35	16.00	1.462			-0.02	0.659	0.963	
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21350	2560		TAS0 0 CID:25	1	14.33	16.00	1.469			0.12	0.593	0.871	
	LTE Band 7	20M	QPSK	100	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	21100	2535		TAS0 0 CID:25	1	14.35	16.00	1.462			0.16	0.584	0.854	
	LTE Band 7	20M	QPSK	1	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535			1	22.89	24.00	1.291			0.03	0.419	0.541	
	LTE Band 7	20M	QPSK	50	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535			1	22.81	24.00	1.315			0.00	0.405	0.533	
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant 0	ECI 3		23095	707.5			1	22.27	24.00	1.489			0.03	0.340	0.506	
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant 0	ECI 3		23095	707.5			1	21.19	23.00	1.517			-0.12	0.270	0.410	
59	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		23095	707.5			1	22.27	24.00	1.489			0.04	0.703	1.047	
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant 0	ECI 3		23095	707.5			1	21.19	23.00	1.517			-0.07	0.556	0.843	
	LTE Band 12	10M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		23095	707.5			1	21.14	23.00	1.535			-0.16	0.503	0.772	
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant 4	ECI 3		23095	707.5		TAS0 0 CID:33	1	22.58	24.00	1.387			-0.09	0.062	0.086	
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant 4	ECI 3		23095	707.5		TAS0 0 CID:33	1	22.57	24.00	1.39			-0.14	0.061	0.085	
	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		23095	707.5		TAS0 0 CID:33	1	22.58	24.00	1.387			0.02	0.154	0.214	
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant 4	ECI 3		23095	707.5		TAS0 0 CID:33	1	22.57	24.00	1.39			0.18	0.151	0.210	
	LTE Band 13	10M	QPSK	1	0	Front	5mm	Ant 0	ECI 3		23230	782			1	22.21	24.00	1.51			0.09	0.448	0.676	
	LTE Band 13	10M	QPSK	25	0	Front	5mm	Ant 0	ECI 3		23230	782			1	21.27	23.00	1.489			0.14	0.353	0.526	
60	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		23230	782			1	22.21	24.00	1.51			0.01	0.938	1.416	
	LTE Band 13	10M	QPSK	25	0	Back	5mm	Ant 0	ECI 3		23230	782			1	21.27	23.00	1.489			-0.16	0.749	1.115	
	LTE Band 13	10M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		23230	782			1	21.25	23.00	1.496			-0.04	0.772	1.155	
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		23230	782	Headset		1	22.21	24.00	1.51			0.02	0.901	1.361	
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		23230	782			2	22.21	24.00	1.51			0.02	0.679	1.025	



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	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		23230	782			3	22.21	24.00	1.51			0.03	0.629	0.950
	LTE Band 25	20M	QPSK	1	0	Front	5mm	Ant 0	ECI 3		26340	1880			1	18.44	19.50	1.276			0.13	0.386	0.493
	LTE Band 25	20M	QPSK	50	0	Front	5mm	Ant 0	ECI 3		26340	1880			1	18.43	19.50	1.279			0.11	0.310	0.396
	LTE Band 25	20M	QPSK	1	0	Front	14mm	Ant 0	ECI 4		26340	1880			1	22.23	24.00	1.503			0.02	0.342	0.514
	LTE Band 25	20M	QPSK	50	0	Front	14mm	Ant 0	ECI 4		26340	1880			1	21.20	23.00	1.514			0.05	0.325	0.492
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		26340	1880			1	18.44	19.50	1.276			0.17	0.872	1.113
61	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		26140	1860			1	18.43	19.50	1.279			0.02	0.918	1.174
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		26590	1905			1	18.41	19.50	1.285			0.12	0.897	1.153
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		26340	1880			1	18.43	19.50	1.279			0.13	0.704	0.900
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		26140	1860			1	18.41	19.50	1.285			-0.17	0.738	0.948
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		26590	1905			1	18.38	19.50	1.294			-0.04	0.687	0.889
	LTE Band 25	20M	QPSK	100	0	Back	5mm	Ant 0	ECI 3		26340	1880			1	18.41	19.50	1.285			-0.04	0.700	0.899
	LTE Band 25	20M	QPSK	1	0	Back	19mm	Ant 0	ECI 4		26340	1880			1	22.23	24.00	1.503			0.06	0.395	0.594
	LTE Band 25	20M	QPSK	50	0	Back	19mm	Ant 0	ECI 4		26340	1880			1	21.20	23.00	1.514			0.07	0.356	0.539
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3-1	PA (Reference Designator)	18900	1880		TAS0 0 CID:35	1	18.51	19.50	1.256			0.02	0.921	1.157
	LTE Band 2	20M	QPSK	1	99	Back	5mm	Ant 0	ECI 3		18900+19098	1880+1899.8			1	18.05	19.50	1.396			0.05	0.756	1.055
	LTE Band 25	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 3		26340	1880			1	14.98	16.40	1.387			-0.03	0.297	0.412
	LTE Band 25	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 3		26340	1880			1	14.95	16.40	1.396			0.05	0.241	0.336
	LTE Band 25	20M	QPSK	1	0	Front	14mm	Ant 4	ECI 4		26340	1880			1	20.47	22.00	1.422			0.02	0.270	0.384
	LTE Band 25	20M	QPSK	50	0	Front	14mm	Ant 4	ECI 4		26340	1880			1	19.43	21.00	1.435			0.00	0.265	0.380
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		26340	1880			1	14.98	16.40	1.387			-0.05	0.631	0.875
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		26140	1860			1	14.95	16.40	1.396			0.02	0.575	0.803
	LTE Band 25	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		26590	1905			1	14.93	16.40	1.403			0.03	0.580	0.814
	LTE Band 25	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		26340	1880			1	14.95	16.40	1.396			0.04	0.505	0.705
	LTE Band 25	20M	QPSK	100	0	Back	5mm	Ant 4	ECI 3		26140	1860			1	14.89	16.40	1.416			0.02	0.456	0.646
	LTE Band 25	20M	QPSK	1	0	Back	19mm	Ant 4	ECI 4		26340	1880			1	20.47	22.00	1.422			0.05	0.315	0.448
	LTE Band 25	20M	QPSK	50	0	Back	19mm	Ant 4	ECI 4		26340	1880			1	19.43	21.00	1.435			0.06	0.301	0.432
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant 0	ECI 3		26865	831.5			1	22.26	23.10	1.213			-0.03	0.528	0.640
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant 0	ECI 3		26865	831.5			1	21.18	23.00	1.521			0.02	0.416	0.633
	LTE Band 26	15M	QPSK	1	0	Front	14mm	Ant 0	ECI 4		26865	831.5			1	22.26	24.00	1.493			0.02	0.301	0.449
	LTE Band 26	15M	QPSK	36	0	Front	14mm	Ant 0	ECI 4		26865	831.5			1	21.18	23.00	1.521			0.03	0.298	0.453
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		26865	831.5			1	22.26	23.10	1.213			0.03	1.060	1.286
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant 0	ECI 3		26865	831.5			1	21.18	23.00	1.521			0.18	0.830	1.262
62	LTE Band 26	15M	QPSK	75	0	Back	5mm	Ant 0	ECI 3		26865	831.5			1	21.19	23.00	1.517			-0.14	0.849	1.288
	LTE Band 26	15M	QPSK	1	0	Back	19mm	Ant 0	ECI 4		26865	831.5			1	22.26	24.00	1.493			0.05	0.325	0.485
	LTE Band 26	15M	QPSK	36	0	Back	19mm	Ant 0	ECI 4		26865	831.5			1	21.18	23.00	1.521			0.06	0.316	0.481
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant 4	ECI 3		26865	831.5			1	22.33	24.00	1.469			0.08	0.161	0.237
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant 4	ECI 3		26865	831.5			1	21.27	23.00	1.489			0.15	0.124	0.185
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		26865	831.5			1	22.33	24.00	1.469			0.02	0.424	0.623
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant 4	ECI 3		26865	831.5			1	21.27	23.00	1.489			0.07	0.331	0.493
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant 0	ECI 3		132322	1745			1	18.21	19.70	1.409			0.16	0.335	0.472
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant 0	ECI 3		132322	1745			1	18.16	19.70	1.426			0.01	0.266	0.379
	LTE Band 66	20M	QPSK	1	0	Front	14mm	Ant 0	ECI 4		132322	1745			1	22.26	24.00	1.493			0.03	0.421	0.629
	LTE Band 66	20M	QPSK	50	0	Front	14mm	Ant 0	ECI 4		132322	1745			1	21.25	23.00	1.496			0.05	0.415	0.621
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		132322	1745			1	18.21	19.70	1.409			0.01	0.840	1.184
63	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		132072	1720			1	18.18	19.70	1.419			0.03	0.863	1.225
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		132572	1770			1	18.19	19.70	1.416			-0.08	0.795	1.126
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		132322	1745			1	18.16	19.70	1.426			0.13	0.670	0.955
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		132072	1720			1	18.15	19.70	1.429			0.08	0.684	0.977
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 0	ECI 3		132572	1770			1	18.14	19.70	1.432			0.06	0.642	0.919
	LTE Band 66	20M	QPSK	100	0	Back	5mm	Ant 0	ECI 3		132322	1745			1	18.11	19.70	1.442			-0.18	0.671	0.968
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3-1	PA (Reference Designator)	132322	1745		TAS0 0 CID:31	1	17.91	19.70	1.51			0.08	0.801	1.210
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 0	ECI 3		132072	1720	Headset	CID 31	1	18.18	19.70	1.419			0.02	0.825	1.171
	LTE Band 66	20M	QPSK	1	0	Back	19mm	Ant 0	ECI 4		132322	1745			1	22.26	24.00	1.493			0.06	0.501	0.748
	LTE Band 66	20M	QPSK	50	0	Back	19mm	Ant 0	ECI 4		132322	1745			1	21.25	23.00	1.496			0.02	0.485	0.726
	LTE Band 66	20M	QPSK	1	99	Back	5mm	Ant 0	ECI 3		132072+132270	1720+1739.8			1	18.01	19.70	1.476			0.05	0.801	1.182
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	132322	1745		TAS0 0 CID:39	1	17.25	17.40	1.035			-0.08	0.365	0.378
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	132322	1745		TAS0 0 CID:39	1	17.24	17.40	1.038			0.08	0.291	0.302
	LTE Band 66	20M	QPSK	1	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745			1	21.11	22.00	1.227			0.05	0.216	0.265
	LTE Band 66	20M	QPSK	50	0	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745			1	20.11	21.00	1.227			0.06	0.205	0.252
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		132322	1745			1	15.93	17.40	1.403			0.02	0.501	0.703
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	132322	1745		TAS0 0 CID:39	1	17.25	17.40	1.035			0.14	0.703	0.728



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	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	132322	1745		TAS0 0 CID:39	1	17.24	17.40	1.038			-0.12	0.507	0.526
	LTE Band 66	20M	QPSK	1	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745			1	21.11	22.00	1.227			0.02	0.203	0.249
	LTE Band 66	20M	QPSK	50	0	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745			1	20.11	21.00	1.227			0.02	0.201	0.247
	LTE Band 38	20M	QPSK	1	0	Front	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595		TAS0 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.09	0.627	0.732
	LTE Band 38	20M	QPSK	50	0	Front	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595		TAS0 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	-0.11	0.510	0.605
	LTE Band 38	20M	QPSK	1	0	Front	14mm	Ant 1	ECI 4-1	PA (Reference Designator)	38000	2595			1	22.51	24.00	1.409	62.9	1.006	0.02	0.220	0.312
	LTE Band 38	20M	QPSK	50	0	Front	14mm	Ant 1	ECI 4-1	PA (Reference Designator)	38000	2595			1	21.09	23.00	1.552	62.9	1.006	0.06	0.205	0.320
64	LTE Band 38	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595		TAS0 0 CID:29	1	21.05	21.70	1.161	62.9	1.006	0.07	1.100	1.285
	LTE Band 38	20M	QPSK	50	0	Back	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595		TAS0 0 CID:29	1	20.98	21.70	1.18	62.9	1.006	0.04	0.841	0.998
	LTE Band 38	20M	QPSK	100	0	Back	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595		TAS0 0 CID:29	1	20.96	21.70	1.186	62.9	1.006	0.04	0.911	1.087
	LTE Band 38	20M	QPSK	1	0	Back	5mm	Ant 1	ECI 3-1	PA (Reference Designator)	38000	2595	Headset		1	21.05	21.70	1.161	62.9	1.006	0.02	1.010	1.180
	LTE Band 38	20M	QPSK	1	0	Back	19mm	Ant 1	ECI 4-1	PA (Reference Designator)	38000	2595			1	22.51	24.00	1.409	62.9	1.006	0.02	0.180	0.255
	LTE Band 38	20M	QPSK	50	0	Back	19mm	Ant 1	ECI 4-1	PA (Reference Designator)	38000	2595			1	21.09	23.00	1.552	62.9	1.006	0.06	0.156	0.244
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant 4	ECI 3		40620	2593			1	16.85	17.90	1.274	62.9	1.006	-0.16	0.153	0.196
	LTE Band 41	20M	QPSK	50	0	Front	5mm	Ant 4	ECI 3		40620	2593			1	16.79	17.90	1.291	62.9	1.006	-0.15	0.134	0.174
	LTE Band 41	20M	QPSK	1	0	Front	14mm	Ant 4	ECI 4		40620	2593			1	22.51	24.00	1.409	62.9	1.006	0.02	0.161	0.228
	LTE Band 41	20M	QPSK	50	0	Front	14mm	Ant 4	ECI 4		40620	2593			1	21.39	23.00	1.449	62.9	1.006	0.03	0.159	0.232
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		40620	2593			1	16.85	17.90	1.274	62.9	1.006	-0.18	0.625	0.801
65	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		39750	2506			1	16.81	17.90	1.285	62.9	1.006	0.12	0.697	0.901
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		40185	2549.5			1	16.79	17.90	1.291	62.9	1.006	-0.06	0.588	0.764
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		41055	2636.5			1	16.78	17.90	1.294	62.9	1.006	0.08	0.553	0.720
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant 4	ECI 3		41490	2680			1	16.79	17.90	1.291	62.9	1.006	-0.07	0.583	0.757
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		40620	2593			1	16.79	17.90	1.291	62.9	1.006	-0.13	0.622	0.808
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		39750	2506			1	16.70	17.90	1.318	62.9	1.006	0.19	0.611	0.810
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		40185	2549.5			1	16.75	17.90	1.303	62.9	1.006	0.07	0.508	0.666
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		41055	2636.5			1	16.62	17.90	1.343	62.9	1.006	-0.18	0.442	0.597
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant 4	ECI 3		41490	2680			1	16.62	17.90	1.343	62.9	1.006	-0.15	0.442	0.597
	LTE Band 41	20M	QPSK	100	0	Back	5mm	Ant 4	ECI 3		40620	2593			1	16.75	17.90	1.303	62.9	1.006	-0.09	0.475	0.623
	LTE Band 41	20M	QPSK	1	0	Back	19mm	Ant 4	ECI 4		40620	2593			1	22.51	24.00	1.409	62.9	1.006	0.05	0.235	0.333
	LTE Band 41	20M	QPSK	50	0	Back	19mm	Ant 4	ECI 4		40620	2593			1	21.39	23.00	1.449	62.9	1.006	0.06	0.225	0.328
	LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant 5	ECI 3		42590	3500			1	17.08	18.70	1.452	62.9	1.006	-0.10	0.127	0.186
	LTE Band 42	20M	QPSK	50	0	Front	5mm	Ant 5	ECI 3		42590	3500			1	17.07	18.70	1.455	62.9	1.006	0.05	0.100	0.146
	LTE Band 42	20M	QPSK	1	0	Front	14mm	Ant 5	ECI 4		42590	3500			1	22.48	24.00	1.419	62.9	1.006	0.02	0.158	0.226
	LTE Band 42	20M	QPSK	50	0	Front	14mm	Ant 5	ECI 4		42590	3500			1	21.37	23.00	1.455	62.9	1.006	0.03	0.141	0.206
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 3		42590	3500			1	17.08	18.70	1.452	62.9	1.006	0.03	0.603	0.881
66	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 3		42190	3460			1	17.05	18.70	1.462	62.9	1.006	0.06	0.614	0.903
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 3		42990	3540			1	17.06	18.70	1.459	62.9	1.006	-0.08	0.581	0.853
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant 5	ECI 3		42590	3500			1	17.07	18.70	1.455	62.9	1.006	0.13	0.552	0.808
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant 5	ECI 3		42190	3460			1	17.03	18.70	1.469	62.9	1.006	0.19	0.561	0.829
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant 5	ECI 3		42990	3540			1	17.02	18.70	1.472	62.9	1.006	-0.18	0.544	0.806
	LTE Band 42	20M	QPSK	100	0	Back	5mm	Ant 5	ECI 3		42590	3500			1	17.05	18.70	1.462	62.9	1.006	-0.10	0.550	0.809
	LTE Band 42	20M	QPSK	1	0	Back	19mm	Ant 5	ECI 4		42590	3500			1	22.48	24.00	1.419	62.9	1.006	0.05	0.262	0.374
	LTE Band 42	20M	QPSK	50	0	Back	19mm	Ant 5	ECI 4		42590	3500			1	21.37	23.00	1.455	62.9	1.006	0.06	0.256	0.375
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 3		42190	3460			2	17.05	18.70	1.462	62.9	1.006	0.02	0.605	0.890
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 3		42190	3460			3	17.05	18.70	1.462	62.9	1.006	0.03	0.598	0.880
	LTE Band 42	20M	QPSK	1	99	Back	5mm	Ant 5	ECI 3		42190+ 42388	3460+ 3479.8			1	16.76	18.70	1.563	62.9	1.006	0.02	0.563	0.885



