

FCC SAR Test Report

APPLICANT : iMozen Group INC.
EQUIPMENT : Handheld mobile computer
BRAND NAME : iMozen Group INC.
MODEL NAME : TC605AN
FCC ID : SPYTC605AN
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



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA3N2109-02	Rev. 01	Initial issue of report.	Jan. 10, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **iMozen Group INC., Handheld mobile computer, TC605AN**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.42	0.33	0.24	1.57
		GSM1900	0.11	0.32	0.18	
	WCDMA	WCDMA II	0.26	0.74	0.37	
		WCDMA IV	0.31	0.91	0.36	
		WCDMA V	0.51	0.40	0.29	
	LTE	LTE Band 2	0.20	0.15	<0.10	
		LTE Band 5	0.36	0.18	0.10	
		LTE Band 7	0.77	0.87	0.56	
		LTE Band 12/17	0.14	0.36	0.31	
		LTE Band 25/2	0.26	0.59	0.31	
		LTE Band 26/5	0.23	0.37	0.26	
		LTE Band 66/4	0.29	0.87	0.36	
		LTE Band 41/38	0.74	0.78	0.58	
		LTE Band 42	0.78	0.78	0.49	
		LTE Band 48/43	0.76	0.73	0.97	
	5G NR	FR1 n2	0.18	0.15	<0.10	
		FR1 n5	0.29	0.31	0.24	
		FR1 n7	0.79	0.81	0.48	
		FR1 n12	0.13	0.30	0.27	
		FR1 n25	0.24	0.57	0.37	
		FR1 n66	0.38	0.79	0.29	
		FR1 n41/n38	0.62	0.53	0.46	
		FR1 n48	0.56	0.49	0.96	
		FR1 n77/n78	0.74	0.77	0.94	
DTS	WLAN	2.4GHz WLAN	1.15	0.29	0.40	1.56
NII		5GHz WLAN	1.16	0.30	1.00	1.57
DSS	Bluetooth	2.4GHz Bluetooth	0.38	0.28	0.21	1.57

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	LTE	LTE Band 41/38	2.11	3.74
		LTE Band 42	2.85	
		LTE Band 48/43	2.65	
	5G NR	FR1 n48	2.94	
		FR1 n77/n78	2.96	
NII	WLAN	5GHz WLAN	2.15	3.74
Date of Testing:			2023/12/1~2023/12/29	
Remark:				
1. This device supports LTE B2 / B4 / B5 / B17 / B38 / 42 / 43 and B25 / B66 / B26 / B12 / B41 / B48. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 / 42 / 43 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B12 / B41 / B48, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41 / B48.				
2. This device supports 5GNR n78/n38 and n77/n41. Since the supported frequency span for 5GNR n78/n38 falls completely within the supports frequency span for n77/n41, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n77/n41.				

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

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.
	SAR07-KS	CN1257	314309

Applicant	
Company Name	iMozen Group INC.
Address	6 F., No. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110417, Taiwan (R.O.C.)

Manufacturer	
Company Name	iMozen Group INC.
Address	6 F., No. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110417, Taiwan (R.O.C.)

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	Handheld mobile computer
Brand Name	Mozen Group INC.
Model Name	TC605AN
FCC ID	SPYTC605AN
IMEI Code	Sample 1: 352149450708255 Sample 2: 352149450712133
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 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, 3550 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 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 n12: 699 MHz ~ 716 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 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 WLAN 6GHz U-NII-5: 5925 MHz ~ 6425 MHz WLAN 6GHz U-NII-6: 6425 MHz ~ 6525 MHz WLAN 6GHz U-NII-7: 6525 MHz ~ 6875 MHz WLAN 6GHz U-NII-8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac/ax VHT20/VHT40/VHT80/ VHT160/HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK



HW Version	V4
SW Version	ST6919A_20231220121856
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 and LTE (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). WLAN6GHz has no hotspot function. 4. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO and MIMO antenna mode. 5. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12. 6. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 7. There are two different types of EUT, they are dual SIM card and single SIM card. The difference that is only SIM Slots, all the other are same, so single SIM card was chosen to perform all the testing. 8. The device implements proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). Details about the 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. 9. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, body-worn and extremity. For WLAN when transmit simultaneous with WWAN and Proximity sensors trigger, power reduction will be activated to body-worn and Handheld. 10. For some WWAN bands, sensor on reduced power level is higher than hotspot reduced power level, so front/back sensor on SAR can represent hotspot conservatively. 11. This device supports HPUE for 5GNR n41/n77/n78 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR. 12. For 5GNR n41/n77/n78 HPUE, 5GNR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing. 13. For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively. 14. SAR and Power density test report for WLAN6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5G U-NII-1/2A/2C/3 and WLAN6GHz U-NII-5/6/7/8. 15. This device has NFC function and the NFC SAR report will be separately submitted. 16. There are three samples, the different between them refer to the TC605AN_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, sample 1 was chosen to perform full SAR testing and sample 2 verified the worst case of sample 1. For sample 3, only memory suppliers are different, the differences do not affect the test, so sample 3 is not tested. 17. This device supports 5GNR 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)
SA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20
	n12	FDD	15	5, 10, 15
	n25	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20
	n38	TDD	30	20, 30, 40
	n41	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	20, 40
	n77	TDD	30	20, 30, 40, 60, 80, 100
	n78	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
NSA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	20, 30, 40, 60, 80, 100
	n78	TDD	30	20, 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		SPYTC605AN							
Equipment Name		Handheld mobile computer							
Operating Frequency Range of each LTE transmission band		LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 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, 3550 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 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 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 43: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 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		R16, Cat16							
CA Support		Supported, Downlink only							
LTE MPR permanently built-in by design		Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
		Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})					MPR (dB)	
			1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz		20 MHz
		QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
		16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
		16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
		64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
		64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
		256 QAM	≥ 1					≤ 5	
LTE A-MPR		In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration		A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance		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 13.							
LTE Carrier Aggregation Combinations		Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 13.							
LTE Carrier Aggregation Additional Information	1. This device supports maximum of 3 carriers in the downlink.								

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
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		
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	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)	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	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715
M	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775
LTE Band 42								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540
LTE Band 43								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	44115	3602.5	44140	3605	44165	3607.5	44190	3610
M	44590	3650	44590	3650	44590	3650	44590	3650
H	45065	3697.5	45040	3695	45015	3692.5	44990	3690
LTE Band 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

<3550 MHz ~ 3600 MHz>

LTE Band 42								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	43115	3552.5	43140	3555	43165	3557.5	43190	3560
M	43340	3575	43340	3575	43340	3575	43340	3575
H	43565	3597.5	43540	3595	43515	3592.5	43490	3590

<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 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes
LTE Band 42			Yes	Yes	Yes	Yes
LTE Band 43			Yes	Yes	Yes	Yes
LTE Band 48			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 2	Ant 0	24	24	24	24	24	24
LTE Band 25	Ant 0	24	24	24	24	24	24
LTE Band 4	Ant 0	24	24	24	24	24	24
LTE Band 66	Ant 0	24	24	24	24	24	24
LTE Band 5	Ant 0	24	24	24	24	24	24
LTE Band 26	Ant 0	24	24	24	24	24	24
LTE Band 12	Ant 0	24	24	24	24	24	24
LTE Band 17	Ant 0	24	24	24	24	24	24

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 2 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 2 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 12	Ant 1	23	23	23	23	23	23
LTE Band 17	Ant 1	23	23	23	23	23	23
LTE Band 38	Ant 1	19	24	24	21.5	24	24
LTE Band 41	Ant 1	19	24	24	21.5	24	24

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 38	Ant 5	24	24	24	24	24	24
LTE Band 41	Ant 5	24	24	24	24	24	24