【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	Headset	CID	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant 0	ECI 3		376000	1880			1	19.73	21.10	1.371	-0.19	0.404	0.554
	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant 0	ECI 3		376000	1880			1	19.71	21.10	1.377	0.08	0.409	0.563
	FR1 n2	40M	BPSK	1	1	Front	14mm	Ant 0	ECI 4		376000	1880			1	22.67	24.00	1.358	0.03	0.210	0.285
	FR1 n2	40M	BPSK	108	54	Front	14mm	Ant 0	ECI 4		376000	1880			1	22.63	24.00	1.371	0.02	0.205	0.281
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant 0	ECI 3		376000	1880			1	19.73	21.10	1.371	0.16	0.900	1.234
67	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 0	ECI 3		376000	1880			1	19.71	21.10	1.377	0.05	0.936	1.289
	FR1 n2	40M	BPSK	216	0	Back	5mm	Ant 0	ECI 3		376000	1880			1	19.63	21.10	1.403	-0.04	0.760	1.066
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 0	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:29	1	19.63	21.10	1.403	0.13	0.824	1.156
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 0	ECI 3		376000	1880	Headset		1	19.71	21.10	1.377	0.02	0.901	1.241
	FR1 n2	40M	BPSK	1	1	Back	19mm	Ant 0	ECI 4		376000	1880			1	22.67	24.00	1.358	0.01	0.234	0.318
	FR1 n2	40M	BPSK	108	54	Back	19mm	Ant 0	ECI 4		376000	1880			1	22.63	24.00	1.371	0.05	0.213	0.292
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:28	1	16.12	17.10	1.253	0.00	0.382	0.479
	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:28	1	15.99	17.10	1.291	-0.12	0.370	0.478
	FR1 n2	40M	BPSK	1	1	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880			1	22.57	24.00	1.39	0.01	0.398	0.553
	FR1 n2	40M	BPSK	108	54	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880			1	22.45	24.00	1.429	0.02	0.356	0.509
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 4	ECI 3		376000	1880			1	16.06	17.10	1.271	-0.07	0.497	0.632
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:28	1	16.12	17.10	1.253	-0.18	0.680	0.852
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:28	1	15.99	17.10	1.291	0.02	0.712	0.919
	FR1 n2	40M	BPSK	216	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	376000	1880		TAS0 0 CID:28	1	15.95	17.10	1.303	0.17	0.654	0.852
	FR1 n2	40M	BPSK	1	1	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880			1	22.57	24.00	1.39	0.05	0.441	0.613
	FR1 n2	40M	BPSK	108	54	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880			1	22.45	24.00	1.429	0.06	0.421	0.602
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant 1	ECI 3		507000	2535			1	20.75	21.90	1.303	0.14	0.452	0.589
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant 1	ECI 3		507000	2535			1	20.69	21.90	1.321	0.12	0.521	0.688
	FR1 n7	50M	BPSK	1	1	Front	14mm	Ant 1	ECI 4		507000	2535			1	23.32	24.00	1.169	0.01	0.254	0.297
	FR1 n7	50M	BPSK	135	68	Front	14mm	Ant 1	ECI 4		507000	2535			1	23.31	24.00	1.172	0.02	0.225	0.264
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant 1	ECI 3		507000	2535			1	20.75	21.90	1.303	0.05	0.881	1.148
68	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 1	ECI 3		507000	2535			1	20.69	21.90	1.321	0.07	0.992	1.310
	FR1 n7	50M	BPSK	270	0	Back	5mm	Ant 1	ECI 3		507000	2535			1	20.69	21.90	1.321	0.17	0.850	1.123
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 1	ECI 3		507000	2535	Headset		1	20.69	21.90	1.321	0.02	0.902	1.192
	FR1 n7	50M	BPSK	1	1	Back	19mm	Ant 1	ECI 4		507000	2535			1	23.32	24.00	1.169	0.05	0.215	0.251
	FR1 n7	50M	BPSK	135	68	Back	19mm	Ant 1	ECI 4		507000	2535			1	23.31	24.00	1.172	0.06	0.201	0.236
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	507000	2535		TAS0 0 CID:14	1	16.12	17.30	1.312	-0.02	0.152	0.199
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	507000	2535		TAS0 0 CID:14	1	16.06	17.30	1.33	0.16	0.154	0.205
	FR1 n7	50M	BPSK	1	1	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535			1	23.02	24.00	1.253	0.01	0.214	0.268
	FR1 n7	50M	BPSK	135	68	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535			1	23.01	24.00	1.256	0.02	0.205	0.257
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	507000	2535		TAS0 0 CID:14	1	16.12	17.30	1.312	0.02	0.676	0.887
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	507000	2535		TAS0 0 CID:14	1	16.06	17.30	1.33	-0.00	0.512	0.681
	FR1 n7	50M	BPSK	270	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	507000	2535		TAS0 0 CID:14	1	15.99	17.30	1.352	0.15	0.425	0.575
	FR1 n7	50M	BPSK	1	1	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535			1	23.02	24.00	1.253	0.05	0.431	0.540
	FR1 n7	50M	BPSK	135	68	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535			1	23.01	24.00	1.256	0.06	0.421	0.529
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant 0	ECI 3		166300	831.5			1	22.58	24.00	1.387	-0.17	0.374	0.519
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant 0	ECI 3		166300	831.5			1	22.48	24.00	1.419	0.18	0.425	0.603
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant 0	ECI 3		166300	831.5			1	22.58	24.00	1.387	0.04	0.782	1.085
69	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant 0	ECI 3		166300	831.5			1	22.48	24.00	1.419	-0.08	0.919	1.304
	FR1 n26	20M	BPSK	100	0	Back	5mm	Ant 0	ECI 3		166300	831.5			1	22.03	23.50	1.403	-0.13	0.864	1.212
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant 0	ECI 3		166300	831.5	Headset		1	22.48	24.00	1.419	0.02	0.901	1.279
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant 4	ECI 3		166300	831.5			1	22.58	24.00	1.387	-0.07	0.128	0.178
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant 4	ECI 3		166300	831.5			1	22.55	24.00	1.396	0.04	0.158	0.221
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant 4	ECI 3		166300	831.5			1	22.58	24.00	1.387	-0.13	0.333	0.462
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant 4	ECI 3		166300	831.5			1	22.55	24.00	1.396	0.02	0.428	0.597
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 0	ECI 3		349000	1745		TAS0 0 CID34	1	18.68	19.70	1.265	-0.05	0.311	0.393
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 0	ECI 3		349000	1745		TAS0 0 CID34	1	18.63	19.70	1.279	0.16	0.304	0.389
	FR1 n66	45M	BPSK	1	1	Front	14mm	Ant 0	ECI 4		349000	1745			1	22.64	24.00	1.368	0.02	0.215	0.294
	FR1 n66	45M	BPSK	120	60	Front	14mm	Ant 0	ECI 4		349000	1745			1	22.60	24.00	1.38	0.03	0.203	0.280
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 0	ECI 3		349000	1745		TAS0 0 CID34	1	18.68	19.70	1.265	0.05	0.940	1.189
70	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 0	ECI 3		349000	1745		TAS0 0 CID34	1	18.63	19.70	1.279	0.07	1.010	1.292



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	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant 0	ECI 3		349000	1745		TAS0 0 CID34	1	18.58	19.70	1.294	-0.13	0.937	1.212
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 0	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:25	1	18.59	19.70	1.291	0.18	0.757	0.977
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 0	ECI 3		349000	1745	Headset	CID 25	1	18.63	19.70	1.279	0.02	0.856	1.095
	FR1 n66	45M	BPSK	1	1	Back	19mm	Ant 0	ECI 4		349000	1745			1	22.64	24.00	1.368	0.05	0.280	0.383
	FR1 n66	45M	BPSK	120	60	Back	19mm	Ant 0	ECI 4		349000	1745			1	22.60	24.00	1.38	0.06	0.251	0.346
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:17	1	18.59	19.90	1.352	-0.02	0.355	0.480
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:17	1	18.56	19.90	1.361	-0.03	0.397	0.540
	FR1 n66	45M	BPSK	1	1	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745			1	22.61	24.00	1.377	0.03	0.265	0.365
	FR1 n66	45M	BPSK	120	60	Front	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745			1	22.58	24.00	1.387	0.02	0.255	0.354
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 4	ECI 3		349000	1745		TAS0 0 CID34	1	18.40	19.90	1.413	0.01	0.400	0.565
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:17	1	18.59	19.90	1.352	-0.04	0.598	0.808
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:17	1	18.56	19.90	1.361	0.08	0.658	0.896
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant 4	ECI 3-1	PA (Reference Designator)	349000	1745		TAS0 0 CID:17	1	18.49	19.90	1.384	-0.04	0.579	0.801
	FR1 n66	45M	BPSK	1	1	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745			1	22.61	24.00	1.377	0.01	0.223	0.307
	FR1 n66	45M	BPSK	120	60	Back	19mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745			1	22.58	24.00	1.387	0.06	0.215	0.298
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant 4	ECI 3		518598	2592.99			1	16.53	17.80	1.34	0.02	0.230	0.308
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant 4	ECI 3		518598	2592.99			1	16.44	17.80	1.368	0.01	0.180	0.246
	FR1 n41	100M	BPSK	1	1	Front	14mm	Ant 4	ECI 4		518598	2592.99			1	23.01	24.00	1.256	0.02	0.277	0.348
	FR1 n41	100M	BPSK	135	69	Front	14mm	Ant 4	ECI 4		518598	2592.99			1	22.99	24.00	1.262	0.03	0.265	0.334
71	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant 4	ECI 3		518598	2592.99			1	16.53	17.80	1.34	0.02	0.710	0.951
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant 4	ECI 3		518598	2592.99			1	16.44	17.80	1.368	-0.08	0.658	0.900
	FR1 n41	100M	BPSK	270	0	Back	5mm	Ant 4	ECI 3		518598	2592.99			1	16.38	17.80	1.387	-0.17	0.587	0.814
	FR1 n41	100M	BPSK	1	1	Back	19mm	Ant 4	ECI 4		518598	2592.99			1	23.01	24.00	1.256	0.02	0.370	0.465
	FR1 n41	100M	BPSK	135	69	Back	19mm	Ant 4	ECI 4		518598	2592.99			1	22.99	24.00	1.262	0.01	0.355	0.448
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 5	ECI 3		656000	3840			1	15.59	17.10	1.416	-0.13	0.234	0.331
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 5	ECI 3		656000	3840			1	15.55	17.10	1.429	-0.05	0.263	0.376
	FR1 n77	100M	BPSK	1	1	Front	14mm	Ant 5	ECI 4		656000	3840			1	23.04	24.00	1.247	0.02	0.366	0.456
	FR1 n77	100M	BPSK	135	69	Front	14mm	Ant 5	ECI 4		656000	3840			1	22.88	24.00	1.294	0.03	0.351	0.454
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 5	ECI 3		656000	3840			1	15.59	17.10	1.416	0.02	0.585	0.828
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 5	ECI 3		656000	3840			1	15.55	17.10	1.429	0.11	0.626	0.895
72	FR1 n77	100M	BPSK	270	0	Back	5mm	Ant 5	ECI 3		656000	3840			1	15.50	17.10	1.445	-0.07	0.624	0.902
	FR1 n77	100M	BPSK	1	1	Back	19mm	Ant 5	ECI 4		656000	3840			1	23.04	24.00	1.247	0.06	0.271	0.338
	FR1 n77	100M	BPSK	135	69	Back	19mm	Ant 5	ECI 4		656000	3840			1	22.88	24.00	1.294	0.02	0.256	0.331
	FR1 n77	100M	BPSK	1	271	Front	5mm	Ant 1	ECI 3		656000	3840			1	20.29	20.50	1.05	-0.04	0.284	0.298
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 1	ECI 3		656000	3840			1	20.05	20.50	1.109	-0.02	0.366	0.406
	FR1 n77	100M	BPSK	1	271	Back	5mm	Ant 1	ECI 3		656000	3840			1	20.29	20.50	1.05	0.10	0.435	0.457
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 1	ECI 3		656000	3840			1	20.05	20.50	1.109	0.02	0.536	0.594
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 2	ECI 3		656000	3840			1	19.75	20.50	1.189	0.02	0.099	0.118
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 2	ECI 3		656000	3840			1	19.72	20.50	1.197	0.07	0.110	0.132
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 2	ECI 3		656000	3840			1	19.75	20.50	1.189	0.01	0.422	0.502
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 2	ECI 3		656000	3840			1	19.72	20.50	1.197	0.10	0.468	0.560
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant 8	ECI 3		656000	3840			1	20.03	20.40	1.089	0.02	0.023	0.025
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant 8	ECI 3		656000	3840			1	19.99	20.40	1.099	-0.17	0.018	0.020
	FR1 n77	100M	BPSK	1	1	Front	14mm	Ant 8	ECI 4		656000	3840			1	21.58	22.50	1.236	0.02	0.015	0.019
	FR1 n77	100M	BPSK	135	69	Front	14mm	Ant 8	ECI 4		656000	3840			1	21.47	22.50	1.268	0.03	0.013	0.016
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 8	ECI 3		656000	3840			1	20.03	20.40	1.089	0.03	0.710	0.773
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 8	ECI 3		656000	3840			1	19.99	20.40	1.099	-0.12	0.624	0.686
	FR1 n77	100M	BPSK	1	1	Back	19mm	Ant 8	ECI 4		656000	3840			1	21.58	22.50	1.236	0.05	0.156	0.193
	FR1 n77	100M	BPSK	135	69	Back	19mm	Ant 8	ECI 4		656000	3840			1	21.47	22.50	1.268	0.06	0.161	0.204

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6	Body worn Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.02	0.239	0.332
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6	Body worn Simultaneous	1	2412	1	14.21	16.00	1.51	100.0	1.0	0.02	0.115	0.174
	WLAN2.4GHz	802.11b 1Mbps	Front	14mm	Ant 6	Full Power	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.03	0.069	0.096
73	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Body worn Standalone	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.03	0.696	0.967
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Body worn Standalone	11	2462	1	17.62	19.00	1.374	100.0	1.0	0.02	0.581	0.798
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Body worn Simultaneous	1	2412	1	14.21	16.00	1.51	100.0	1.0	0.03	0.254	0.384
	WLAN2.4GHz	802.11b 1Mbps	Back	19mm	Ant 6	Full Power	1	2412	1	18.07	19.50	1.39	100.0	1.0	0.01	0.087	0.121
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Body worn Standalone	1	2412	2	18.07	19.50	1.39	100.0	1.0	0.03	0.653	0.908
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	Body worn Standalone	1	2412	3	18.07	19.50	1.39	100.0	1.0	0.05	0.621	0.863



FCC SAR Test Report

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	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Body worn Standalone	58	5290	1	13.49	15.00	1.416	86.15	1.161	0.02	0.238	0.391
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Body worn Simultaneous	58	5290	1	8.93	10.50	1.435	86.15	1.161	0.01	0.085	0.142
	WLAN5GHz	802.11a 6Mbps	Front	14mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.02	0.176	0.254
74	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Standalone	58	5290	1	13.49	15.00	1.416	86.15	1.161	0.01	0.703	1.156
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Simultaneous	58	5290	1	8.93	10.50	1.435	86.15	1.161	0.05	0.253	0.422
	WLAN5GHz	802.11a 6Mbps	Back	19mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.02	0.457	0.659
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Body worn Standalone	122	5610	1	14.91	16.50	1.442	86.15	1.161	0.02	0.217	0.363
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Body worn Simultaneous	138	5690	1	11.83	13.00	1.309	86.15	1.161	0.02	0.077	0.117
	WLAN5GHz	802.11a 6Mbps	Front	14mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.05	0.128	0.181
75	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Standalone	122	5610	1	14.91	16.50	1.442	86.15	1.161	0.01	0.605	1.013
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Standalone	106	5530	1	14.68	16.50	1.521	86.15	1.161	0.05	0.553	0.977
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Simultaneous	138	5690	1	11.83	13.00	1.309	86.15	1.161	0.03	0.230	0.350
	WLAN5GHz	802.11a 6Mbps	Back	19mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.02	0.441	0.623
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant 6	Body worn Standalone	157	5785	1	17.37	19.00	1.455	97.46	1.026	0.01	0.452	0.675
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 6	Body worn Simultaneous	155	5775	1	12.38	14.00	1.452	86.15	1.161	0.02	0.143	0.241
	WLAN5GHz	802.11a 6Mbps	Front	14mm	Ant 6	Full Power	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.02	0.173	0.259
76	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 6	Body worn Standalone	157	5785	1	17.37	19.00	1.455	97.46	1.026	0.02	0.798	1.191
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 6	Body worn Standalone	165	5825	1	17.35	19.00	1.462	97.46	1.026	0.03	0.681	1.022
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	Body worn Simultaneous	155	5775	1	12.38	14.00	1.452	86.15	1.161	0.05	0.252	0.425
	WLAN5GHz	802.11a 6Mbps	Back	19mm	Ant 6	Full Power	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.02	0.384	0.575