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 38	Ant 6	24	24	24	24	24	24
LTE Band 41	Ant 6	24	24	24	24	24	24

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 38	Ant 7	22.5	22.5	22.5	22.5	22.5	22.5
LTE Band 41	Ant 7	22.5	22.5	22.5	22.5	22.5	22.5

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 2 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 2 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 42	Ant 8	20	24.5	24.5	22	24.5	24.5
LTE Band 43	Ant 8	20	24.5	24.5	22	24.5	24.5
LTE Band 48	Ant 8	20	24.5	24.5	22	24.5	24.5

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 n12: 699 MHz ~ 716 MHz							
	5G NR n25: 1850 MHz ~ 1915 MHz							
	5G NR n66: 1710 MHz ~ 1780 MHz							
	5G NR n38: 2570 MHz ~ 2620 MHz							
	5G NR n41: 2496 MHz ~ 2690 MHz							
	5G NR n48: 3550 MHz ~ 3700 MHz							
	5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz							
5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz								
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.							
SCS	FDD/TDD: SCS15KHz/SCS30KHz							
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM							
A-MPR (Additional MPR) disabled for SAR Testing?	Yes							
LTE Anchor Bands for n2	LTE B5/12/66							
LTE Anchor Bands for n5	LTE B2/66							
LTE Anchor Bands for n41	LTE B2/5/12/66							
LTE Anchor Bands for n66	LTE B2/5/12							
LTE Anchor Bands for n77	LTE B2/5/12/66							
LTE Anchor Bands for n78	LTE B2/4/7/38/41/66							
Transmission (H, M, L) channel numbers and frequencies in each 5G NR band								
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900
NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839
NR Band 7								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510
M	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560
NR Band 12								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300	701.5	140800	704	141300	706.5	141300	706.5
M	141500	707.5	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5	141700	708.5
NR Band 25								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905
NR Band 66								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720
M	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770

NR Band 38						
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	516000	2580	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595
H	522000	2610	520998	2604.99	519996	2599.98

NR Band 41																		
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	501204	2506.02	502200	2511	503202	2516.01	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
H	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	537000	2685	529998	2649.99	528996	2644.98	528000	2640

NR Band 48						
	Bandwidth 20MHz			Bandwidth 40MHz		
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)	
L	637334	3560.01		638000	3570	
M	641666	3624.99		641666	3624.99	
H	646000	3690		645332	3679.98	

NR Band 77												
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647334	3710.01	647668	3715.02	648000	3720	648668	3730.02	649334	3740.01	650000	3750
M	656000	3840	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840
H	664666	3969.99	664332	3964.98	664000	3960	663332	3949.98	662666	3939.99	662000	3930

NR Band 78																		
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	652668	3790.02	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650334	3755.01		

For <3450 MHz ~ 3550 MHz >

NR Band 77												
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630668	3460.02	631000	3465	631334	3470.01	632000	3480	632668	3490.02		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636000	3540	635668	3535.02	635334	3530.01	634668	3520.02	634000	3510		

NR Band 78																		
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636000	3540	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02		

<For NR Overlap Bands Description>
1) NR Bands BW

Band	Duplex	SCS(KHz)	Bandwidths(BW)
n2	FDD	15	5, 10, 15, 20
n25	FDD	15	5, 10, 15, 20
n38	TDD	30	20,30,40
n41	TDD	30	20,30,40,50,60,70,80,90,100
n77	TDD	30	20,30,40,60,80,100
n78	TDD	30	20,30,40,50,60,70,80,90,100

2) NR Bands Tune up:

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n2	Ant 0	24	24	24	24	24	24
5G NR n25	Ant 0	24	24	24	24	24	24

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 2 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 2 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n38	Ant 1	23	23	23	23	23	23
5G NR n41	Ant 1	23	23	23	23	23	23
5G NR n41 HPUE	Ant 1	25	25	25	25	25	25

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n38	Ant 5	23	23	23	23	23	23
5G NR n41	Ant 5	23	23	23	23	23	23
5G NR n77	Ant 5	23	23	23	23	23	23
5G NR n78	Ant 5	23	23	23	23	23	23
5G NR n77 HPUE	Ant 5	26	26	26	26	26	26
5G NR n78 HPUE	Ant 5	26	26	26	26	26	26

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n38	Ant 6	23	23	23	23	23	23
5G NR n41	Ant 6	23	23	23	23	23	23
5G NR n77	Ant 6	23	23	23	23	23	23
5G NR n78	Ant 6	23	23	23	23	23	23
5G NR n77 HPUE	Ant 6	26	26	26	26	26	26
5G NR n78 HPUE	Ant 6	26	26	26	26	26	26

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 3 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 3 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n38	Ant 7	21	21	21	21	21	21
5G NR n41	Ant 7	21	21	21	21	21	21
5G NR n41 HPUE	Ant 7	23	23	23	23	23	23

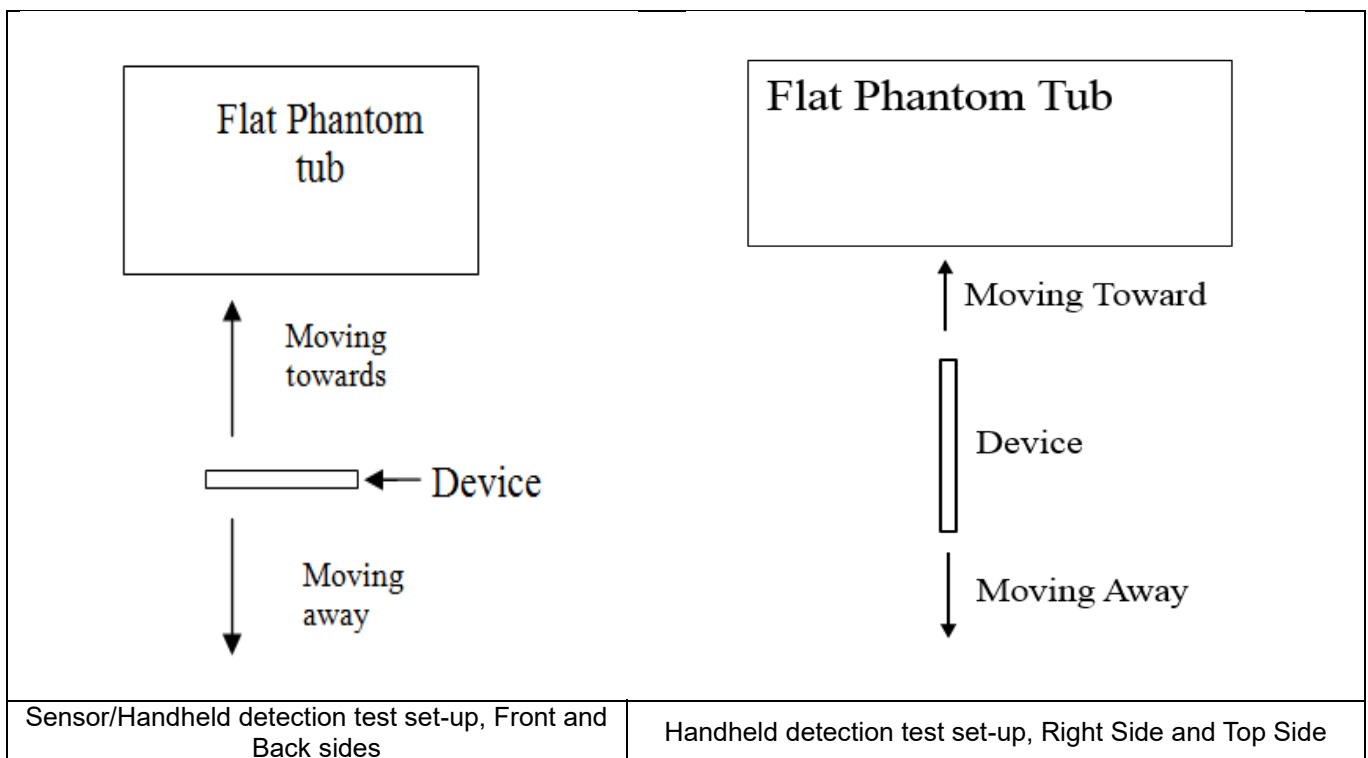
Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 2 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 2 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77	Ant 8	15.5	21.5	21.5	18	21.5	21.5
5G NR n78	Ant 8	15.5	21.5	21.5	18	21.5	21.5
5G NR n77 HPUE	Ant 8	18.5	24.5	24.5	21	24.5	24.5
5G NR n78 HPUE	Ant 8	18.5	24.5	24.5	21	24.5	24.5