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.01	0.035	0.051
77	Bluetooth	1Mbps	Back	5mm	Ant 6	Full Power	78	2480	1	14.19	15.50	1.352	76.67	1.086	0.02	0.086	0.126



16.4 Product specific 10g SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	189	836.4	1	28.05	28.50	1.109	-0.14	2.000	2.218
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	128	824.2	1	27.76	28.50	1.186	0.02	1.980	2.348
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	251	848.8	1	28.03	28.50	1.114	0.03	1.910	2.128
	GSM850	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	189	836.4	1	28.05	28.50	1.109	-0.16	2.560	2.839
	GSM850	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	1	27.76	28.50	1.186	-0.10	2.410	2.858
78	GSM850	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	251	848.8	1	28.03	28.50	1.114	-0.04	2.660	2.963
	GSM1900	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	661	1880	1	24.81	25.80	1.256	-0.04	2.010	2.525
	GSM1900	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	512	1850.2	1	24.79	25.80	1.262	0.16	1.850	2.335
	GSM1900	GPRS 4 Tx slots	Back	0mm	Ant 0	ECI 6	810	1909.8	1	24.73	25.80	1.279	-0.05	2.230	2.852
	GSM1900	GPRS 4 Tx slots	Back	14mm	Ant 0	ECI 4	661	1880	1	25.24	26.50	1.337	0.03	0.387	0.517
	GSM1900	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	661	1880	1	24.81	25.80	1.256	0.04	2.400	3.014
79	GSM1900	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	512	1850.2	1	24.79	25.80	1.262	0.01	2.510	3.168
	GSM1900	GPRS 4 Tx slots	Bottom Side	0mm	Ant 0	ECI 6	810	1909.8	1	24.73	25.80	1.279	-0.10	2.240	2.865
	GSM1900	GPRS 4 Tx slots	Bottom Side	12mm	Ant 0	ECI 4	661	1880	1	25.24	26.50	1.337	0.02	0.771	1.031

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9400	1880	1	21.31	22.60	1.346	0.06	1.910	2.571
	WCDMA II	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9262	1852.4	1	21.25	22.60	1.365	-0.06	1.970	2.689
	WCDMA II	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9538	1907.6	1	21.22	22.60	1.374	-0.13	2.020	2.775
	WCDMA II	RMC 12.2Kbps	Back	14mm	Ant 0	ECI 4	9400	1880	1	22.42	24.00	1.439	0.02	0.325	0.468
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9400	1880	1	21.31	22.60	1.346	-0.13	2.050	2.759
80	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9262	1852.4	1	21.25	22.60	1.365	-0.08	2.120	2.894
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9538	1907.6	1	21.22	22.60	1.374	-0.17	1.940	2.666
	WCDMA II	RMC 12.2Kbps	Bottom Side	12mm	Ant 0	ECI 4	9400	1880	1	22.42	24.00	1.439	0.03	0.578	0.832
	WCDMA IV	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1413	1732.6	1	20.31	21.90	1.442	0.03	1.860	2.682
	WCDMA IV	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1312	1712.4	1	20.15	21.90	1.496	-0.06	1.840	2.753
	WCDMA IV	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1513	1752.6	1	20.21	21.90	1.476	0.17	2.050	3.026
	WCDMA IV	RMC 12.2Kbps	Back	14mm	Ant 0	ECI 4	1413	1732.6	1	22.41	24.00	1.442	0.02	0.302	0.435
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1413	1732.6	1	20.31	21.90	1.442	-0.08	2.010	2.898
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1312	1712.4	1	20.15	21.90	1.496	0.16	2.070	3.097
81	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1513	1752.6	1	20.21	21.90	1.476	0.06	2.300	3.395
	WCDMA IV	RMC 12.2Kbps	Bottom Side	12mm	Ant 0	ECI 4	1413	1732.6	1	22.41	24.00	1.442	0.03	0.481	0.694
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1513	1752.6	2	20.21	21.90	1.476	0.03	2.150	3.173
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1513	1752.6	3	20.21	21.90	1.476	0.02	2.080	3.070
	WCDMA V	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4182	836.4	1	22.57	24.00	1.39	0.02	1.530	2.127
	WCDMA V	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4132	826.4	1	22.43	24.00	1.435	0.03	1.450	2.081
	WCDMA V	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4233	846.6	1	22.46	24.00	1.426	0.05	1.560	2.225
82	WCDMA V	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4182	836.4	1	22.57	24.00	1.39	0.05	2.010	2.794
	WCDMA V	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4132	826.4	1	22.43	24.00	1.435	0.02	1.850	2.655
	WCDMA V	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4233	846.6	1	22.46	24.00	1.426	0.03	1.810	2.581

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	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)
83	LTE Band 4	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	19.61	20.20	1.146			0.03	1.920	2.200
	LTE Band 4	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20175	1732.5	TAS0 0 CID:37	1	19.59	20.20	1.151			0.01	1.520	1.750
	LTE Band 4	20M	QPSK	100	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20175	1732.5		1	19.49	20.20	1.178			0.15	1.520	1.791
	LTE Band 4	20M	QPSK	1	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5		1	22.75	24.00	1.334			0.01	0.361	0.482
	LTE Band 4	20M	QPSK	50	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	20175	1732.5		1	21.79	23.00	1.321			0.02	0.326	0.431



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									Designator)													
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6		21100	2535		1	21.07	22.30	1.327			0.18	2.270	3.012
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6		20850	2510		1	21.05	22.30	1.334			0.18	2.090	2.788
84	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6		21350	2560		1	21.06	22.30	1.33			0.03	2.410	3.205
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 1	ECI 6		21100	2535		1	21.05	22.30	1.334			-0.07	1.820	2.428
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 1	ECI 6		20850	2510		1	21.03	22.30	1.34			0.17	1.670	2.238
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 1	ECI 6		21350	2560		1	21.01	22.30	1.346			-0.17	1.930	2.598
	LTE Band 7	20M	QPSK	100	0	Back	0mm	Ant 1	ECI 6		21100	2535		1	21.00	22.30	1.349			-0.08	1.810	2.442
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant 1	ECI 4		21100	2535		1	22.93	24.00	1.279			0.02	0.384	0.491
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant 1	ECI 4		21100	2535		1	21.85	23.00	1.303			0.01	0.351	0.457
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6		21350+ 21152	2560+ 2540.2		1	20.83	22.30	1.403			0.05	2.050	2.876
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.93	21.20	1.34			0.11	1.720	2.305
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20850	2510	TAS0 0 CID:25	1	19.91	21.20	1.346			0.02	1.850	2.490
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21350	2560	TAS0 0 CID:25	1	19.92	21.20	1.343			-0.09	1.660	2.229
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.91	21.20	1.346			-0.08	1.690	2.275
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20850	2510	TAS0 0 CID:25	1	19.89	21.20	1.352			-0.04	1.750	2.366
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21350	2560	TAS0 0 CID:25	1	19.90	21.20	1.349			0.11	1.620	2.185
	LTE Band 7	20M	QPSK	100	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.81	21.20	1.377			0.11	1.680	2.313
	LTE Band 7	20M	QPSK	1	0	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535		1	22.89	24.00	1.291			0.02	0.631	0.815
	LTE Band 7	20M	QPSK	50	0	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535		1	22.81	24.00	1.315			0.03	0.561	0.738
	LTE Band 7	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.93	21.20	1.34			0.14	1.680	2.251
	LTE Band 7	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20850	2510	TAS0 0 CID:25	1	19.91	21.20	1.346			-0.11	1.700	2.288
	LTE Band 7	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21350	2560	TAS0 0 CID:25	1	19.92	21.20	1.343			-0.11	1.470	1.974
	LTE Band 7	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.91	21.20	1.346			0.16	1.500	2.019
	LTE Band 7	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	20850	2510	TAS0 0 CID:25	1	19.89	21.20	1.352			0.03	1.690	2.285
	LTE Band 7	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21350	2560	TAS0 0 CID:25	1	19.90	21.20	1.349			-0.01	1.370	1.848
	LTE Band 7	20M	QPSK	100	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	21100	2535	TAS0 0 CID:25	1	19.81	21.20	1.377			0.05	1.480	2.038
	LTE Band 7	20M	QPSK	1	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535		1	22.89	24.00	1.291			0.03	0.653	0.843
	LTE Band 7	20M	QPSK	50	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	21100	2535		1	22.81	24.00	1.315			0.05	0.601	0.790
	LTE Band 13	10M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		23230	782		1	22.21	24.00	1.51			0.06	1.760	2.658
	LTE Band 13	10M	QPSK	25	0	Back	0mm	Ant 0	ECI 6		23230	782		1	21.27	23.00	1.489			0.02	1.650	2.457
	LTE Band 13	10M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		23230	782		1	21.25	23.00	1.496			0.03	1.630	2.438
85	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		23230	782		1	22.21	24.00	1.51			0.03	2.150	3.246
	LTE Band 13	10M	QPSK	25	0	Bottom Side	0mm	Ant 0	ECI 6		23230	782		1	21.27	23.00	1.489			0.05	2.010	2.993
	LTE Band 13	10M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		23230	782		1	21.25	23.00	1.496			0.06	1.980	2.962
	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		23230	782		2	22.21	24.00	1.51			0.02	2.010	3.035
	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		23230	782		3	22.21	24.00	1.51			0.06	1.980	2.990
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		26340	1880		1	21.52	22.10	1.143			-0.04	2.560	2.926
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		26140	1860		1	21.45	22.10	1.161			-0.12	2.620	3.042
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		26590	1905		1	21.48	22.10	1.153			0.02	2.680	3.090
	LTE Band 25	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		26340	1880		1	21.46	22.10	1.159			-0.14	2.050	2.376



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	LTE Band 25	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		26140	1860		1	21.44	22.10	1.164			-0.18	2.120	2.468
	LTE Band 25	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		26590	1905		1	21.43	22.10	1.167			0.09	2.070	2.416
	LTE Band 25	20M	QPSK	100	0	Back	0mm	Ant 0	ECI 6		26340	1880		1	21.45	22.10	1.161			0.02	2.020	2.345
	LTE Band 25	20M	QPSK	1	0	Back	14mm	Ant 0	ECI 4		26340	1880		1	22.23	24.00	1.503			0.02	0.382	0.574
	LTE Band 25	20M	QPSK	50	0	Back	14mm	Ant 0	ECI 4		26340	1880		1	21.20	23.00	1.514			0.01	0.351	0.531
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26340	1880		1	21.52	22.10	1.143			-0.06	2.720	3.109
86	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26140	1860		1	21.45	22.10	1.161			0.06	2.790	3.239
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26590	1905		1	21.48	22.10	1.153			0.02	2.770	3.194
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		26340	1880		1	21.46	22.10	1.159			-0.10	2.190	2.538
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		26140	1860		1	21.44	22.10	1.164			-0.14	2.250	2.619
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		26590	1905		1	21.43	22.10	1.167			0.03	2.130	2.486
	LTE Band 25	20M	QPSK	100	0	Bottom Side	0mm	Ant 0	ECI 6		26340	1880		1	21.45	22.10	1.161			0.01	2.160	2.508
	LTE Band 25	20M	QPSK	1	0	Bottom Side	12mm	Ant 0	ECI 4		26340	1880		1	22.23	24.00	1.503			0.03	0.692	1.040
	LTE Band 25	20M	QPSK	50	0	Bottom Side	12mm	Ant 0	ECI 4		26340	1880		1	21.20	23.00	1.514			0.00	0.621	0.940
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26140	1860		2	21.45	22.10	1.161			0.02	2.710	3.146
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26140	1860		3	21.45	22.10	1.161			0.05	2.680	3.111
	LTE Band 2	20M	QPSK	1	99	Bottom Side	0mm	Ant 0	ECI 6		18900+19098	1880+1899.8		1	21.25	22.10	1.216			0.03	2.460	2.991
	LTE Band 2	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6-1	PA (Reference Designator)	18900	1880	TAS0 0 CID:35	1	21.75	22.10	1.084			0.02	2.550	2.764
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		26340	1880		1	18.65	19.80	1.303			-0.05	1.260	1.642
	LTE Band 25	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		26340	1880		1	18.61	19.80	1.315			-0.06	1.010	1.328
	LTE Band 25	20M	QPSK	1	0	Back	9mm	Ant 4	ECI 4		26340	1880		1	20.47	22.00	1.422			0.05	0.612	0.870
	LTE Band 25	20M	QPSK	50	0	Back	9mm	Ant 4	ECI 4		26340	1880		1	19.43	21.00	1.435			0.06	0.581	0.834
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		26340	1880		1	18.65	19.80	1.303			-0.05	1.920	2.502
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		26140	1860		1	18.63	19.80	1.309			0.02	2.110	2.762
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		26590	1905		1	18.62	19.80	1.312			0.17	1.950	2.558
	LTE Band 25	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6		26340	1880		1	18.61	19.80	1.315			0.11	1.510	1.986
	LTE Band 25	20M	QPSK	100	0	Top Side	0mm	Ant 4	ECI 6		26340	1880		1	18.55	19.80	1.334			-0.11	1.510	2.014
	LTE Band 25	20M	QPSK	1	0	Top Side	14mm	Ant 4	ECI 4		26340	1880		1	20.47	22.00	1.422			0.01	0.453	0.644
	LTE Band 25	20M	QPSK	50	0	Top Side	14mm	Ant 4	ECI 4		26340	1880		1	19.43	21.00	1.435			0.02	0.451	0.647
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		26140	1860		2	18.63	19.80	1.309			0.05	1.950	2.553
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		26140	1860		3	18.63	19.80	1.309			0.06	1.960	2.566
	LTE Band 26	15M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		26865	831.5		1	22.26	24.00	1.493			0.05	1.680	2.508
	LTE Band 26	15M	QPSK	36	0	Back	0mm	Ant 0	ECI 6		26865	831.5		1	21.18	23.00	1.521			0.06	1.590	2.418
	LTE Band 26	15M	QPSK	75	0	Back	0mm	Ant 0	ECI 6		26865	831.5		1	21.19	23.00	1.517			0.02	1.510	2.291
87	LTE Band 26	15M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26865	831.5		1	22.26	24.00	1.493			0.03	2.150	3.210
	LTE Band 26	15M	QPSK	36	0	Bottom Side	0mm	Ant 0	ECI 6		26865	831.5		1	21.18	23.00	1.521			0.02	2.090	3.179
	LTE Band 26	15M	QPSK	75	0	Bottom Side	0mm	Ant 0	ECI 6		26865	831.5		1	21.19	23.00	1.517			0.03	1.980	3.004
	LTE Band 26	15M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26865	831.5		2	22.26	24.00	1.493			0.05	2.110	3.150
	LTE Band 26	15M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		26865	831.5		3	22.26	24.00	1.493			0.06	1.980	2.956
	LTE Band 66	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		132322	1745		1	21.11	21.80	1.172			0.01	2.320	2.719
	LTE Band 66	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		132072	1720		1	21.08	21.80	1.18			-0.02	2.370	2.797
	LTE Band 66	20M	QPSK	1	0	Back	0mm	Ant 0	ECI 6		132572	1770		1	21.07	21.80	1.183			-0.17	2.190	2.591
	LTE Band 66	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		132322	1745		1	21.08	21.80	1.18			-0.12	1.850	2.183
	LTE Band 66	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		132072	1720		1	21.06	21.80	1.186			0.14	1.880	2.230
	LTE Band 66	20M	QPSK	50	0	Back	0mm	Ant 0	ECI 6		132572	1770		1	21.07	21.80	1.183			-0.07	1.770	2.094
	LTE Band 66	20M	QPSK	100	0	Back	0mm	Ant 0	ECI 6		132322	1745		1	21.05	21.80	1.189			-0.02	1.820	2.164