Band	Antenna	Head DSI 1 Tune-up Limit	Body Worn DSI 2 Tune-up Limit	Hotspot DSI 5 Tune-up Limit	Extremity DSI 2 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77	Ant 9	24	24	24	24	24	24
5G NR n78	Ant 9	24	24	24	24	24	24
5G NR n77 HPUE	Ant 9	26	26	26	26	26	26
5G NR n78 HPUE	Ant 9	26	26	26	26	26	26

5. 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 (3550MHz) and lowest (2450MHz) 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 /handheld at the front/back/top/right of the device.
3. The sensors can use to detect the proximity of the user's body or a finger or handheld state at front/back/ top /right sides of the device use a detection threshold distance. When front/back/ top /right sides of body/handheld condition are detected reduced power will be active. The trigger distance shown in the sections below.
4. 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:



<Sensor for ANT 2+4>

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	12	7	17	18	21	16	19	14

<Sensor for ANT 8>

Proximity Sensor Triggering Distance (mm)				
Position	Back		Right Side	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	14	9	5	10

6. RF Exposure Limits

6.1 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.

6.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7. Specific Absorption Rate (SAR)

7.1 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.

7.2 SAR Definition

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

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

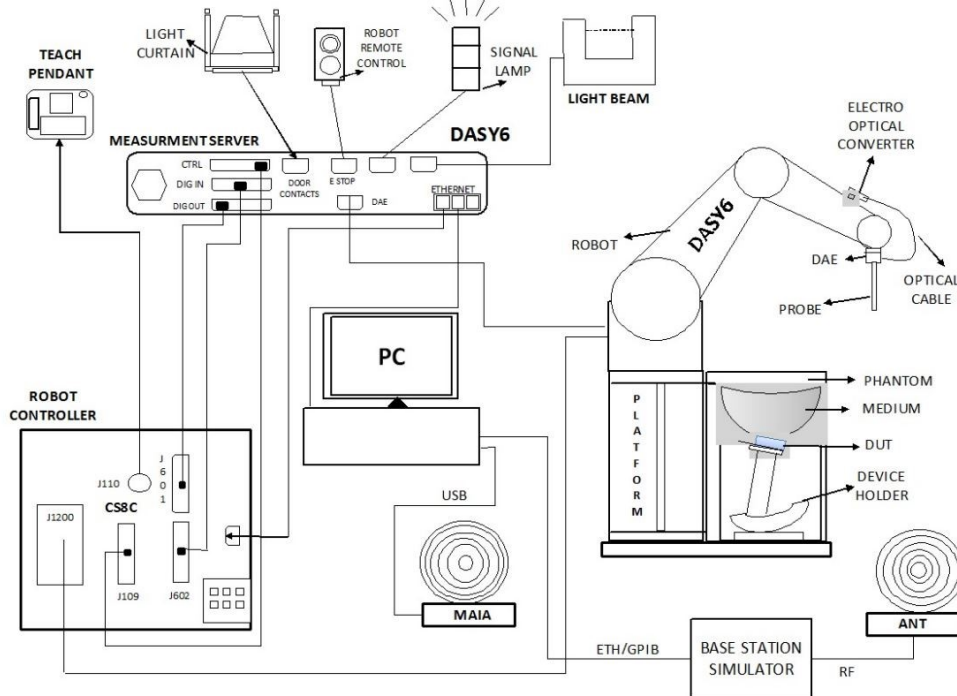
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

The DASY5 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 Win7 or Win10 and the DASY6 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.

8.1 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	10 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

8.2 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

8.3 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.

8.4 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

9. 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

9.1 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

9.2 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.

9.3 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.	

9.4 Zoom Scan

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

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

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

9.5 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.

9.6 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.

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	2022/2/24	2025/2/23
SPEAG	835MHz System Validation Kit	D835V2	4d091	2022/8/19	2025/8/18
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2025/2/23
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	2022/3/30	2025/3/29
SPEAG	2450MHz System Validation Kit	D2450V2	1040	2023/4/25	2024/4/24
SPEAG	2600MHz System Validation Kit	D2600V2	1070	2021/12/20	2024/12/19
SPEAG	3500MHz System Validation Kit	D3500V2	1076	2022/5/9	2025/5/8
SPEAG	3700MHz System Validation Kit	D3700V2	1037	2022/5/9	2025/5/8
SPEAG	3900MHz System Validation Kit	D3900V2	1048	2023/3/9	2024/3/8
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2022/9/23	2025/9/22
SPEAG	Data Acquisition Electronics	DAE4	1649	2023/4/24	2024/4/23
SPEAG	Data Acquisition Electronics	DAE4	1358	2023/2/21	2024/2/20
SPEAG	Dosimetric E-Field Probe	EX3DV4	7706	2023/1/26	2024/1/25
SPEAG	Dosimetric E-Field Probe	EX3DV4	7764	2023/10/5	2024/10/4
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
SPEAG	SAM Twin Phantom	SAM Twin	TP-2024	NCR	NCR
CHIGO	Thermo-Hygrometer	HTC-1	55011	2023/1/8	2024/1/7
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306175	2023/7/5	2024/7/4
Agilent	ENA Series Network Analyzer	E5071C	MY46111157	2023/7/5	2024/7/4
SPEAG	Dielectric Probe Kit	DAK-3.5	1071	2023/2/20	2024/2/19
Anritsu	Vector Signal Generator	MG3710A	6201682672	2023/1/5	2024/1/4
Rohde & Schwarz	Power Meter	NRVD	102081	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2023/7/5	2024/7/4
R&S	BLUETOOTH TESTER	CBT	101246	2023/5/15	2024/5/14
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2023/10/11	2024/10/10
TES	DIGITAC THERMOMETER	1310	220305411	2023/1/8	2024/1/7
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	

Note:

- 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
- 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.

11. System Verification

11.1 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.

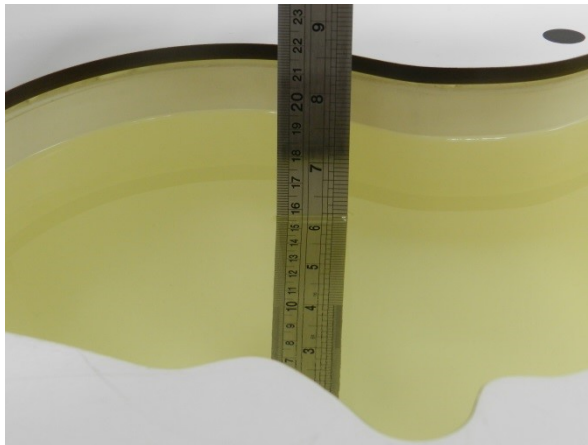


Fig 11.1 Photo of Liquid Height for Head SAR

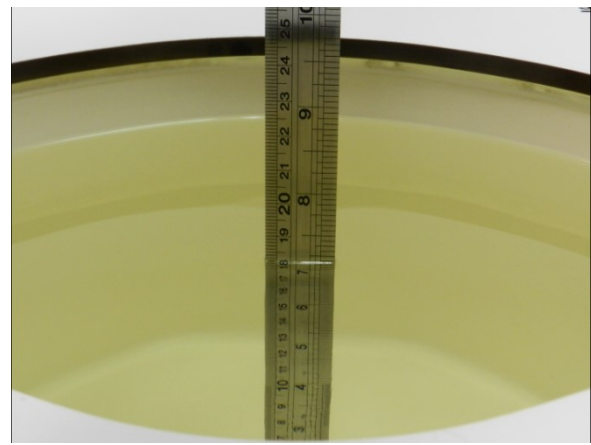


Fig 11.2 Photo of Liquid Height for Body SAR

11.2 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)	Head	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	Head	22.8	0.925	42.4	0.89	41.90	3.93	1.19	±5	2023/12/1
835	Head	22.7	0.924	41.4	0.90	41.50	2.67	-0.24	±5	2023/12/2
1750	Head	22.7	1.38	40.2	1.37	40.10	0.73	0.25	±5	2023/12/3
1900	Head	22.6	1.45	39.9	1.40	40.00	3.57	-0.25	±5	2023/12/4
2450	Head	22.9	1.84	39.2	1.80	39.20	2.22	0.00	±5	2023/12/5
2600	Head	22.6	1.93	38.9	1.96	39.00	-1.53	-0.26	±5	2023/12/6
3500	Head	22.8	2.79	39.6	2.91	37.90	-4.12	4.49	±5	2023/12/7
3700	Head	22.7	2.98	39.3	3.12	37.70	-4.49	4.24	±5	2023/12/8
3900	Head	22.6	3.18	39.0	3.32	37.50	-4.22	4.00	±5	2023/12/9
5250	Head	22.7	4.68	36.7	4.71	35.90	-0.64	2.23	±5	2023/12/10
5600	Head	22.6	5.08	36.0	5.07	35.50	0.20	1.41	±5	2023/12/11
5750	Head	22.8	5.26	35.8	5.22	35.40	0.77	1.13	±5	2023/12/12
750	Head	22.6	0.872	41.2	0.89	41.90	-2.02	-1.67	±5	2023/12/13
835	Head	22.8	0.915	41.3	0.90	41.50	1.67	-0.48	±5	2023/12/14
1750	Head	22.9	1.39	38.4	1.37	40.10	1.46	-4.24	±5	2023/12/15
1900	Head	22.7	1.46	38.2	1.40	40.00	4.29	-4.50	±5	2023/12/16
2450	Head	22.8	1.85	39.1	1.80	39.20	2.78	-0.26	±5	2023/12/17
2600	Head	22.6	1.98	38.8	1.96	39.00	1.02	-0.51	±5	2023/12/18
3500	Head	22.7	2.88	38.5	2.91	37.90	-1.03	1.58	±5	2023/12/19
3700	Head	22.9	3.08	38.0	3.12	37.70	-1.28	0.80	±5	2023/12/20
3900	Head	22.6	3.28	37.6	3.32	37.50	-1.20	0.27	±5	2023/12/21
5250	Head	22.8	4.57	35.5	4.71	35.90	-2.97	-1.11	±5	2023/12/22
5600	Head	22.9	4.95	34.8	5.07	35.50	-2.37	-1.97	±5	2023/12/23
5750	Head	22.7	5.13	34.6	5.22	35.40	-1.72	-2.26	±5	2023/12/24
750	Head	22.7	0.926	42.5	0.89	41.90	4.04	1.43	±5	2023/12/18
835	Head	22.8	0.915	41.3	0.90	41.50	1.67	-0.48	±5	2023/12/19
1750	Head	22.7	1.38	40.3	1.37	40.10	0.73	0.50	±5	2023/12/20
1900	Head	22.9	1.45	40.0	1.40	40.00	3.57	0.00	±5	2023/12/21
2450	Head	22.6	1.84	39.3	1.80	39.20	2.22	0.26	±5	2023/12/22
2600	Head	22.6	1.94	39.1	1.96	39.00	-1.02	0.26	±5	2023/12/13
3500	Head	22.9	2.78	38.9	2.91	37.90	-4.47	2.64	±5	2023/12/24
3700	Head	22.9	2.99	38.7	3.12	37.70	-4.17	2.65	±5	2023/12/25
3900	Head	22.9	3.25	37.8	3.32	37.50	-2.11	0.80	±5	2023/12/26
5250	Head	22.7	4.66	36.7	4.71	35.90	-1.06	2.23	±5	2023/12/27
5600	Head	22.7	5.07	36.0	5.07	35.50	0.00	1.41	±5	2023/12/28
5750	Head	22.7	5.24	35.8	5.22	35.40	0.38	1.13	±5	2023/12/29

11.3 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.

<1g SAR>

Date	Frequency (MHz)	Head	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 (%)
2023/12/1	750	Head	50	1087	7706	1649	0.432	8.58	8.64	0.70
2023/12/2	835	Head	50	4d091	7706	1649	0.504	9.45	10.08	6.67
2023/12/3	1750	Head	50	1090	7706	1649	1.89	37.00	37.8	2.16
2023/12/4	1900	Head	50	5d118	7706	1649	2.06	39.30	41.2	4.83
2023/12/5	2450	Head	50	1040	7706	1649	2.71	52.70	54.2	2.85
2023/12/6	2600	Head	50	1070	7706	1649	2.67	56.20	53.4	-4.98
2023/12/7	3500	Head	50	1076	7706	1649	3.21	66.20	64.2	-3.02
2023/12/8	3700	Head	50	1037	7706	1649	3.22	66.70	64.4	-3.45
2023/12/9	3900	Head	50	1048	7706	1649	3.33	69.10	66.6	-3.62
2023/12/10	5250	Head	50	1113	7706	1649	3.86	81.50	77.2	-5.28
2023/12/11	5600	Head	50	1113	7706	1649	4.22	82.60	84.4	2.18
2023/12/12	5750	Head	50	1113	7706	1649	3.81	80.80	76.2	-5.69
2023/12/13	750	Head	50	1087	7706	1649	0.437	8.58	8.74	1.86
2023/12/14	835	Head	50	4d091	7706	1649	0.465	9.45	9.3	-1.59
2023/12/15	1750	Head	50	1090	7706	1649	1.890	37.00	37.8	2.16
2023/12/16	1900	Head	50	5d118	7706	1649	2.060	39.30	41.2	4.83
2023/12/17	2450	Head	50	1040	7706	1649	2.530	52.70	50.6	-3.98
2023/12/18	2600	Head	50	1070	7706	1649	2.640	56.20	52.8	-6.05
2023/12/19	3500	Head	50	1076	7706	1649	3.190	66.20	63.8	-3.63
2023/12/20	3700	Head	50	1037	7706	1649	3.320	66.70	66.4	-0.45
2023/12/21	3900	Head	50	1048	7706	1649	3.310	69.10	66.2	-4.20
2023/12/22	5250	Head	50	1113	7706	1649	3.820	81.50	76.4	-6.26
2023/12/23	5600	Head	50	1113	7706	1649	3.870	82.60	77.4	-6.30
2023/12/24	5750	Head	50	1113	7706	1649	3.810	80.80	76.2	-5.69
2023/12/18	750	Head	50	1087	7764	1358	0.406	8.58	8.12	-5.36
2023/12/19	835	Head	50	4d091	7764	1358	0.447	9.45	8.94	-5.40
2023/12/20	1750	Head	50	1090	7764	1358	1.730	37.00	34.6	-6.49
2023/12/21	1900	Head	50	5d118	7764	1358	2.110	39.30	42.2	7.38
2023/12/22	2450	Head	50	1040	7764	1358	2.700	52.70	54	2.47
2023/12/13	2600	Head	50	1070	7764	1358	2.630	56.20	52.6	-6.41
2023/12/24	3500	Head	50	1076	7764	1358	3.150	66.20	63	-4.83
2023/12/25	3700	Head	50	1037	7764	1358	3.310	66.70	66.2	-0.75
2023/12/26	3900	Head	50	1048	7764	1358	3.410	69.10	68.2	-1.30
2023/12/27	5250	Head	50	1113	7764	1358	4.050	81.50	81	-0.61
2023/12/28	5600	Head	50	1113	7764	1358	4.360	82.60	87.2	5.57
2023/12/29	5750	Head	50	1113	7764	1358	3.960	80.80	79.2	-1.98