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	LTE Band 66	20M	QPSK	1	0	Back	14mm	Ant 0	ECI 4		132322	1745		1	22.26	24.00	1.493			0.02	0.542	0.809
	LTE Band 66	20M	QPSK	50	0	Back	14mm	Ant 0	ECI 4		132322	1745		1	21.25	23.00	1.496			0.03	0.501	0.749
88	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		132322	1745		1	21.11	21.80	1.172			-0.18	2.720	3.188
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		132072	1720		1	21.08	21.80	1.18			0.02	2.630	3.103
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6		132572	1770		1	21.07	21.80	1.183			-0.04	2.550	3.017
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		132322	1745		1	21.08	21.80	1.18			-0.10	2.150	2.537
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		132072	1720		1	21.06	21.80	1.186			0.15	2.180	2.585
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Ant 0	ECI 6		132572	1770		1	21.07	21.80	1.183			0.12	2.050	2.425
	LTE Band 66	20M	QPSK	100	0	Bottom Side	0mm	Ant 0	ECI 6		132322	1745		1	21.05	21.80	1.189			0.07	2.130	2.533
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Ant 0	ECI 6-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:31	1	20.93	21.80	1.222			-0.17	2.430	2.969
	LTE Band 66	20M	QPSK	1	0	Bottom Side	12mm	Ant 0	ECI 4		132322	1745		1	22.26	24.00	1.493			0.03	0.880	1.314
	LTE Band 66	20M	QPSK	50	0	Bottom Side	12mm	Ant 0	ECI 4		132322	1745		1	21.25	23.00	1.496			0.05	0.801	1.198
	LTE Band 66	20M	QPSK	1	99	Bottom Side	0mm	Ant 0	ECI 6		132322+132520	1745+1764.8		1	21.05	21.80	1.189			0.05	2.460	2.925
	LTE Band 66	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	19.38	19.50	1.028			0.13	0.779	0.801
	LTE Band 66	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	19.32	19.50	1.042			0.01	0.620	0.646
	LTE Band 66	20M	QPSK	1	0	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745		1	21.11	22.00	1.227			0.02	0.394	0.483
	LTE Band 66	20M	QPSK	50	0	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745		1	20.11	21.00	1.227			0.05	0.351	0.431
	LTE Band 66	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		132322	1745		1	18.38	19.50	1.294			0.06	1.870	2.420
	LTE Band 66	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	19.38	19.50	1.028			-0.01	2.050	2.107
	LTE Band 66	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132072	1720		1	19.27	19.50	1.054			-0.03	1.950	2.055
	LTE Band 66	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132572	1770		1	19.33	19.50	1.04			0.18	2.020	2.101
	LTE Band 66	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132322	1745	TAS0 0 CID:39	1	19.32	19.50	1.042			0.14	1.620	1.688
	LTE Band 66	20M	QPSK	100	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	132322	1745		1	19.25	19.50	1.059			-0.13	1.600	1.694
	LTE Band 66	20M	QPSK	1	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745		1	21.11	22.00	1.227			0.02	0.401	0.492
	LTE Band 66	20M	QPSK	50	0	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	132322	1745		1	20.11	21.00	1.227			0.03	0.356	0.437
	LTE Band 38	20M	QPSK	1	0	Front	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.02	1.150	1.630
	LTE Band 38	20M	QPSK	50	0	Front	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	0.00	1.130	1.764
89	LTE Band 38	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.11	2.210	3.133
	LTE Band 38	20M	QPSK	50	0	Back	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	-0.15	1.850	2.888
	LTE Band 38	20M	QPSK	100	0	Back	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595		1	21.04	23.00	1.57	62.9	1.006	-0.04	1.680	2.653
	LTE Band 38	20M	QPSK	1	0	Bottom Side	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	22.51	24.00	1.409	62.9	1.006	0.06	1.250	1.772
	LTE Band 38	20M	QPSK	50	0	Bottom Side	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595	TAS0 0 CID:29	1	21.09	23.00	1.552	62.9	1.006	0.05	1.210	1.889
	LTE Band 38	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595		2	22.51	24.00	1.409	62.9	1.006	0.03	2.050	2.906
	LTE Band 38	20M	QPSK	1	0	Back	0mm	Ant 1	ECI 6-1	PA (Reference Designator)	38000	2595		3	22.51	24.00	1.409	62.9	1.006	0.05	2.110	2.991
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		40620	2593		1	22.25	23.80	1.429	62.9	1.006	-0.01	1.500	2.156
90	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		39750	2506		1	22.21	23.80	1.442	62.9	1.006	0.02	1.720	2.495



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	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		40185	2549.5		1	22.23	23.80	1.435	62.9	1.006	-0.09	0.745	1.075
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		41055	2636.5		1	22.22	23.80	1.439	62.9	1.006	0.03	0.501	0.725
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		41490	2680		1	22.20	23.80	1.445	62.9	1.006	0.10	1.530	2.224
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		40620	2593		1	21.45	23.00	1.429	62.9	1.006	0.01	1.400	2.013
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		39750	2506		1	21.35	23.00	1.462	62.9	1.006	0.10	1.360	2.000
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		40185	2549.5		1	21.37	23.00	1.455	62.9	1.006	-0.06	1.270	1.859
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		41055	2636.5		1	21.43	23.00	1.435	62.9	1.006	-0.15	1.270	1.833
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 4	ECI 6		41490	2680		1	21.36	23.00	1.459	62.9	1.006	-0.11	1.220	1.791
	LTE Band 41	20M	QPSK	100	0	Back	0mm	Ant 4	ECI 6		40620	2593		1	21.27	23.00	1.489	62.9	1.006	-0.04	1.200	1.798
	LTE Band 41	20M	QPSK	1	0	Back	9mm	Ant 4	ECI 4		40620	2593		1	22.51	24.00	1.409	62.9	1.006	0.02	0.446	0.632
	LTE Band 41	20M	QPSK	50	0	Back	9mm	Ant 4	ECI 4		40620	2593		1	21.39	23.00	1.449	62.9	1.006	0.03	0.421	0.614
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		40620	2593		1	22.25	23.80	1.429	62.9	1.006	0.10	1.410	2.027
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		39750	2506		1	22.21	23.80	1.442	62.9	1.006	0.05	1.470	2.132
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		40185	2549.5		1	22.23	23.80	1.435	62.9	1.006	-0.10	1.250	1.805
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		41055	2636.5		1	22.22	23.80	1.439	62.9	1.006	0.12	1.160	1.679
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 4	ECI 6		41490	2680		1	22.20	23.80	1.445	62.9	1.006	-0.03	1.210	1.759
	LTE Band 41	20M	QPSK	50	0	Top Side	0mm	Ant 4	ECI 6		40620	2593		1	21.45	23.00	1.429	62.9	1.006	0.04	0.945	1.359
	LTE Band 41	20M	QPSK	100	0	Top Side	0mm	Ant 4	ECI 6		40620	2593		1	21.27	23.00	1.489	62.9	1.006	0.01	0.945	1.416
	LTE Band 41	20M	QPSK	1	0	Top Side	14mm	Ant 4	ECI 4		40620	2593		1	22.51	24.00	1.409	62.9	1.006	0.01	0.397	0.563
	LTE Band 41	20M	QPSK	50	0	Top Side	14mm	Ant 4	ECI 4		40620	2593		1	21.39	23.00	1.449	62.9	1.006	0.02	0.356	0.519
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		39750	2506		2	22.21	23.80	1.442	62.9	1.006	0.05	1.650	2.394
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 4	ECI 6		39750	2506		3	22.21	23.80	1.442	62.9	1.006	0.06	1.610	2.336
91	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant 5	ECI 6		42590	3500		1	21.54	22.70	1.306	62.9	1.006	0.14	0.526	0.691
	LTE Band 42	20M	QPSK	50	0	Back	0mm	Ant 5	ECI 6		42590	3500		1	21.48	22.70	1.324	62.9	1.006	0.07	0.448	0.597
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant 5	ECI 4		42590	3500		1	22.48	24.00	1.419	62.9	1.006	0.02	0.278	0.397
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant 5	ECI 4		42590	3500		1	21.37	23.00	1.455	62.9	1.006	0.03	0.261	0.382
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant 5	ECI 6		42590	3500		2	21.54	22.70	1.306	62.9	1.006	0.05	0.515	0.677
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant 5	ECI 6		42590	3500		3	21.54	22.70	1.306	62.9	1.006	0.06	0.453	0.595
	LTE Band 42	20M	QPSK	1	99	Back	0mm	Ant 5	ECI 6		42590+42788	3500+3519.8		1	21.35	22.70	1.365	62.9	1.006	0.05	0.486	0.667

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	PA	Ch.	Freq. (MHz)	CID	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n2	40M	BPSK	1	1	Back	0mm	Ant 0	ECI 6		376000	1880		1	21.73	23.10	1.371	-0.02	2.170	2.975
	FR1 n2	40M	BPSK	108	54	Back	0mm	Ant 0	ECI 6		376000	1880		1	21.69	23.10	1.384	-0.09	2.040	2.823
	FR1 n2	40M	BPSK	216	0	Back	0mm	Ant 0	ECI 6		376000	1880		1	21.66	23.10	1.393	0.01	1.840	2.563
	FR1 n2	40M	BPSK	1	1	Back	14mm	Ant 0	ECI 4		376000	1880		1	22.67	24.00	1.358	0.01	0.251	0.341
	FR1 n2	40M	BPSK	108	54	Back	14mm	Ant 0	ECI 4		376000	1880		1	22.63	24.00	1.371	0.05	0.221	0.303
92	FR1 n2	40M	BPSK	1	1	Bottom Side	0mm	Ant 0	ECI 6		376000	1880		1	21.73	23.10	1.371	0.03	2.280	3.126
	FR1 n2	40M	BPSK	108	54	Bottom Side	0mm	Ant 0	ECI 6		376000	1880		1	21.69	23.10	1.384	0.18	2.210	3.059
	FR1 n2	40M	BPSK	216	0	Bottom Side	0mm	Ant 0	ECI 6		376000	1880		1	21.66	23.10	1.393	0.17	2.000	2.786
	FR1 n2	40M	BPSK	1	1	Bottom Side	0mm	Ant 0	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:29	1	21.65	23.10	1.396	0.16	2.170	3.029
	FR1 n2	40M	BPSK	1	1	Bottom Side	12mm	Ant 0	ECI 4		376000	1880		1	22.67	24.00	1.358	0.06	0.422	0.573
	FR1 n2	40M	BPSK	108	54	Bottom Side	12mm	Ant 0	ECI 4		376000	1880		1	22.63	24.00	1.371	0.05	0.401	0.550
	FR1 n2	40M	BPSK	1	1	Front	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.65	19.70	1.274	0.06	1.160	1.478
	FR1 n2	40M	BPSK	108	54	Front	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.46	19.70	1.33	-0.05	1.200	1.596
	FR1 n2	40M	BPSK	1	1	Front	6mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.57	24.00	1.39	0.02	0.735	1.022
	FR1 n2	40M	BPSK	108	54	Front	6mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.45	24.00	1.429	0.03	0.701	1.002
	FR1 n2	40M	BPSK	1	1	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.65	19.70	1.274	0.05	1.110	1.414
	FR1 n2	40M	BPSK	108	54	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.46	19.70	1.33	-0.12	1.170	1.556



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										Designator)										
	FR1 n2	40M	BPSK	1	1	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.57	24.00	1.39	0.05	0.869	1.208
	FR1 n2	40M	BPSK	108	54	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.45	24.00	1.429	0.06	0.823	1.176
	FR1 n2	40M	BPSK	108	54	Top Side	0mm	Ant 4	ECI 6		376000	1880		1	18.56	19.70	1.3	0.17	1.450	1.885
	FR1 n2	40M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.65	19.70	1.274	0.02	1.950	2.484
	FR1 n2	40M	BPSK	108	54	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.46	19.70	1.33	-0.13	1.910	2.540
	FR1 n2	40M	BPSK	216	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	376000	1880	TAS0 0 CID:28	1	18.44	19.70	1.337	0.06	1.580	2.112
	FR1 n2	40M	BPSK	1	1	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.57	24.00	1.39	0.07	0.561	0.780
	FR1 n2	40M	BPSK	108	54	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	376000	1880		1	22.45	24.00	1.429	0.02	0.525	0.750
	FR1 n7	50M	BPSK	1	1	Back	0mm	Ant 1	ECI 6		507000	2535		1	21.83	22.80	1.25	-0.04	2.400	3.000
93	FR1 n7	50M	BPSK	135	68	Back	0mm	Ant 1	ECI 6		507000	2535		1	21.81	22.80	1.256	-0.07	2.550	3.203
	FR1 n7	50M	BPSK	270	0	Back	0mm	Ant 1	ECI 6		507000	2535		1	21.73	22.80	1.279	-0.17	2.260	2.891
	FR1 n7	50M	BPSK	1	1	Back	10mm	Ant 1	ECI 4		507000	2535		1	23.32	24.00	1.169	0.02	0.339	0.396
	FR1 n7	50M	BPSK	135	68	Back	10mm	Ant 1	ECI 4		507000	2535		1	23.31	24.00	1.172	0.05	0.321	0.376
	FR1 n7	50M	BPSK	1	1	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	507000	2535		1	20.97	22.00	1.268	-0.01	1.820	2.308
	FR1 n7	50M	BPSK	135	68	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	507000	2535		1	20.95	22.00	1.274	-0.07	1.730	2.204
	FR1 n7	50M	BPSK	270	0	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	507000	2535		1	20.93	22.00	1.279	-0.12	1.530	1.957
	FR1 n7	50M	BPSK	1	1	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535		1	23.02	24.00	1.253	0.06	0.815	1.021
	FR1 n7	50M	BPSK	135	68	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535		1	23.01	24.00	1.256	0.02	0.783	0.983
	FR1 n7	50M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	507000	2535		1	20.97	22.00	1.268	-0.15	1.360	1.724
	FR1 n7	50M	BPSK	135	68	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	507000	2535		1	20.95	22.00	1.274	-0.09	1.410	1.796
	FR1 n7	50M	BPSK	1	1	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535		1	23.02	24.00	1.253	0.05	0.561	0.703
	FR1 n7	50M	BPSK	135	68	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	507000	2535		1	23.01	24.00	1.256	0.07	0.525	0.659
94	FR1 n26	20M	BPSK	1	1	Back	0mm	Ant 0	ECI 6		166300	831.5		1	22.58	24.00	1.387	0.02	1.210	1.678
	FR1 n26	20M	BPSK	50	28	Back	0mm	Ant 0	ECI 6		166300	831.5		1	22.48	24.00	1.419	0.03	1.050	1.490
	FR1 n66	45M	BPSK	1	1	Back	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.21	22.50	1.346	-0.02	2.020	2.719
	FR1 n66	45M	BPSK	120	60	Back	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.15	22.50	1.365	-0.04	1.890	2.580
	FR1 n66	45M	BPSK	240	0	Back	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.08	22.50	1.387	-0.13	1.640	2.275
	FR1 n66	45M	BPSK	1	1	Back	14mm	Ant 0	ECI 4		349000	1745		1	22.64	24.00	1.368	0.05	0.339	0.464
	FR1 n66	45M	BPSK	120	60	Back	14mm	Ant 0	ECI 4		349000	1745		1	22.60	24.00	1.38	0.06	0.301	0.415
95	FR1 n66	45M	BPSK	1	1	Bottom Side	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.21	22.50	1.346	0.05	2.340	3.150
	FR1 n66	45M	BPSK	120	60	Bottom Side	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.15	22.50	1.365	0.17	2.210	3.017
	FR1 n66	45M	BPSK	240	0	Bottom Side	0mm	Ant 0	ECI 6		349000	1745	TAS0 0 CID34	1	21.08	22.50	1.387	-0.19	1.910	2.649
	FR1 n66	45M	BPSK	1	1	Bottom Side	0mm	Ant 0	ECI 6-1	PA (Reference Designator)	349000	1745		1	21.15	22.50	1.365	-0.02	2.060	2.812
	FR1 n66	45M	BPSK	1	1	Bottom Side	12mm	Ant 0	ECI 4		349000	1745		1	22.64	24.00	1.368	0.01	0.506	0.692
	FR1 n66	45M	BPSK	120	60	Bottom Side	12mm	Ant 0	ECI 4		349000	1745		1	22.60	24.00	1.38	0.06	0.485	0.669
	FR1 n66	45M	BPSK	1	1	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745	CID17	1	20.03	20.70	1.167	0.01	0.765	0.893
	FR1 n66	45M	BPSK	120	60	Back	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745	CID17	1	19.96	20.70	1.186	0.04	0.796	0.944
	FR1 n66	45M	BPSK	1	1	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745		1	22.61	24.00	1.377	0.02	0.506	0.697
	FR1 n66	45M	BPSK	120	60	Back	9mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745		1	22.58	24.00	1.387	0.03	0.456	0.632
	FR1 n66	45M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6		349000	1745	CID34	1	19.85	20.70	1.216	-0.06	1.540	1.873
	FR1 n66	45M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745	CID17	1	20.03	20.70	1.167	0.10	2.090	2.439
	FR1 n66	45M	BPSK	120	60	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745	CID17	1	19.96	20.70	1.186	0.17	2.030	2.408
	FR1 n66	45M	BPSK	240	0	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745	CID17	1	19.94	20.70	1.191	0.05	1.850	2.203
	FR1 n66	45M	BPSK	1	1	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745		1	22.61	24.00	1.377	0.02	0.451	0.621
	FR1 n66	45M	BPSK	120	60	Top Side	14mm	Ant 4	ECI 4-1	PA (Reference Designator)	349000	1745		1	22.58	24.00	1.387	0.03	0.425	0.589
	FR1 n66	45M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745		2	20.03	20.70	1.167	0.00	2.010	2.346
	FR1 n66	45M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6-1	PA (Reference Designator)	349000	1745		3	20.03	20.70	1.167	0.02	1.950	2.276
96	FR1 n41	100M	BPSK	1	1	Back	0mm	Ant 4	ECI 6		518598	2592.99		1	20.53	21.40	1.222	-0.09	2.000	2.444
	FR1 n41	100M	BPSK	135	69	Back	0mm	Ant 4	ECI 6		518598	2592.99		1	20.48	21.40	1.236	0.05	1.800	2.225
	FR1 n41	100M	BPSK	270	0	Back	0mm	Ant 4	ECI 6		518598	2592.99		1	20.48	21.40	1.236	-0.09	1.520	1.879
	FR1 n41	100M	BPSK	1	1	Back	9mm	Ant 4	ECI 4		518598	2592.99		1	23.01	24.00	1.256	0.01	0.729	0.916
	FR1 n41	100M	BPSK	135	69	Back	9mm	Ant 4	ECI 4		518598	2592.99		1	22.99	24.00	1.262	0.09	0.701	0.885
	FR1 n41	100M	BPSK	1	1	Top Side	0mm	Ant 4	ECI 6		518598	2592.99		1	20.53	21.40	1.222	0.16	1.530	1.870
	FR1 n41	100M	BPSK	135	69	Top Side	0mm	Ant 4	ECI 6		518598	2592.99		1	20.48	21.40	1.236	0.00	1.400	1.730
	FR1 n41	100M	BPSK	1	1	Top Side	14mm	Ant 4	ECI 4		518598	2592.99		1	23.01	24.00	1.256	0.03	0.621	0.780
	FR1 n41	100M	BPSK	135	69	Top Side	14mm	Ant 4	ECI 4		518598	2592.99		1	22.99	24.00	1.262	0.05	0.605	0.764