<10g SAR>

Date	Frequency (MHz)	Head	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2023/12/1	750	Head	50	1087	7706	1649	0.285	5.65	5.7	0.88
2023/12/2	835	Head	50	4d091	7706	1649	0.330	6.22	6.6	6.11
2023/12/3	1750	Head	50	1090	7706	1649	1.00	19.50	20	2.56
2023/12/4	1900	Head	50	5d118	7706	1649	1.10	20.40	22	7.84
2023/12/5	2450	Head	50	1040	7706	1649	1.28	24.60	25.6	4.07
2023/12/6	2600	Head	50	1070	7706	1649	1.22	24.60	24.4	-0.81
2023/12/7	3500	Head	50	1076	7706	1649	1.23	25.50	24.6	-3.53
2023/12/8	3700	Head	50	1037	7706	1649	1.19	24.60	23.8	-3.25
2023/12/9	3900	Head	50	1048	7706	1649	1.20	24.10	24	-0.41
2023/12/10	5250	Head	50	1113	7706	1649	1.12	23.30	22.4	-3.86
2023/12/11	5600	Head	50	1113	7706	1649	1.21	23.70	24.2	2.11
2023/12/12	5750	Head	50	1113	7706	1649	1.11	23.00	22.2	-3.48
2023/12/13	750	Head	50	1087	7706	1649	0.284	5.65	5.68	0.53
2023/12/14	835	Head	50	4d091	7706	1649	0.301	6.22	6.02	-3.22
2023/12/15	1750	Head	50	1090	7706	1649	0.990	19.50	19.8	1.54
2023/12/16	1900	Head	50	5d118	7706	1649	1.060	20.40	21.2	3.92
2023/12/17	2450	Head	50	1040	7706	1649	1.180	24.60	23.6	-4.07
2023/12/18	2600	Head	50	1070	7706	1649	1.190	24.60	23.8	-3.25
2023/12/19	3500	Head	50	1076	7706	1649	1.200	25.50	24	-5.88
2023/12/20	3700	Head	50	1037	7706	1649	1.230	24.60	24.6	0.00
2023/12/21	3900	Head	50	1048	7706	1649	1.170	24.10	23.4	-2.90
2023/12/22	5250	Head	50	1113	7706	1649	1.090	23.30	21.8	-6.44
2023/12/23	5600	Head	50	1113	7706	1649	1.110	23.70	22.2	-6.33
2023/12/24	5750	Head	50	1113	7706	1649	1.090	23.00	21.8	-5.22
2023/12/18	750	Head	50	1087	7764	1358	0.272	5.65	5.44	-3.72
2023/12/19	835	Head	50	4d091	7764	1358	0.297	6.22	5.94	-4.50
2023/12/20	1750	Head	50	1090	7764	1358	0.909	19.50	18.18	-6.77
2023/12/21	1900	Head	50	5d118	7764	1358	1.090	20.40	21.8	6.86
2023/12/22	2450	Head	50	1040	7764	1358	1.280	24.60	25.6	4.07
2023/12/13	2600	Head	50	1070	7764	1358	1.180	24.60	23.6	-4.07
2023/12/24	3500	Head	50	1076	7764	1358	1.230	25.50	24.6	-3.53
2023/12/25	3700	Head	50	1037	7764	1358	1.210	24.60	24.2	-1.63
2023/12/26	3900	Head	50	1048	7764	1358	1.230	24.10	24.6	2.07
2023/12/27	5250	Head	50	1113	7764	1358	1.180	23.30	23.6	1.29
2023/12/28	5600	Head	50	1113	7764	1358	1.260	23.70	25.2	6.33
2023/12/29	5750	Head	50	1113	7764	1358	1.150	23.00	23	0.00

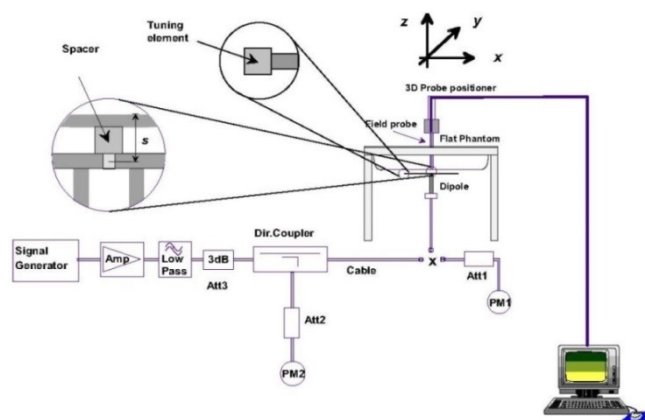


Fig 11.3.1 System Performance Check Setup

Fig 11.3.2 Setup Photo

12. RF Exposure Positions

12.1 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.

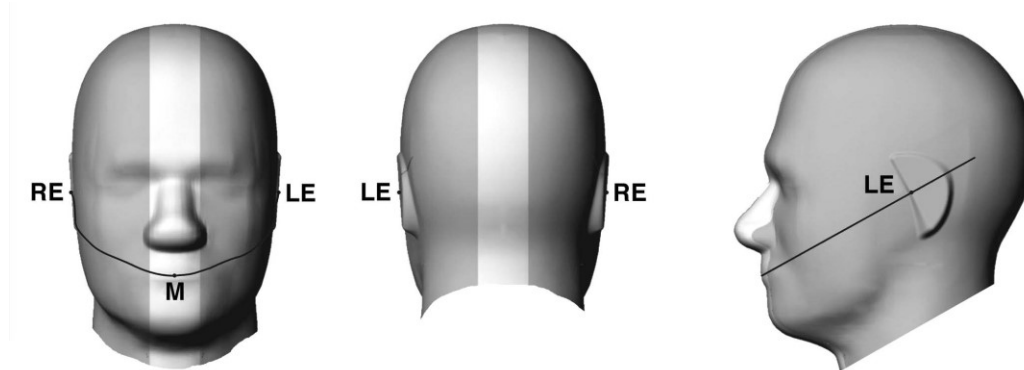


Fig 12.1.1 Front, back, and side views of SAM twin phantom

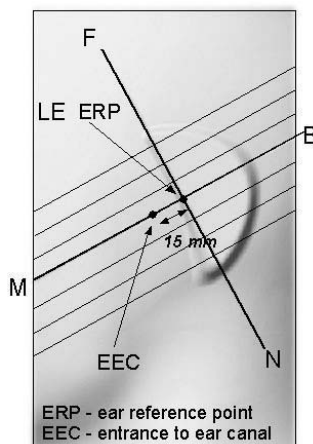


Fig 12.1.2 Close-up side view of phantom showing the ear region.

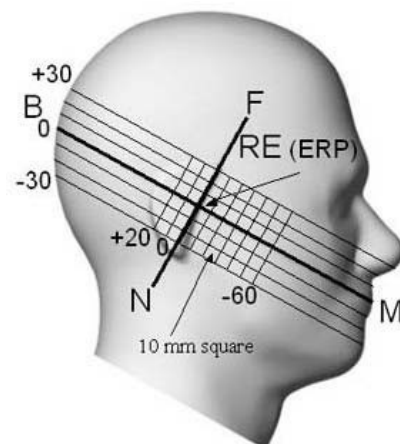


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 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 handset. 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.

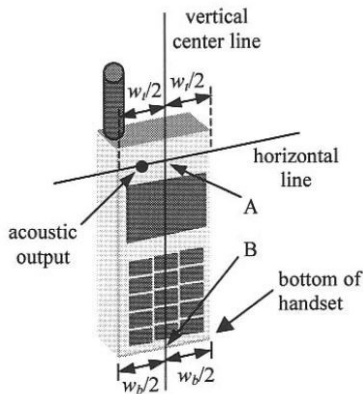


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

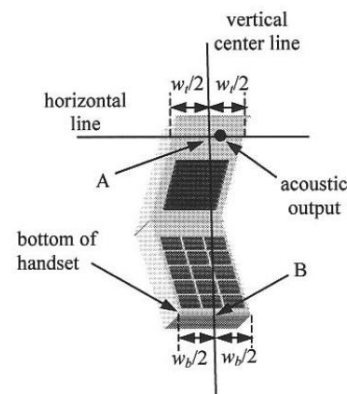


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

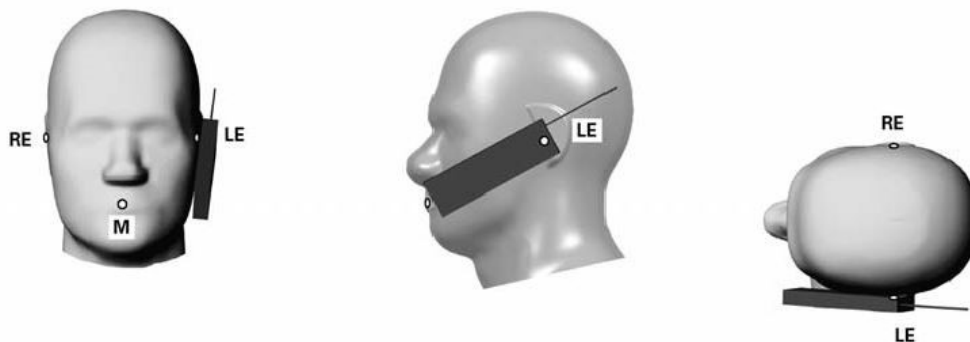


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 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

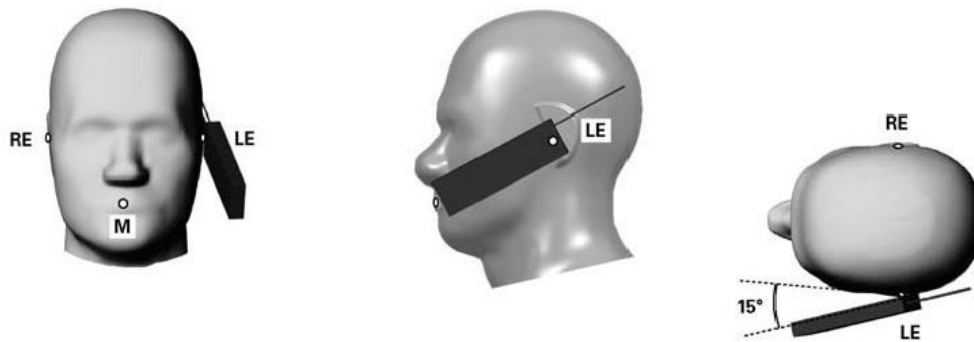


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 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 11.4). 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-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

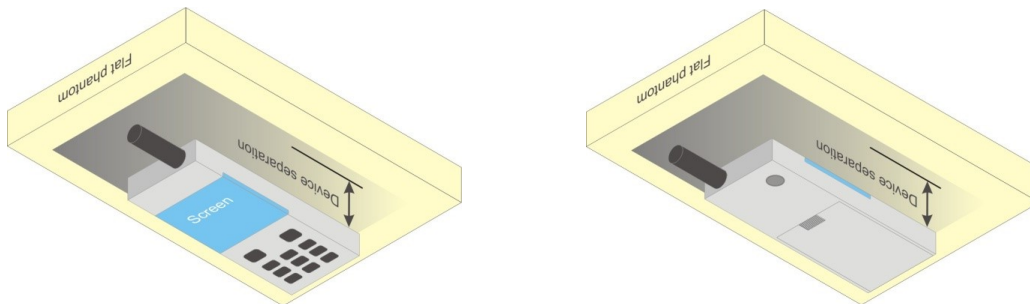


Fig 12.4 Body Worn Position

12.5 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.

12.6 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.

13. 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 $\leq 1/4$ 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_o/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 $\beta_o/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, 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_o/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 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.		

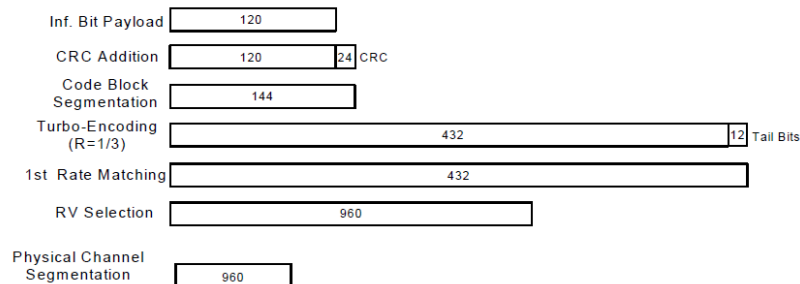


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration

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

1. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - ii. 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
 - iii. Set Channel Parm
 - iv. Set Cell Power = -86 dBm
 - v. Set Channel Type = HSPA
 - vi. Set UE Target Power = 21 dBm
 - vii. Power Ctrl Mode= All Up Bits
 - viii. Set Manual Uplink DPCH Bc/Bd = Manual
 - ix. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 - x. Set HSPA Conn DL Channel Levels
 - xi. Set HS-SCCH Configs
 - xii. Set RB Test Mode Setup
 - xiii. Set Common HSUPA Parameters
 - xiv. Set Serving Grant
 - xv. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
4. 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 (Note 3)	β_d	β_{HS} (Note 1)	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

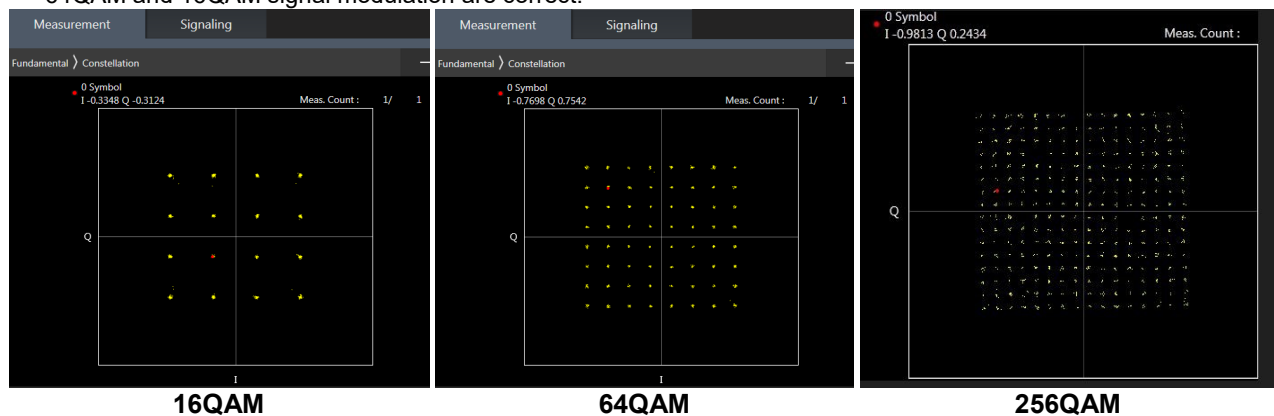
<WCDMA Conducted Power>**General Note:**

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 B2 / B4 / B5 / B17 / B38 / B42 / B43 SAR test was covered by B25 / B66 / B26 / B12 / B41 / B48; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<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.