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	FR1 n77	100M	BPSK	1	1	Back	0mm	Ant 5	ECI 6		656000	3840		1	19.55	20.80	1.334	-0.15	0.390	0.520
	FR1 n77	100M	BPSK	135	69	Back	0mm	Ant 5	ECI 6		656000	3840		1	19.51	20.80	1.346	0.13	0.416	0.560
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant 5	ECI 4		656000	3840		1	23.04	24.00	1.247	0.02	1.310	1.634
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant 5	ECI 4		656000	3840		1	22.88	24.00	1.294	0.05	1.250	1.618
	FR1 n77	100M	BPSK	1	1	Top Side	0mm	Ant 5	ECI 6		656000	3840		1	19.55	20.80	1.334	0.01	1.710	2.281
97	FR1 n77	100M	BPSK	135	69	Top Side	0mm	Ant 5	ECI 6		656000	3840		1	19.51	20.80	1.346	-0.08	1.850	2.490
	FR1 n77	100M	BPSK	270	0	Top Side	0mm	Ant 5	ECI 6		656000	3840		1	19.41	20.80	1.377	-0.03	1.550	2.134
	FR1 n77	100M	BPSK	1	1	Top Side	7mm	Ant 5	ECI 4		656000	3840		1	23.04	24.00	1.247	0.02	0.672	0.838
	FR1 n77	100M	BPSK	135	69	Top Side	7mm	Ant 5	ECI 4		656000	3840		1	22.88	24.00	1.294	0.01	0.625	0.809
	FR1 n77	100M	BPSK	135	69	Top Side	0mm	Ant 5	ECI 6		656000	3840		2	19.51	20.80	1.346	0.05	1.750	2.356
	FR1 n77	100M	BPSK	135	69	Top Side	0mm	Ant 5	ECI 6		656000	3840		3	19.51	20.80	1.346	0.06	1.710	2.302

【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 6	Extremity Standalone	36	5180	1	17.89	19.50	1.449	97.46	1.026	0.03	0.622	0.925
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 6	Extremity Simultaneous	42	5210	1	12.25	14.00	1.496	86.15	1.161	0.02	0.197	0.342
	WLAN5GHz	802.11a 6Mbps	Back	7mm	Ant 6	Full Power	36	5180	1	17.89	19.50	1.449	97.46	1.026	0.05	0.543	0.807
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 6	Extremity Standalone	36	5180	1	17.89	19.50	1.449	97.46	1.026	0.02	0.062	0.092
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 6	Extremity Simultaneous	42	5210	1	12.25	14.00	1.496	86.15	1.161	0.03	0.020	0.035
98	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	36	5180	1	17.89	19.50	1.449	97.46	1.026	0.06	1.950	2.899
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	44	5220	1	17.53	19.00	1.403	97.46	1.026	0.02	1.750	2.519
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 6	Extremity Simultaneous	42	5210	1	12.25	14.00	1.496	86.15	1.161	0.01	0.560	0.973
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 6	Full Power	36	5180	1	17.89	19.50	1.449	97.46	1.026	0.06	0.369	0.549
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	36	5180	2	17.89	19.50	1.449	97.46	1.026	0.05	1.850	2.750
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	36	5180	3	17.89	19.50	1.449	97.46	1.026	0.03	1.810	2.691
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.03	0.546	0.788
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.05	0.172	0.295
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.02	0.237	0.342
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.06	0.542	0.782
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.05	0.171	0.293
	WLAN5GHz	802.11a 6Mbps	Back	7mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.01	0.592	0.854
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.01	0.056	0.081
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.05	0.018	0.031
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.03	0.315	0.454
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.02	0.100	0.171
	WLAN5GHz	802.11a 6Mbps	Right Side	6mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.03	0.141	0.203
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.09	1.890	2.726
99	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	60	5300	1	17.50	19.00	1.413	97.46	1.026	0.05	1.950	2.827
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.01	0.566	0.970
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 6	Full Power	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.05	0.322	0.465
	WLAN5GHz	802.11a 6Mbps	Bottom Side	0mm	Ant 6	Extremity Standalone	52	5260	1	17.52	19.00	1.406	97.46	1.026	0.05	0.013	0.019
	WLAN5GHz	802.11ac-VHT80 MCS0	Bottom Side	0mm	Ant 6	Extremity Simultaneous	58	5290	1	12.31	14.00	1.476	86.15	1.161	0.03	0.004	0.007
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.02	0.316	0.446
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.03	0.166	0.283
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.02	0.154	0.218
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.05	0.222	0.314
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.06	0.116	0.198
	WLAN5GHz	802.11a 6Mbps	Back	7mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.01	0.335	0.473
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.01	0.031	0.044
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.02	0.016	0.027
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.05	0.184	0.260
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.06	0.096	0.164
	WLAN5GHz	802.11a 6Mbps	Right Side	6mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.05	0.106	0.150
100	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.04	1.070	1.512
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.02	0.561	0.957
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 6	Full Power	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.06	0.216	0.305
	WLAN5GHz	802.11a 6Mbps	Bottom Side	0mm	Ant 6	Extremity Standalone	100	5500	1	17.61	19.00	1.377	97.46	1.026	0.01	0.015	0.021
	WLAN5GHz	802.11ac-VHT80 MCS0	Bottom Side	0mm	Ant 6	Extremity Simultaneous	122	5610	1	14.83	16.50	1.469	86.15	1.161	0.03	0.008	0.014
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	100	5500	2	17.61	19.00	1.377	97.46	1.026	0.05	1.010	1.427
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	100	5500	3	17.61	19.00	1.377	97.46	1.026	0.06	0.985	1.392



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	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 6	Extremity Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.03	0.201	0.301
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 6	Extremity Simultaneous	155	5775	1	15.41	17.00	1.442	86.15	1.161	0.02	0.131	0.219
	WLAN5GHz	802.11a 6Mbps	Back	7mm	Ant 6	Full Power	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.03	0.315	0.472
101	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.03	1.020	1.527
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 6	Extremity Simultaneous	155	5775	1	15.41	17.00	1.442	86.15	1.161	0.01	0.564	0.944
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 6	Full Power	157	5785	1	17.86	19.50	1.459	97.46	1.026	0.02	0.281	0.421
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	157	5785	2	17.86	19.50	1.459	97.46	1.026	0.05	0.956	1.431
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Extremity Standalone	157	5785	3	17.86	19.50	1.459	97.46	1.026	0.00	0.945	1.415

16.5 Repeated SAR Measurement

【Repeat SAR 1g - FCC】

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	CID	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	LTE Band 13	10M_QPSK_1_0	Back	5.0	Ant 0	ECI 7	23230	782	1		22.21	24.00	1.51			0.01	0.938	1.416	-
2nd	LTE Band 13	10M_QPSK_1_0	Back	5.0	Ant 0	ECI 7	23230	782	1		22.21	24.00	1.51			0.05	0.915	1.382	1.02
1st	WCDMA V	RMC 12.2Kbps	Back	5.0	Ant 0	ECI 7	4233	846.6	1		22.46	23.10	1.159			0.05	1.130	1.310	-
2nd	WCDMA V	RMC 12.2Kbps	Back	5.0	Ant 0	ECI 7	4233	846.6	1		22.46	23.10	1.159			0.06	1.050	1.217	1.08
1st	LTE Band 66	20M_QPSK_1_0	Bottom Side	5.0	Ant 0	ECI 7	132072	1720	1		17.03	17.70	1.167			0.02	1.110	1.295	-
2nd	LTE Band 66	20M_QPSK_1_0	Bottom Side	5.0	Ant 0	ECI 7	132072	1720	1		17.03	17.70	1.167			0.01	1.030	1.202	1.08
1st	GSM1900	GPRS 4 Tx slots	Back	5.0	Ant 0	ECI 7	810	1909.8	1		23.15	24.10	1.245			0.02	1.050	1.307	-
2nd	GSM1900	GPRS 4 Tx slots	Back	5.0	Ant 0	ECI 7	810	1909.8	1		23.15	24.10	1.245			0.02	1.010	1.257	1.04
1st	LTE Band 38	20M_QPSK_1_0	Back	5.0	Ant 1	ECI 7-1	38000	2595	1	TASO 0 CID:29	21.05	21.70	1.161	62.9	1.006	0.07	1.100	1.285	-
2nd	LTE Band 38	20M_QPSK_1_0	Back	5.0	Ant 1	ECI 7-1	38000	2595	1	TASO 0 CID:29	21.05	21.70	1.161	62.9	1.006	0.03	1.020	1.191	1.08
1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0.0	Ant 6	Head Standalone	122	5610	1		15.46	16.50	1.271	86.15	1.161	-0.07	0.801	1.182	-
2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0.0	Ant 6	Head Standalone	122	5610	1		15.46	16.50	1.271	86.15	1.161	0.02	0.756	1.116	1.06
1st	WLAN5GHz	802.11a 6Mbps	Left Tilted	0.0	Ant 6	Head Standalone	157	5785	1		17.86	19.50	1.459	97.46	1.026	-0.07	0.801	1.199	-
2nd	WLAN5GHz	802.11a 6Mbps	Left Tilted	0.0	Ant 6	Head Standalone	157	5785	1		17.86	19.50	1.459	97.46	1.026	0.05	0.756	1.132	1.06

【Repeat SAR 10g - FCC】

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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	LTE Band 13	10M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	23230	782	1	22.21	24.00	1.51			0.03	2.150	3.246	-
2nd	LTE Band 13	10M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	23230	782	1	22.21	24.00	1.51			0.03	2.050	3.096	1.05
1st	GSM850	GPRS 4 Tx slots	Bottom Side	0.0	Ant 0	ECI 6	251	848.8	1	28.03	28.50	1.114			-0.04	2.660	2.963	-
2nd	GSM850	GPRS 4 Tx slots	Bottom Side	0.0	Ant 0	ECI 6	251	848.8	1	28.03	28.50	1.114			0.05	2.530	2.818	1.05
1st	LTE Band 66	20M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	132322	1745	1	21.11	21.80	1.172			-0.18	2.720	3.188	-
2nd	LTE Band 66	20M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	132322	1745	1	21.11	21.80	1.172			0.06	2.650	3.106	1.03
1st	LTE Band 25	20M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	26140	1860	1	21.45	22.10	1.161			0.06	2.790	3.239	-
2nd	LTE Band 25	20M_QPSK_1_0	Bottom Side	0.0	Ant 0	ECI 6	26140	1860	1	21.45	22.10	1.161			0.02	2.710	3.146	1.03
1st	FR1 n7	50M_BPSK_135_68	Back	0.0	Ant 1	ECI 6	507000	2535	1	21.81	22.80	1.256			-0.07	2.550	3.203	-
2nd	FR1 n7	50M_BPSK_135_68	Back	0.0	Ant 1	ECI 6	507000	2535	1	21.81	22.80	1.256			0.01	2.410	3.027	1.06

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR 1.45W/kg, only one repeated measurement is required.
- 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.
- The ratio is the difference in percentage between original and repeated *measured* SAR.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WLAN5GHz + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + WLAN5GHz + Bluetooth	Yes	Yes	Yes	Yes
6.	WWAN + WLAN2.4GHz + NFC				Yes
7.	WWAN + WLAN5GHz + NFC				Yes
8.	WWAN + Bluetooth + NFC				Yes
9.	WLAN5GHz + Bluetooth + NFC				Yes
10.	WWAN + WLAN5GHz + Bluetooth + NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, MediaTek TA-SAR algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. TA-SAR 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 operation is demonstrated in the Part 2 Report during algorithm validation. In this Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz cannot transmit simultaneously.
- WLAN 2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- For Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.
- For distance SAR and non-distance SAR at extremity exposure conditions always chose higher SAR to do co-located analysis.
- For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT together. This is the worst co-located analysis and can represent each band.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - The SPLSR calculated results please refer to section 17.6.

17.1 5G NR + LTE + WLAN + BT Sim-Tx analysis

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR and LTE transmission are managed and controlled by MediaTek TA-SAR, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

TA-SAR current implementation assumes hotspots from 5G NR and LTE are collocated. Therefore, for a total of 100% exposure margin, if LTE uses x, then the exposure margin left for 5G NR is capped to y. Thus, the compliance equation for LTE + 5G NR is

$$\begin{aligned} x \cdot A + y \cdot B + m &\leq 1 \\ x + y &= g \leq 1 \\ g + m &\leq 1 \end{aligned}$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and $A \leq 1.0$; B is normalized reported time-averaged exposure ratio from 5G NR (i.e., PD exposure for 5G FR2 or SAR exposure for 5G FR1), and $B \leq 1.0$.

Let m = normalized reported SAR exposure ratio from WLAN+BT, then for compliance,

$$x \cdot A + y \cdot B + m \leq 1.0 \quad (1)$$

$$x \cdot A + y \cdot B \leq x \cdot \max(A, B) + (g-x) \cdot \max(A, B) \leq \max(A, B)$$

$$x \cdot A + (g-x) \cdot B + m \leq \max(A, B) + m \leq 1.0 \quad (2)$$

If $A + m \leq 1.0$ and $B + m \leq 1.0$ can be proven, then " $x \cdot A + y \cdot B + m \leq 1.0$ ". Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove total exposure ratio (TER) of LTE + WLAN + BT < 1

Step 2: Prove total exposure ratio (TER) of 5G NR + WLAN + BT < 1

Else, if $A + m > 1.0$ and/or $B + m > 1.0$, then the followings need to hold true for compliance:

- i. A and m are decoupled based on the SPLSR criteria, and
- ii. $y \cdot B + m \leq 1.0$, and
- iii. $x \cdot A + y \cdot B \leq 1.0$

Note iii. is covered in Part 2 report; i. and ii. should be addressed in Part 1 report.

Above analysis is also apply to LTE inter-band uplink, LTE1 + LTE2 + WLAN + BT simultaneous transmission, so inter-band uplink CA no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.

The device also enabled Mediatek's TA-SAR algorithm to improve antenna performance by applying separate SAR budgets to each predefined antenna group. There are two predefined antenna groups of AG0, AG1, more detail as following table. Each antenna group is spatially separated to others. Simultaneous transmission analysis is performed per antenna group. Below analysis demonstrates the spatially separation of AG0, AG1, and the compliance between AG0 and BT/WLAN/NFC and between AG1 and BT/WLAN/NFC.

Thus, the concept was to split the SAR/TER on the transmitting RATs even they are transmitting on different antennas. Such approach is considered as a worst-case scenario in terms of transmitting power. Thus, to enhance the performance of the transmission power of RATs, consider the spatial properties of each antenna and the correlations between the antenna's transmissions.

SPLSR_Group (Antenna Group):

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

Note that WLAN/BT operations are not enabled with TA-SAR feature.

The verification of spatial separation of the antenna groups is demonstrated through the following steps, together with WIF/BT simultaneous transmission analysis results.

- i) The highest reported SAR at Plimit (or Pmax when Plimit > Pmax) for each antenna should be obtained out of all supported technologies and frequency bands for each power index. Demonstrate that the sum of reported SAR of one antenna from each of the antenna groups and the sum of RF exposure from all supported radios outside of TAS feature should be less than the regulatory limit as given below for each power index.
- ii) If the sum of SAR from step i) is over 1.6 W/kg for 1g, demonstrate for a given power index that every antenna from one antenna group meets SPLSR criteria with every antenna in another antenna group for all frequency bands. SPLSR criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios, SPLSR Hotspot combination procedure (Hybrid SPLSR) also be considered for simultaneous transmission analysis.
- iii) If SPLSR evaluation and analysis is needed to determine compliance for a certain power index configuration, SPLSR is performed by taking the highest summation SAR for each of the supported technologies and bands per antenna, along with the minimum of peak SAR location distance. The minimum of peak location distance is documented in the Highest Report SAR and Hotspot Location below for each power index configuration.
- iv) In section 17.6 SPLSR analysis only evaluation Sim-Tx SAR configuration are rounded to two decimal higher or equal to 1.6W/kg.
- v) The analysis addresses the simultaneous transmission and the transition among non-simultaneous transmission radios

For summed SAR results and SPLSR detailed analysis, please refer to section 17.2/17.3 / 17.4 / 17.5 / 17.6 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.

17.2 Head Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

AG0 maximum reported SAR:

Test Position	Ant0	Ant1	MAX
Right Cheek	0.445	0.237	0.445
Right Tilted	0.214	0.212	0.214
Left Cheek	0.498	0.427	0.498
Left Tilted	0.212	0.121	0.212

AG1 maximum reported SAR:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Right Cheek	0.908	0.551	0.292	0.058	0.908
Right Tilted	1.051	0.599	0.169	0.049	1.051
Left Cheek	0.572	0.903	0.089	0.105	0.903
Left Tilted	0.702	0.892	0.064	0.058	0.892

WLAN2.4GHz/5GHz +BT Worse-case SAR:

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Right Cheek	0.187	0.050	0.175	0.225	0.225
Right Tilted	0.241	0.062	0.203	0.265	0.265
Left Cheek	0.397	0.110	0.361	0.471	0.471
Left Tilted	0.377	0.101	0.358	0.459	0.459

Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case:

Test Position	AG0	AG1	WLAN/BT worst case	AG0+AG1+WLAN/BT worst case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Right Cheek	0.445	0.908	0.225	1.58
Right Tilted	0.214	1.051	0.265	1.53
Left Cheek	0.498	0.903	0.471	1.87
Left Tilted	0.212	0.892	0.459	1.56

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

Left Cheek					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	SPLSR
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant4	0.498	0.572	0.471	1.54	
Ant0-Ant5	0.498	0.903	0.471	1.87	1
Ant0-Ant2	0.498	0.089	0.471	1.06	
Ant0-Ant8	0.498	0.105	0.471	1.07	
Ant1-Ant4	0.427	0.572	0.471	1.47	
Ant1-Ant5	0.427	0.903	0.471	1.80	2
Ant1-Ant2	0.427	0.089	0.471	0.99	
Ant1-Ant8	0.427	0.105	0.471	1.00	

Simultaneous Transmission analysis of WLAN 5GHz+BT only and WWAN cell-off :

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Right Cheek	0.388	0.050	0.493	0.543	0.54
Right Tilted	0.346	0.062	0.679	0.741	0.74
Left Cheek	0.571	0.110	0.911	1.021	1.02
Left Tilted	0.542	0.101	1.199	1.300	1.30

17.3 Hotspot Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

AG0 maximum reported SAR:

Test Position	Ant0	Ant1	MAX
Front	0.676	0.732	0.732
Back	1.416	1.310	1.416
Left Side	0.371	0.571	0.571
Right Side	0.801	0.146	0.801
Top Side	0.070	0.050	0.070
Bottom Side	1.368	0.937	1.368

AG1 maximum reported SAR:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Front	0.298	0.265	0.086	0.001	0.298
Back	0.629	0.630	0.530	0.695	0.695
Left Side	0.194	0.022	0.239	0.001	0.239
Right Side	0.032	0.080	0.001	0.137	0.137
Top Side	0.658	0.457	0.031	0.001	0.658
Bottom Side	0.029	0.009	0.001	0.001	0.029

WLAN2.4GHz/5GHz +BT Worse-case SAR:

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Front	0.214	0.051	0.206	0.257	0.257
Back	0.626	0.126	0.525	0.651	0.651
Left Side	0.058	0.001	0.224	0.225	0.225
Right Side	0.219	0.001	0.114	0.115	0.219
Top Side	0.441	0.100	0.624	0.724	0.724
Bottom Side	0.002	0.001	0.041	0.042	0.042

Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case:

Test Position	AG0	AG1	WLAN/BT worst case	AG0+AG1+WLAN/BT worst case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.732	0.298	0.257	1.29
Back	1.416	0.695	0.651	2.76
Left Side	0.571	0.239	0.225	1.04
Right Side	0.801	0.137	0.219	1.16
Top Side	0.070	0.658	0.724	1.45
Bottom Side	1.368	0.029	0.042	1.44

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

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case	SPLSR
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant4	1.416	0.629	0.651	2.70	14
Ant0-Ant5	1.416	0.630	0.651	2.70	15
Ant0-Ant2	1.416	0.530	0.651	2.60	16
Ant0-Ant8	1.416	0.695	0.651	2.76	17
Ant1-Ant4	1.310	0.629	0.651	2.59	18
Ant1-Ant5	1.310	0.630	0.651	2.59	19
Ant1-Ant2	1.310	0.530	0.651	2.49	20
Ant1-Ant8	1.310	0.695	0.651	2.66	21

Simultaneous Transmission analysis of WLAN 5GHz+BT only and WWAN cell-off :

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Front	0.214	0.051	0.206	0.257	0.26
Back	0.626	0.126	0.525	0.651	0.65
Left Side	0.058	0.001	0.224	0.225	0.23
Right Side	0.219	0.001	0.114	0.115	0.22
Top Side	0.441	0.100	0.624	0.724	0.72
Bottom Side	0.002	0.001	0.041	0.042	0.04

17.4 Body-Worn Accessory Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

AG0 maximum reported SAR:

Test Position	Ant0	Ant1	MAX
Front	0.676	0.732	0.732
Back	1.416	1.310	1.416

AG1 maximum reported SAR:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Front	0.540	0.376	0.132	0.025	0.540
Back	1.034	0.903	0.560	0.773	1.034

WLAN2.4GHz/5GHz +BT Worse-case SAR:

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Front	0.174	0.051	0.241	0.292	0.292
Back	0.384	0.126	0.425	0.551	0.551

Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case:

Test Position	AG0	AG1	WLAN/BT worst case	AG0+AG1+WLAN/BT worst case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.732	0.540	0.292	1.56
Back	1.416	1.034	0.551	3.00

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

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case	SPLSR
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant4	1.416	1.034	0.551	3.00	3
Ant0-Ant5	1.416	0.903	0.551	2.87	4
Ant0-Ant2	1.416	0.560	0.551	2.53	5
Ant0-Ant8	1.416	0.773	0.551	2.74	6
Ant1-Ant4	1.310	1.034	0.551	2.90	7
Ant1-Ant5	1.310	0.903	0.551	2.76	8
Ant1-Ant2	1.310	0.560	0.551	2.42	9
Ant1-Ant8	1.310	0.773	0.551	2.63	10

Simultaneous Transmission analysis of WLAN 5GHz+BT only and WWAN cell-off :

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Front	0.332	0.051	0.675	0.726	0.73
Back	0.967	0.126	1.191	1.317	1.32

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	Ant0	Ant1	MAX
Front	0.629	0.467	0.629
Back	0.748	0.366	0.748

AG1 maximum reported SAR:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Front	0.553	0.456		0.019	0.553
Back	0.613	0.375		0.204	0.613

WLAN2.4GHz/5GHz+BT Worse-case SAR

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	MAX
Front	0.096		0.259	0.259	0.259
Back	0.121		0.659	0.659	0.659

Simultaneous Transmission analysis of AG0 + AG1 + WLAN + BT Worse-case:

Test Position	AG0	AG1	WLAN/BT worst case	AG0+AG1+WLAN/BT worst case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.629	0.553	0.259	1.44
Back	0.748	0.613	0.659	2.02

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

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case	SPLSR
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant4	0.748	0.613	0.659	2.02	11
Ant0-Ant5	0.748	0.375	0.659	1.78	12
Ant0-Ant2	0.748		0.659	1.41	
Ant0-Ant8	0.748	0.019	0.659	1.43	
Ant1-Ant4	0.366	0.613	0.659	1.64	13
Ant1-Ant5	0.366	0.375	0.659	1.40	
Ant1-Ant2	0.366		0.659	1.03	
Ant1-Ant8	0.366	0.204	0.659	1.23	

17.5 Product specific 10g SAR Exposure Conditions

Remark:

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

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

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

AG0 maximum reported SAR:

Test Position	Ant0	Ant1	MAX
Front		1.764	1.764
Back	3.090	3.205	3.205
Left Side			
Right Side			
Top Side			
Bottom Side	3.395	1.889	3.395

AG1 maximum reported SAR:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Front	1.596				1.596
Back	2.495	0.691			2.495
Left Side					
Right Side					
Top Side	2.762	2.490			2.762
Bottom Side					

WLAN2.4GHz/5GHz/BT Worse-case SAR

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	MAX
Front			0.295	0.295
Back			0.342	0.342
Left Side			0.035	0.035
Right Side			0.171	0.171
Top Side			0.973	0.973
Bottom Side			0.014	0.014

Simultaneous Transmission analysis of AG0 + AG1 + WLAN/BT Worse-case+NFC:

Test Position	AG0	AG1	WLAN/BT worst case	NFC	AG0+AG1+WLAN/BT worst case+NFC
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)
Front	1.764	1.596	0.295		3.66
Back	3.205	2.495	0.342	0.026	6.07
Left Side			0.035		0.04
Right Side			0.171		0.17
Top Side		2.762	0.973		3.74
Bottom Side	3.395		0.014		3.41

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

Back						
Ant combination	AG0	AG1	WLAN/BT worst case	NFC	AG1+AG0+WLAN +BT worse case	SPLSR
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant4	3.090	2.495	0.342	0.026	5.95	22
Ant0-Ant5	3.090	0.691	0.342	0.026	4.15	23
Ant0-Ant2	3.090		0.342	0.026	3.46	
Ant0-Ant8	3.090		0.342	0.026	3.46	
Ant1-Ant4	3.205	2.495	0.342	0.026	6.07	26
Ant1-Ant5	3.205	0.691	0.342	0.026	4.26	27
Ant1-Ant2	3.205		0.342	0.026	3.57	
Ant1-Ant8	3.205		0.342	0.026	3.57	

Simultaneous Transmission analysis of WLAN/BT+NFC only and WWAN cell-off :

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	WLAN5GHz Ant6+BT Ant6	NFC	NFC+WLAN+BT worst case
Front			0.788	0.788	0.000	0.79
Back			0.925	0.925	0.026	0.95
Left Side			0.092	0.092	0.000	0.09
Right Side			0.454	0.454	0.000	0.45
Top Side			2.827	2.899	0.000	2.90
Bottom Side			0.021	0.021	0.000	0.02

<Sensor off>
General Note: The unit of SAR evaluation is W/kg.

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

Test Position	Ant0	Ant1	MAX
Front			
Back	0.809	0.491	0.809
Left Side			
Right Side			
Top Side			
Bottom Side	1.314		1.314

<AG1 maximum reported SAR>:

Test Position	Ant4	Ant5	Ant2	Ant8	MAX
Front	1.022				1.022
Back	1.208	1.634			1.634
Left Side					
Right Side					
Top Side	0.843	0.838			0.843
Bottom Side					

WLAN2.4GHz/5GHz/BT Worse-case SAR

Test Position	WLAN2.4GHz Ant6	BT Ant6	WLAN5GHz Ant6	MAX
Front			0.342	0.342
Back			0.854	0.854
Left Side				0.000
Right Side			0.203	0.203
Top Side			0.549	0.549
Bottom Side				0.000

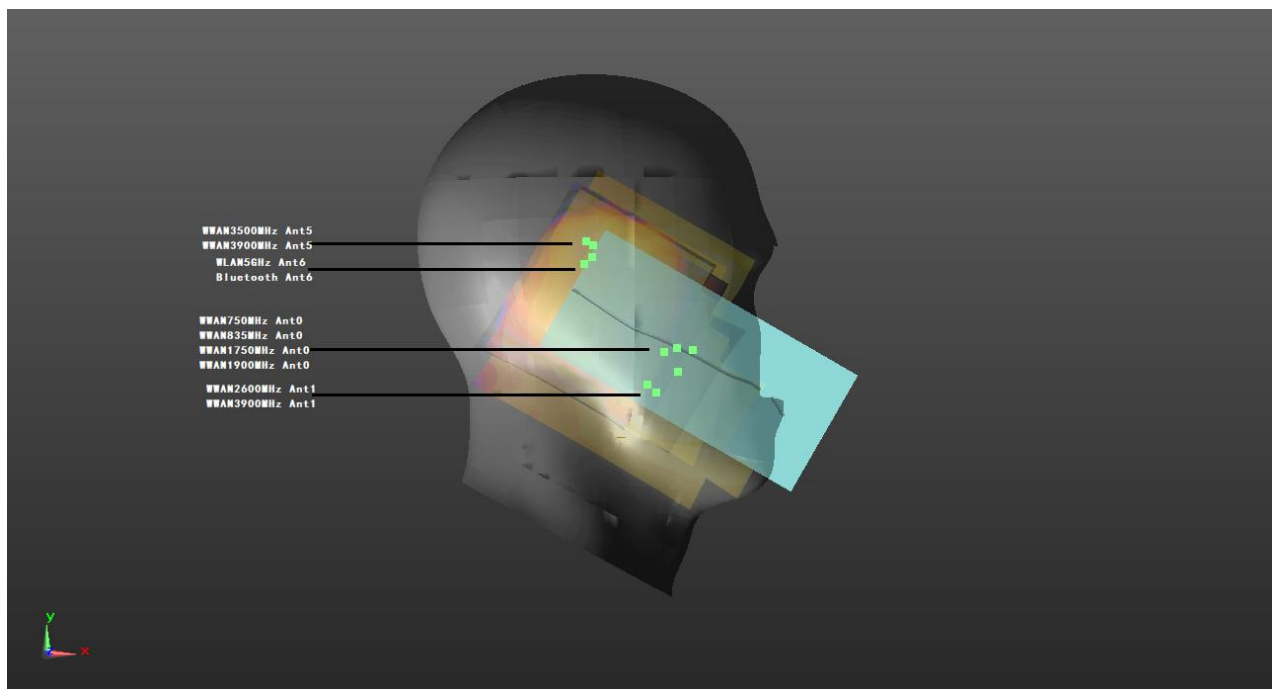
<Simultaneous Transmission analysis of AG0 + AG1 + WLAN/BT Worse-case+NFC>:

Test Position	AG0	AG1	WLAN/BT worst case	NFC	AG0+AG1+WLAN/BT worst case+NFC
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)
Front		1.022	0.342		1.36
Back	0.809	1.634	0.854	0.026	3.32
Left Side					0.00
Right Side			0.203		0.20
Top Side		0.843	0.549		1.39
Bottom Side	1.314				1.31

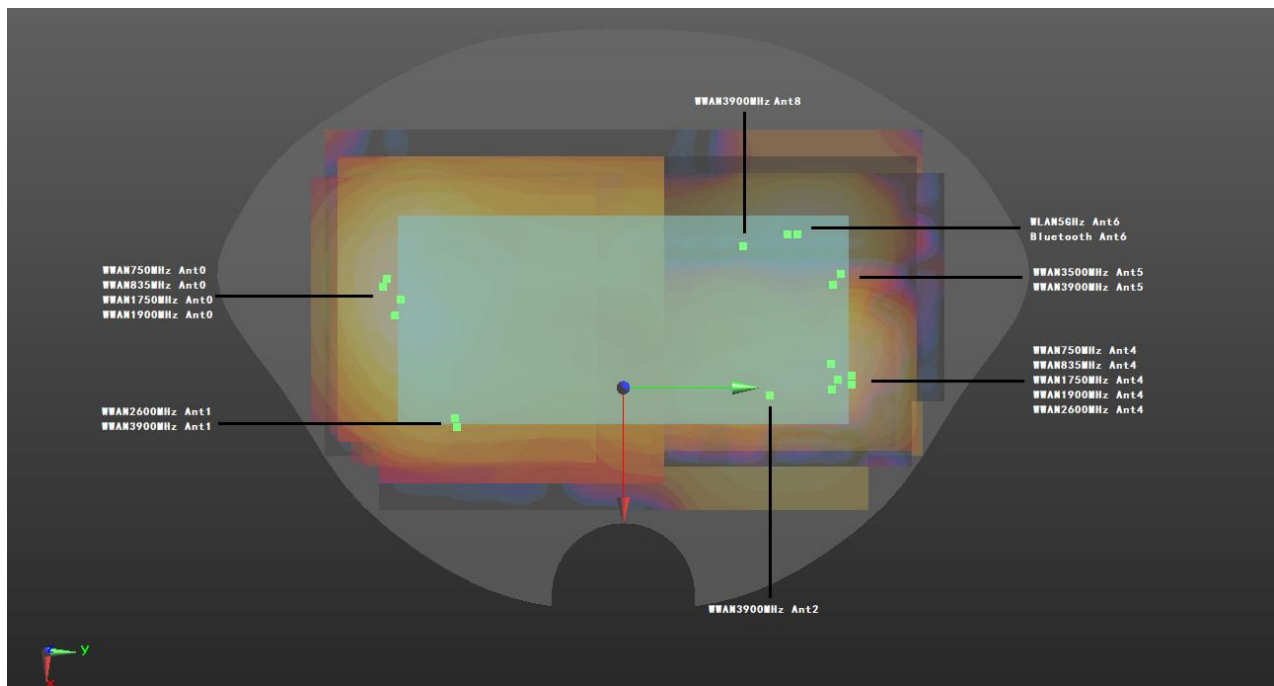
17.6 SPLSR Evaluation and Analysis

General Note:

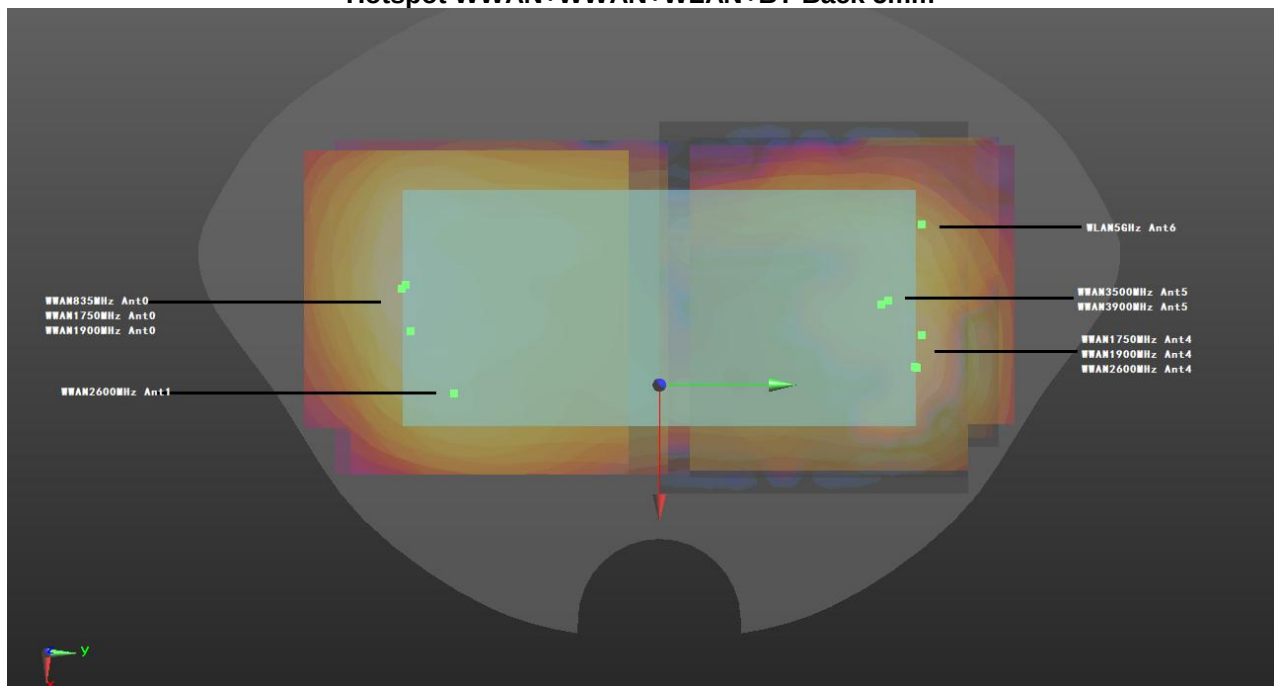
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR1 + SAR2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
3. Per April 2022 TCB Workshop Notes, WLAN /BT/ NFC was summed algebraically with the AG1 for the purposes of hybrid SPLSR combination and they are located at the top of the device
4. 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.
5. The detail hotspot point for each transmitter in each exposure condition are showing as below figure and the minimum 3D distance for each sum combination is used for SPLSR analysis.
6. The axis peak locations refer to Section 17.7.



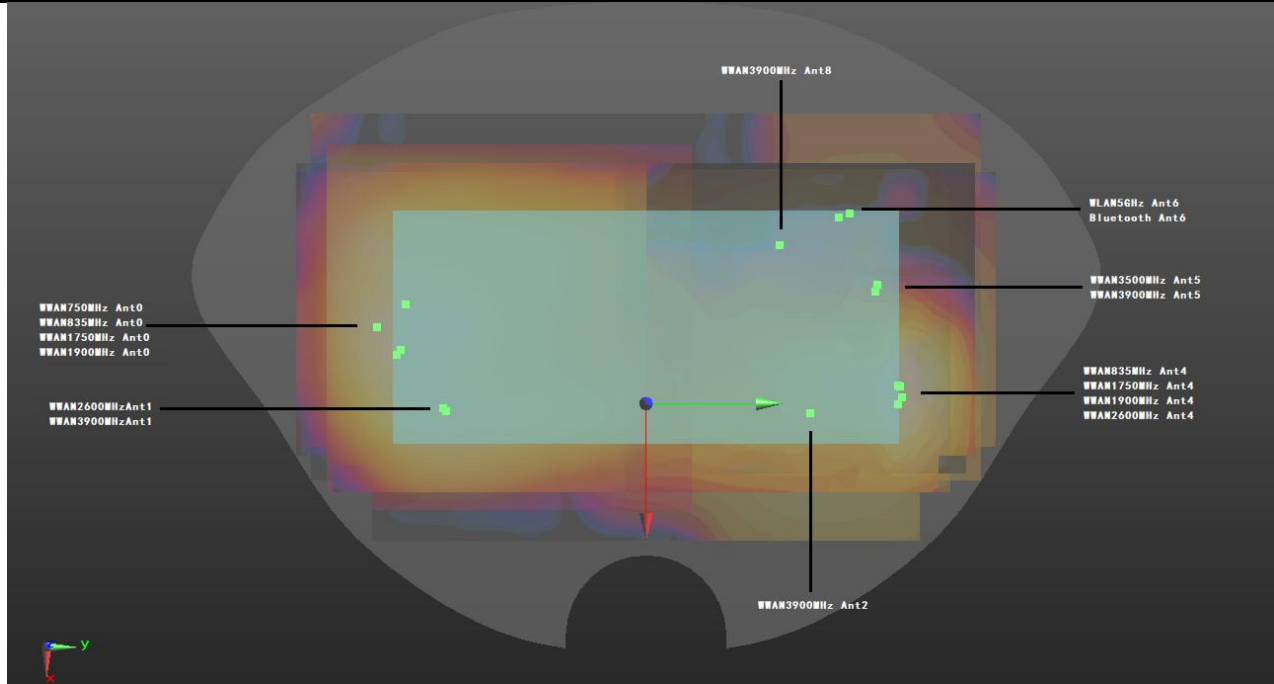
Head WWAN+WWAN+WLAN+BT Left Cheek 0mm



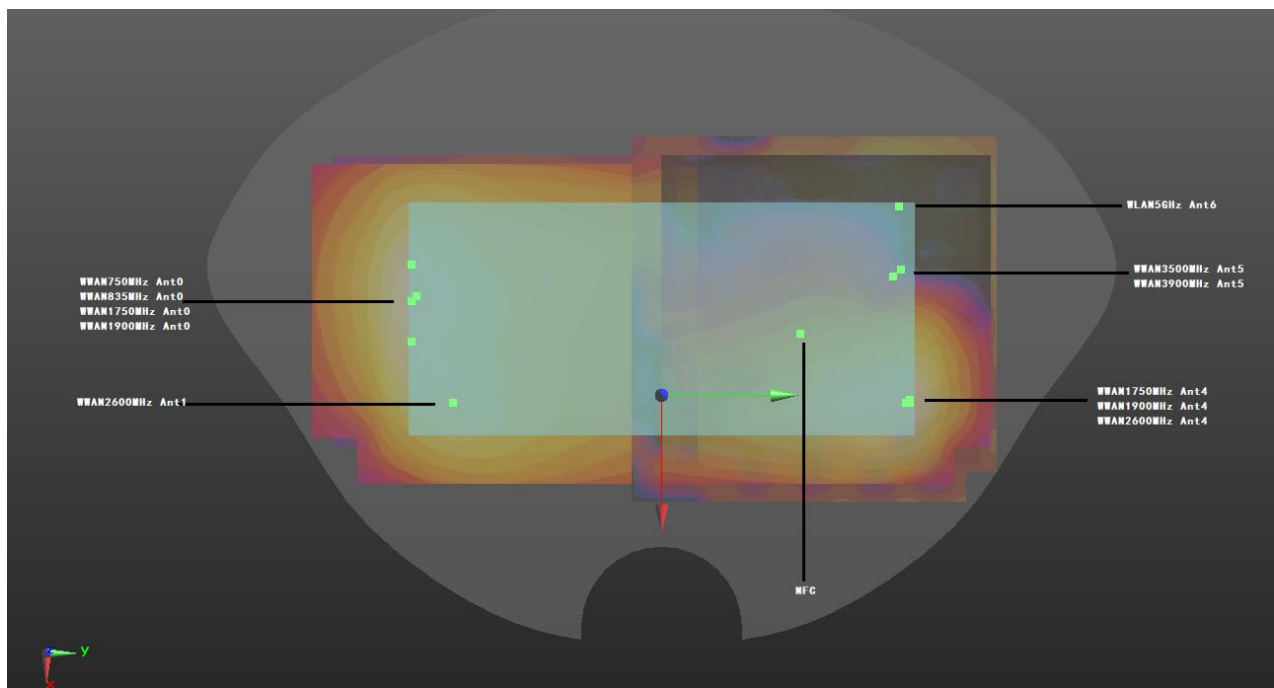
Hotspot WWAN+WWAN+WLAN+BT Back 5mm



Body worn WWAN+WWAN+WLAN Back 19mm



Body worn WWAN+WWAN+WLAN+BT Back 5mm



Extremity WWAN+WWAN+WLAN+NFC Back 0mm

Head

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Left Cheek	0.498	0.498	0mm	50.25	-47.15	-2.74	74.3	1.87	0.03	Not required
Ant5		0.903	1.374	0mm	9.5	15.02	-2.61				
WLAN5GHz Ant6		0.361		0mm							
BT Ant6		0.110		0mm							
Ant0	Left Cheek	0.498	0.498	0mm	50.25	-47.15	-2.74	84.9	1.87	0.03	Not required
Ant5		0.903	1.374	0mm							
WLAN5GHz Ant6		0.361		0mm	8.11	26.52	-2.5				
BT Ant6		0.110		0mm							
Ant0	Left Cheek	0.498	0.498	0mm	50.25	-47.15	-2.74	83.9	1.87	0.03	Not required
Ant5		0.903	1.374	0mm							
WLAN5GHz Ant6		0.361		0mm							
BT Ant6		0.110		0mm	6.65	24.58	-1.84				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Left Cheek	0.427	0.427	0mm	42.15	-60.15	-3.07	82.0	1.80	0.03	Not required
Ant5		0.903	1.374	0mm	9.5	15.02	-2.61				
WLAN5GHz Ant6		0.361		0mm							
BT Ant6		0.110		0mm							
Ant1	Left Cheek	0.427	0.427	0mm	42.15	-60.15	-3.07	93.1	1.80	0.03	Not required
Ant5		0.903	1.374	0mm							
WLAN5GHz Ant6		0.361		0mm	8.11	26.52	-2.5				
BT Ant6		0.110		0mm							
Ant1	Left Cheek	0.427	0.427	0mm	42.15	-60.15	-3.07	91.9	1.80	0.03	Not required
Ant5		0.903	1.374	0mm							
WLAN5GHz Ant6		0.361		0mm							
BT Ant6		0.110		0mm	6.65	24.58	-1.84				

Hotspot

No.14 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	146.1	2.70	0.03	Not required
Ant4		0.629	1.28	5mm	20.8	70.6	-2.15				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	152.6	2.70	0.03	Not required
Ant4		0.629	1.28	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	150.8	2.70	0.03	Not required
Ant4		0.629	1.28	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.15 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	155.8	2.70	0.03	Not required
Ant5		0.630	1.281	5mm	-8	83.2	-2.51				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	152.6	2.70	0.03	Not



Ant5		0.630	1.281	5mm							required
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	150.8	2.70	0.03	Not required
Ant5		0.630	1.281	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.16 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	131.4	2.60	0.03	Not required
Ant2		0.530	1.181	5mm	36.3	51	-2.15				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	152.6	2.60	0.03	Not required
Ant2		0.530	1.181	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	150.8	2.60	0.03	Not required
Ant2		0.530	1.181	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.17 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	121.0	2.76	0.04	Not required
Ant8		0.695	1.346	5mm	-35.6	45.3	-2.5				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	152.6	2.76	0.03	Not required
Ant8		0.695	1.346	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-8.3	-72.6	-1.58	150.8	2.76	0.03	Not required
Ant8		0.695	1.346	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.18 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	133.5	2.59	0.03	Not required
Ant4		0.629	1.28	5mm	20.8	70.6	-2.15				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	152.2	2.59	0.03	Not required
Ant4		0.629	1.28	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	150.0	2.59	0.03	Not required
Ant4		0.629	1.28	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.19 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	149.6	2.59	0.03	Not required
Ant5		0.630	1.281	5mm	-8	83.2	-2.51				



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WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	152.2	2.59	0.03	Not required
Ant5		0.630	1.281	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	150.0	2.59	0.03	Not required
Ant5		0.630	1.281	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.20 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	114.4	2.49	0.03	Not required
Ant2		0.530	1.181	5mm	36.3	51	-2.15				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	152.2	2.49	0.03	Not required
Ant2		0.530	1.181	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	150.0	2.49	0.03	Not required
Ant2		0.530	1.181	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				
No.21 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	123.8	2.66	0.04	Not required
Ant8		0.695	1.346	5mm	-35.6	45.3	-2.5				
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	152.2	2.66	0.03	Not required
Ant8		0.695	1.346	5mm							
WLAN5GHz Ant6		0.525		5mm	-33	78	-3.25				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	24.8	-62.8	-2	150.0	2.66	0.03	Not required
Ant8		0.695	1.346	5mm							
WLAN5GHz Ant6		0.525		5mm							
BT Ant6		0.126		5mm	-30.9	76.5	-1.9				

Body-worn

No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-3.7	-75.4	-2.16	150.2	3.00	0.03	Not required
Ant4		1.034	1.585	5mm	16.3	73.5	-2.26				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	152.3	3.00	0.03	Not required
Ant4		1.034	1.585	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	150.1	3.00	0.03	Not required
Ant4		1.034	1.585	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.4 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-9.1	-75	-2.39	152.6	2.87	0.03	Not required
Ant5		0.903	1.454	5mm	-10.8	77.6	-2.58				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	152.3	2.87	0.03	Not required
Ant5		0.903	1.454	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	150.1	2.87	0.03	Not required
Ant5		0.903	1.454	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.5 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	15.4	-78	-1.84	133.4	2.53	0.03	Not required
Ant2		0.560	1.111	5mm	34.4	54	-2.35				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	152.3	2.53	0.03	Not required
Ant2		0.560	1.111	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	150.1	2.53	0.03	Not required
Ant2		0.560	1.111	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.6 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	118.2	2.74	0.04	Not required
Ant8		0.773	1.324	5mm	-29.4	41.6	-2.52				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	152.3	2.74	0.03	Not required
Ant8		0.773	1.324	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				



BT Ant6		0.126		5mm							
Ant0	Back	1.416	1.416	5mm	-12.3	-75.4	-2.24	150.1	2.74	0.03	Not required
Ant8		0.773	1.324	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.7 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	30.6	-72.4	-2.12	146.6	2.90	0.03	Not required
Ant4		1.034	1.585	5mm	16.3	73.5	-2.26				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	161.2	2.90	0.03	Not required
Ant4		1.034	1.585	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	158.2	2.90	0.03	Not required
Ant4		1.034	1.585	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.8 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	30.6	-72.4	-2.12	155.6	2.76	0.03	Not required
Ant5		0.903	1.454	5mm	-10.8	77.6	-2.58				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	161.2	2.76	0.03	Not required
Ant5		0.903	1.454	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	158.2	2.76	0.03	Not required
Ant5		0.903	1.454	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.9 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	30.6	-72.4	-2.12	126.5	2.42	0.03	Not required
Ant2		0.560	1.111	5mm	34.4	54	-2.35				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	161.2	2.42	0.02	Not required
Ant2		0.560	1.111	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	158.2	2.42	0.02	Not required
Ant2		0.560	1.111	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				
No.10 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	128.0	2.63	0.03	Not required
Ant8		0.773	1.324	5mm	-29.4	41.6	-2.52				
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm							



Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	161.2	2.63	0.03	Not required
Ant8		0.773	1.324	5mm							
WLAN5GHz Ant6		0.425		5mm	-36	75	-3.41				
BT Ant6		0.126		5mm							
Ant1	Back	1.310	1.310	5mm	26.4	-73.6	-2	158.2	2.63	0.03	Not required
Ant8		0.773	1.324	5mm							
WLAN5GHz Ant6		0.425		5mm							
BT Ant6		0.126		5mm	-32.2	73.4	-1.8				

Sensor off

No.11 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	0.748	0.748	19mm	9.8	-70.2	-1.86	140.7	2.02	0.02	Not required
Ant4		0.613	1.272	19mm	10.8	70.5	-2.45				
WLAN5GHz Ant6		0.659		19mm							
Ant0	Back	0.748	0.748	19mm	9.8	-70.2	-1.86	152.6	2.02	0.02	Not required
Ant4		0.613	1.272	19mm							
WLAN5GHz Ant6		0.659		19mm	-33	76.3	-3.25				
No.12 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	0.748	0.748	19mm	9.8	-70.2	-1.86	147.6	1.78	0.02	Not required
Ant5		0.375	1.034	19mm	-3	76.8	-2.57				
WLAN5GHz Ant6		0.659		19mm							
Ant0	Back	0.748	0.748	19mm	9.8	-70.2	-1.86	152.6	1.78	0.02	Not required
Ant5		0.375	1.034	19mm							
WLAN5GHz Ant6		0.659		19mm	-33	76.3	-3.25				
No.13 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	0.366	0.366	19mm	35.9	-60.5	-2.05	133.4	1.64	0.02	Not required
Ant4		0.613	1.272	19mm	10.8	70.5	-2.45				
WLAN5GHz Ant6		0.659		19mm							
Ant1	Back	0.366	0.366	19mm	35.9	-60.5	-2.05	153.2	1.64	0.01	Not required
Ant4		0.613	1.272	19mm							
WLAN5GHz Ant6		0.659		19mm	-33	76.3	-3.25				

Extremity

No.22 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	3.090	3.090	0mm	-8.5	-70.5	-2.01	153.2	5.93	0.09	Not required
Ant4		2.495	2.837	0mm	24.2	79.2	-2.01				
WLAN5GHz Ant6		0.342		0mm							
Ant0	Back	3.090	3.090	0mm	-11.2	-70.3	-2.14	154.8	5.93	0.09	Not required
Ant4		2.495	2.837	0mm							
WLAN5GHz Ant6		0.342		0mm	-33	83	-1.89				
Ant0	Back	3.090	3.090	0mm	-11.2	-70.3	-2.14	140.8	5.61	0.09	Not required
Ant4		2.495	2.521	0mm							
NFC		0.026		0mm	-8.6	70.5	-2.3				
No.23 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant0	Back	3.090	3.090	0mm	-10.8	-70.3	-2.14	150.5	4.12	0.06	Not required
Ant5		0.691	1.033	0mm	-9.2	80.2	-2.65				



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WLAN5GHz Ant6		0.342		0mm							
Ant0	Back	3.090	3.090	0mm	-11.2	-70.3	-2.14	154.8	4.12	0.05	Not required
Ant5		0.691	1.033	0mm							
WLAN5GHz Ant6		0.342		0mm	-33	83	-1.89				
Ant0	Back	3.090	3.090	0mm	-11.2	-70.3	-2.14	140.8	3.81	0.05	Not required
Ant5		0.691	0.717	0mm							
NFC		0.026		0mm	-8.6	70.5	-2.3				
No.26 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	157.4	6.04	0.09	Not required
Ant4		2.495	2.837	0mm	27.6	80.6	-2.09				
WLAN5GHz Ant6		0.342		0mm							
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	161.4	6.04	0.09	Not required
Ant4		2.495	2.837	0mm							
WLAN5GHz Ant6		0.342		0mm	-33	73	-1.89				
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	151.6	5.73	0.09	Not required
Ant4		2.495	2.521	0mm							
NFC		0.026		0mm	-8.6	70.5	-2.3				
No.27 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	161.2	4.24	0.05	Not required
Ant5		0.691	1.033	0mm	-9.2	80.2	-2.65				
WLAN5GHz Ant6		0.342		0mm							
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	161.4	4.24	0.05	Not required
Ant5		0.691	1.033	0mm							
WLAN5GHz Ant6		0.342		0mm	-33	73	-1.89				
Ant1	Back	3.205	3.205	0mm	27.2	-76.8	-1.99	151.6	3.92	0.05	Not required
Ant5		0.691	0.717	0mm							
NFC		0.026		0mm	-8.6	70.5	-2.3				

17.7 Maximum Reported SAR and SAR Peak Locations

General Note:

1. The maximum reported SAR and SAR Peak Locations corresponding to each position of each frequency band of each antenna in the below tables are as follows.
2. The unit of SAR evaluation is W/kg. The unit of x, y, z with Axis evaluation is mm.

Head

Left Cheek									
Band		Ant0			Ant1			Ant5	
GSM850	SAR	0.498							
	Axis	50.1	-48.99	-2.74					
GSM1900	SAR	0.136							
	Axis	51.5	-48.35	-2.74					
WCDMA II	SAR	0.170							
	Axis	52	-49.21	-2.74					
WCDMA IV	SAR	0.127							
	Axis	52.25	-54.25	-2.74					
WCDMA V	SAR	0.332							
	Axis	51.13	-53.51	-3.47					
LTE Band 7	SAR				0.414				
	Axis				42.15	-60.15	-3.07		
LTE Band 12(17)	SAR	0.177							
	Axis	55.71	-54.61	-3.47					
LTE Band 13	SAR	0.240							
	Axis	50.05	-48.25	-3.47					
LTE Band 25(2)	SAR	0.191							
	Axis	50.25	-47.15	-2.74					
LTE Band 26(5)	SAR	0.193							
	Axis	53	-47.29	-3.47					
LTE Band 66(4)	SAR	0.163							
	Axis	51.2	-48.35	-3.47					
LTE Band 38	SAR				0.242				
	Axis				46.31	-58.45	-3.07		
LTE Band 42	SAR							0.877	
	Axis							9.5	15.02
FR1 n2	SAR	0.117							
	Axis	52.5	-47.38	-2.74					
FR1 n7	SAR				0.427				
	Axis				42.33	-61.5	-3.07		
FR1 n26(5)	SAR	0.179							
	Axis	53.1	-47.21	-2.74					
FR1 n66	SAR	0.148							
	Axis	55.6	-48.8	-3.47					
FR1 n77(78)	SAR				0.104			0.903	
	Axis				40.85	-63.25	-3.07	9.3	16.08
WLAN5GHz Ant6	SAR (W/kg)	0.361							
	Axis	8.11	26.52	-2.5					
BT Ant6	SAR (W/kg)	0.110							
	Axis	6.65	24.58	-1.84					



Hotspot

Back																			
Band		Ant0			Ant1			Ant4			Ant5			Ant2			Ant8		
GSM850	SAR	1.308																	
	Axis	-11.8	-78.6	-1.46															
GSM1900	SAR	1.307																	
	Axis	12.8	-78.7	-1.33															
WCDMA II	SAR	1.050																	
	Axis	-3.8	-75.3	-1.58															
WCDMA IV	SAR	1.040																	
	Axis	-4.2	-78.1	-2.16															
WCDMA V	SAR	1.310																	
	Axis	-9.1	-75	-2.39															
LTE Band 4	SAR							0.352											
	Axis							20.8	70.6	-2.15									
LTE Band 7	SAR				1.301			0.627											
	Axis				30.6	-72.4	-2.12	20.3	75.6	-2.15									
LTE Band 12(17)	SAR	1.047						0.214											
	Axis	-12.3	-75.4	-2.24				21.2	78.1	-2.25									
LTE Band 13	SAR	1.416																	
	Axis	-7.5	-75.7	-2.35															
LTE Band 25(2)	SAR	1.031						0.536											
	Axis	-6.8	-73.9	-1.58				21.3	77.5	-2.15									
LTE Band 26(5)	SAR	1.288						0.623											
	Axis	-4.1	-78.5	-2.15				22.8	76.3	-2.25									
LTE Band 66(4)	SAR	1.013						0.451											
	Axis	-8.3	-72.6	-1.58				22.9	75.2	-2.25									
LTE Band 38	SAR				1.285														
	Axis				26.4	-73.6	-2												
LTE Band 41(38)	SAR							0.494											
	Axis							20.8	76.8	-2.15									
LTE Band 42	SAR										0.588								
	Axis										-10	85.6	-2.51						
FR1 n2	SAR	0.935						0.560											
	Axis	-8.5	-73.5	-1.58				18.9	78.9	-2.25									
FR1 n7	SAR				1.310			0.615											
	Axis				29.6	-75.8	-2.02	25.6	75.6	-2.15									
FR1 n26(5)	SAR	1.304						0.597											
	Axis	-5.9	-77.4	-2.25				25.8	71.5	-2.25									
FR1 n66	SAR	0.972						0.531											
	Axis	-11	-78.3	-1.58				26.3	75.6	-2.15									
FR1 n41(38)	SAR							0.629											
	Axis							27.8	72.3	-2.25									
FR1 n77(78)	SAR				0.628						0.630			0.530			0.695		
	Axis				24.8	-62.8	-2				-8	83.2	-2.51	36.3	51	-2.15	-35.6	45.3	-2.5
WLAN5GHz Ant6	SAR (W/kg)	0.525																	
	Axis	-33	78	-3.25															
BT Ant6	SAR (W/kg)	0.126																	
	Axis	-30.9	76.5	-1.9															



Body-worn

Back																			
Band		Ant0			Ant1			Ant4			Ant5			Ant2			Ant8		
GSM850	SAR	1.308																	
	Axis	-11.8	-78.6	-1.46															
GSM1900	SAR	1.307																	
	Axis	12.8	-78.7	-1.33															
WCDMA II	SAR	1.271																	
	Axis	-6.9	-78.9	-2.38															
WCDMA IV	SAR	1.376																	
	Axis	-6	-77.1	-2.4															
WCDMA V	SAR	1.310																	
	Axis	-9.1	-75	-2.39															
LTE Band 4	SAR							0.722											
	Axis							12.2	79.7	-2.54									
LTE Band 7	SAR				1.301			1.034											
	Axis				30.6	-72.4	-2.12	25.4	82.8	-2.25									
LTE Band 12(17)	SAR	1.047						0.214											
	Axis	-12.3	-75.4	-2.24				20.3	80.5	-2.21									
LTE Band 13	SAR	1.416																	
	Axis	-7.5	-75.7	-2.35															
LTE Band 25(2)	SAR	1.174						0.875											
	Axis	-3.7	-75.4	-2.16				23.4	83.4	-2.17									
LTE Band 26(5)	SAR	1.288						0.623											
	Axis	-4.1	-78.5	-2.15				18.1	82.3	-2.17									
LTE Band 66(4)	SAR	1.225						0.728											
	Axis	9.1	-79.4	-2.02				17.9	79.7	-2.52									
LTE Band 38	SAR				1.285														
	Axis				26.4	-73.6	-2												
LTE Band 41(38)	SAR							0.901											
	Axis							24.2	78.8	-2.21									
LTE Band 42	SAR										0.903								
	Axis										-1	80	-2.57						
FR1 n2	SAR	1.289						0.919											
	Axis	15.4	-78	-1.84				16.3	73.5	-2.26									
FR1 n7	SAR				1.310			0.887											
	Axis				29.6	-75.8	-2.02	24.8	80	-2.32									
FR1 n26(5)	SAR	1.304						0.597											
	Axis	-5.9	-77.4	-2.25				15.8	81.5	-2.03									
FR1 n66	SAR	1.292						0.896											
	Axis	5.9	-77.3	-2.14				14.8	79.2	-2.2									
FR1 n41(38)	SAR																		
	Axis																		
FR1 n77(78)	SAR				0.594						0.902			0.560			0.773		
	Axis				25.61	-75.3	-2.02				-10.8	77.6	-2.58	34.4	54	-2.35	-29.4	41.6	-2.52

WLAN5GHz Ant6	SAR (W/kg)	0.425		
	Axis	-36	75	-3.41

BT Ant6	SAR (W/kg)	0.126		
	Axis	-32.2	73.4	-1.8



Sensor off

Back												
Band		Ant0			Ant1			Ant4			Ant5	
GSM850	SAR	0.258										
	Axis	10.2	-79.3	-1.86								
GSM1900	SAR	0.610										
	Axis	9.8	-70.2	-1.86								
WCDMA II	SAR	0.430										
	Axis	11.5	-71.3	-1.86								
WCDMA IV	SAR	0.473										
	Axis	12.3	-79.8	-1.86								
WCDMA V	SAR	0.349										
	Axis	12.1	-71.5	-1.84								
LTE Band 4	SAR							0.231				
	Axis							10.8	73.9	-2.45		
LTE Band 7	SAR				0.366			0.541				
	Axis				35.9	-60.5	-2.05	11.2	75.5	-2.41		
LTE Band 25(2)	SAR	0.594						0.448				
	Axis	11.5	-72.3	-1.84				11.6	76.3	-2.41		
LTE Band 66(4)	SAR	0.748						0.249				
	Axis	11.8	-78.9	-1.86				10.8	75.2	-2.45		
LTE Band 38	SAR				0.255							
	Axis				36.8	-62.3	-2.05					
LTE Band 41(38)	SAR							0.333				
	Axis							15.3	76.3	-2.41		
LTE Band 42	SAR										0.375	
	Axis										-5	82.3
FR1 n2	SAR	0.318						0.613				
	Axis	12.4	-73.8	-1.84				15.4	78.5	-2.45		
FR1 n7	SAR				0.251			0.540				
	Axis				33.9	-63.8	-2.05	10.9	73.5	-2.41		
FR1 n66	SAR	0.383						0.307				
	Axis	12.8	-76.8	-1.86				10.8	70.5	-2.45		
FR1 n41(38)	SAR							0.465				
	Axis							11.2	76.3	-2.41		
FR1 n77(78)	SAR										0.338	
	Axis										-3	76.8

WLAN5GHz Ant6	SAR (W/kg)	0.659		
	Axis	-33	76.3	-3.25

Extremity

Back													
Band		Ant0			Ant1			Ant4			Ant5		
GSM850	SAR	2.348											
	Axis	-5.3	-73.5	-1.58									
GSM1900	SAR	2.852											
	Axis	-5.5	-75.5	-1.51									
WCDMA II	SAR	2.775											
	Axis	-10.8	-70.3	-2.14									
WCDMA IV	SAR	3.026											
	Axis	-9.1	-71.2	-2.01									
WCDMA V	SAR	2.225											



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	Axis	-7.6	-71.8	-2.01										
LTE Band 4	SAR													
	Axis													
LTE Band 7	SAR				3.205			2.490						
	Axis				27.2	-76.8	-1.99	27.6	81.6	-2.28				
LTE Band 12(17)	SAR													
	Axis													
LTE Band 13	SAR	2.658												
	Axis	-6.3	-72.5	-2.14										
LTE Band 25(2)	SAR	3.090						1.642						
	Axis	-5.9	-73.3	-2.01				26.2	81.8	-2.27				
LTE Band 26(5)	SAR	2.508												
	Axis	-8.1	-73.6	-2.14										
LTE Band 66(4)	SAR	2.797						0.801						
	Axis	-8.9	-76.9	-2.01				27.6	80.6	-2.09				
LTE Band 38	SAR				3.133									
	Axis				28.2	-80.8	-1.93							
LTE Band 41(38)	SAR							2.495						
	Axis							29.6	83.6	-2.24				
LTE Band 42	SAR										0.691			
	Axis										-9.2	80.2	-2.65	
FR1 n2	SAR	2.975						1.556						
	Axis	-8.1	-70.6	-2.14				25.6	80.8	-2.09				
FR1 n7	SAR				3.203			2.308						
	Axis				27.4	-76.8	-1.89	25.1	82.2	-2.09				
FR1 n26(5)	SAR	1.678												
	Axis	-8.5	-70.5	-2.01										
FR1 n66	SAR	2.719						0.944						
	Axis	-11.2	-70.3	-2.14				24.2	83.2	-2.01				
FR1 n41(38)	SAR							2.444						
	Axis							23.8	82.3	-2.09				
FR1 n77(78)	SAR										0.560			
	Axis										-10.8	83.5	-2.5	

WLAN5GHz Ant6	SAR (W/kg)	0.342		
	Axis	-33	73	-1.89

NFC	SAR (W/kg)	0.026		
	Axis	-8.6	70.5	-2.3

Test Engineer: Martin Li, Varus Wang, Light Wang

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.

19. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [11] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [12] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR 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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