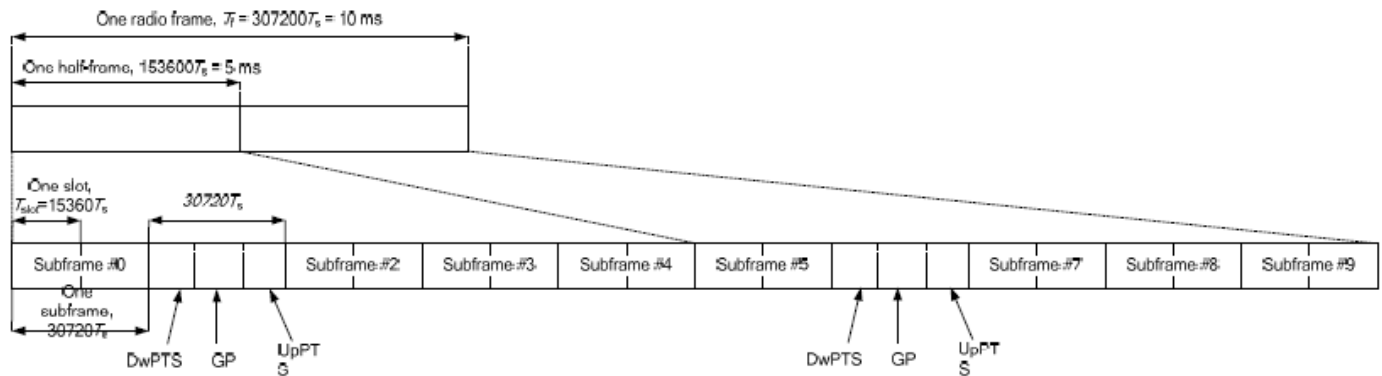


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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

- i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.167)/5 = 63.3\%$
- iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.143)/5 = 62.9\%$
- v. 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>
General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. All permutations exist. No restrictions on Pcell & Scell combinations.
4. The gray color table is covered by other combinations and no need to verify power.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2C		1	CA_2A-5A-66A	
2	CA_5B		2	CA_2A-7A-66A	
3	CA_7C				
4	CA_12B				
5	CA_38C				
6	CA_41C				
7	CA_48C				
8	CA_66B				
9	CA_66C				
10	CA_2A-4A				
11	CA_2A-5A	3CC-1			
12	CA_2A-12A				
13	CA_2A-13A				
14	CA_4A-7A				
15	CA_4A-17A				
16	CA_5A-7A				
17	CA_5A-38A				
18	CA_48A-66A				

LTE Carrier Aggregation Conducted Power (Downlink)

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

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

LTE 4x4 MIMO (Downlink)

This device supports downlink 4x4 MIMO operations for LTE Band 2/4/7/38/41/66/48 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

4X4 MIMO	Band
	LTE Band 2/4/7/38/41/66/48

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n66/n41/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n12/n25/n66/n38/n41/n48/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. This device supports HPUE for 5G NR n41/n77/n78 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
5. For 5G NR n41/n77/n78 HPUE, 5G NR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
6. 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.
7. 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.
8. 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.
9. 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.
10. 5G NR n41/n77/n78/n48 supports UL MIMO. MIMO SAR base on standalone SAR summed together as MIMO SAR.
11. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.

<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		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
CP-OFDM	256 QAM	≤ 4.5		
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

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

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

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

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

EN-DC combination Configuration:

ENDC	Main Antenna Tx	
	LTE TX	NR TX
DC_2A_n5A	Ant 5	Ant 0
DC_2A_n41A	Ant 0	Ant 5
DC_2A_n66A	Ant 0	Ant 5
DC_2A_n77A	Ant 0	Ant 5
DC_2A_n78A	Ant 0	Ant 5
DC_4A_n78A	Ant 0	Ant 5
DC_5A_n2A	Ant 0	Ant 5
DC_5A_n41A	Ant 0	Ant 5
DC_5A_n66A	Ant 0	Ant 5
DC_5A_n77A	Ant 0	Ant 5
DC_7A_n78A	Ant 6	Ant 5
DC_12A_n2A	Ant 0	Ant 5
DC_12A_n41A	Ant 0	Ant 5
DC_12A_n66A	Ant 0	Ant 5
DC_12A_n77A	Ant 0	Ant 5
DC_38A_n78A	Ant 6	Ant 5
DC_41A_n78A	Ant 6	Ant 5
DC_66A_n2A	Ant 0	Ant 5
DC_66A_n5A	Ant 5	Ant 0
DC_66A_n41A	Ant 0	Ant 5
DC_66A_n77A	Ant 0	Ant 5
DC_66A_n78A	Ant 0	Ant 5

NR UL MIMO Bands Configuration:

ULMIMO	Main Anten/ Tx0	Main Anten/ Tx1
n41	Ant 6	Ant 5
n48	Ant 8	Ant 5
n77	Ant 8	Ant 5
n78	Ant 8	Ant 5

<WLAN Conducted Power>

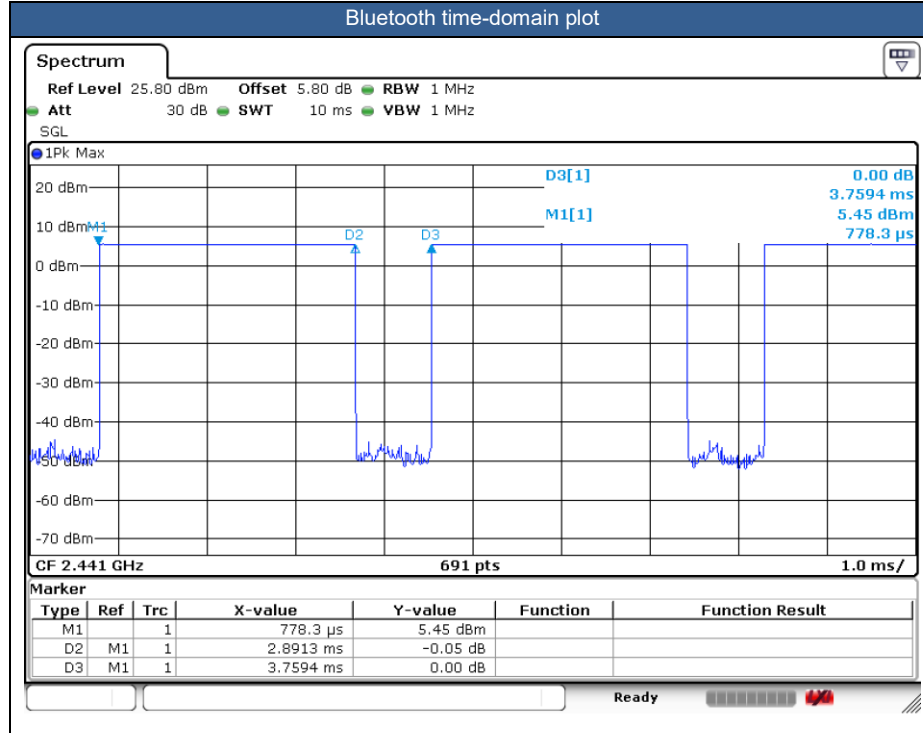
General Note:

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.
6. 802.11 ax supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.
7. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO and MIMO antenna mode.
8. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
9. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

<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 76.91% as following figure, 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





14. Antenna Location

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

15. 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 BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
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 proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). Details about the 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. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, body-worn and extremity. For WLAN when transmit simultaneous with WWAN and Proximity sensors trigger, power reduction will be activated to body-worn and Handheld.
6. For some WWAN bands, sensor on reduced power level is higher than hotspot reduced power level, so front/back sensor on SAR can represent hotspot conservatively.
7. This device supports HPUE for 5GNR n41/n77/n78 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
8. For 5GNR n41/n77/n78 HPUE, 5GNR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
9. For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
10. 5GNR n41/n77/n78/n48 supports UL MIMO. MIMO SAR base on standalone SAR summed together as MIMO SAR.
11. 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 LTE Band 38/41/42/43/48, 5GNR n77/n78/n48, WLAN5.8GHz, 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.
12. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. Further simplification chose the worse SAR value and the worst scaling factor from each transmit chain perform reported SAR calculation conservatively. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain.
13. Although the distance 1gSAR is greater than 0.8 W/kg at body-worn exposure conditions, the distance SAR verified the worst of the non-distance SAR and less than non-distance SAR, so there is no need to be tested other channels.

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 $\leq$ ¼ 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 $\leq$ ¼ 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 $\leq$ 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 ¼ 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 / 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.
7. LTE B2 / B4 / B5 / B17 / B38 / B42 / B43 SAR test was covered by B25 / B66 / B26 / B12 / B41 / B48; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

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 n5 /n7/n12/n25 /n66 /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.
6. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
7. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

DSI status description:

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

Exposure Condition	DSI	Trigger conditions
Head SAR	DSI 1	Earpiece On
Hotspot Mode SAR	DSI 5	Hotspot On
Sensor off SAR	DSI 4	Sensor Off/ receiver off
Body worn/ Extremity Mode SAR for Ant 1/2/3/8	DSI 2	Sensor On/ receiver off
Body worn/ Extremity Mode SAR for Ant 0/4/5/6	DSI 3	Sensor On/ receiver off



15.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)
750MHz																					
01	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	23095	707.5	1	22.57	24.00	1.390	-	-	-0.08	0.097	0.135
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	23095	707.5	2	22.57	24.00	1.390	-	-	0.02	0.076	0.106
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 1	23095	707.5	1	21.59	23.00	1.384	-	-	0.08	0.076	0.105
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	23095	707.5	1	22.57	24.00	1.390	-	-	0.01	0.058	0.081
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 1	23095	707.5	1	21.59	23.00	1.384	-	-	0.03	0.040	0.055
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	23095	707.5	1	22.57	24.00	1.390	-	-	-0.08	0.086	0.120
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 1	23095	707.5	1	21.59	23.00	1.384	-	-	-0.08	0.068	0.094
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	23095	707.5	1	22.57	24.00	1.390	-	-	0.1	0.055	0.076
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 1	23095	707.5	1	21.59	23.00	1.384	-	-	-0.18	0.036	0.050
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	23095	707.5	1	21.99	23.00	1.262	-	-	0.1	0.080	0.101
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	23095	707.5	2	21.99	23.00	1.262	-	-	0.02	0.077	0.097
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 1	23095	707.5	1	20.86	22.00	1.300	-	-	-0.17	0.064	0.083
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	23095	707.5	1	21.99	23.00	1.262	-	-	0.17	0.046	0.058
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 1	23095	707.5	1	20.86	22.00	1.300	-	-	-0.05	0.037	0.048
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	23095	707.5	1	21.99	23.00	1.262	-	-	0.01	0.048	0.061
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 1	23095	707.5	1	20.86	22.00	1.300	-	-	0.1	0.037	0.048
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	23095	707.5	1	21.99	23.00	1.262	-	-	-0.17	0.029	0.037
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 1	23095	707.5	1	20.86	22.00	1.300	-	-	0.04	0.019	0.025
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	141500	707.5	1	22.41	24.00	1.442	-	-	0.12	0.084	0.121
02	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	141500	707.5	1	22.33	24.00	1.469	-	-	-0.08	0.086	0.126
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	141500	707.5	2	22.33	24.00	1.469	-	-	-0.03	0.055	0.081
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	141500	707.5	1	22.41	24.00	1.442	-	-	-0.17	0.040	0.058
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	141500	707.5	1	22.33	24.00	1.469	-	-	-0.03	0.029	0.043
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	141500	707.5	1	22.41	24.00	1.442	-	-	0.14	0.075	0.108
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	141500	707.5	1	22.33	24.00	1.469	-	-	0.11	0.067	0.098
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	141500	707.5	1	22.41	24.00	1.442	-	-	-0.05	0.030	0.043
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	141500	707.5	1	22.33	24.00	1.469	-	-	0.18	0.022	0.032
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	141500	707.5	1	22.08	23.00	1.236	-	-	-0.08	0.083	0.103
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	141500	707.5	1	21.96	23.00	1.271	-	-	-0.06	0.094	0.119
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	141500	707.5	2	21.96	23.00	1.271	-	-	0.03	0.072	0.091
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	141500	707.5	1	22.08	23.00	1.236	-	-	0.06	0.050	0.062
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	141500	707.5	1	21.96	23.00	1.271	-	-	-0.09	0.054	0.069
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	141500	707.5	1	22.08	23.00	1.236	-	-	-0.08	0.049	0.061
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	141500	707.5	1	21.96	23.00	1.271	-	-	0.13	0.053	0.067
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	141500	707.5	1	22.08	23.00	1.236	-	-	0.12	0.040	0.049
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	141500	707.5	1	21.96	23.00	1.271	-	-	0.03	0.035	0.044
835MHz																					
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Right Cheek	0mm	Ant 0	DSI 1	189	836.4	1	31.64	32.50	1.219	-	-	-0.01	0.142	0.173
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Right Cheek	0mm	Ant 0	DSI 1	189	836.4	2	31.64	32.50	1.219	-	-	-0.01	0.137	0.167
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Right Tilted	0mm	Ant 0	DSI 1	189	836.4	1	31.64	32.50	1.219	-	-	0.18	0.078	0.095
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Left Cheek	0mm	Ant 0	DSI 1	189	836.4	1	31.64	32.50	1.219	-	-	-0.1	0.092	0.112
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Left Tilted	0mm	Ant 0	DSI 1	189	836.4	1	31.64	32.50	1.219	-	-	0.01	0.068	0.083
03	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Cheek	0mm	Ant 1	DSI 1	189	836.4	1	30.69	32.00	1.352	-	-	-0.08	0.310	0.419
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Cheek	0mm	Ant 1	DSI 1	189	836.4	2	30.69	32.00	1.352	-	-	-0.08	0.275	0.372
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Tilted	0mm	Ant 1	DSI 1	189	836.4	1	30.69	32.00	1.352	-	-	-0.15	0.178	0.241
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	189	836.4	1	30.69	32.00	1.352	-	-	-0.15	0.196	0.265
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Left Tilted	0mm	Ant 1	DSI 1	189	836.4	1	30.69	32.00	1.352	-	-	0.11	0.119	0.161
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	4182	836.4	1	23.09	24.00	1.233	-	-	0.08	0.198	0.244
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	4182	836.4	2	23.09	24.00	1.233	-	-	0.08	0.170	0.210
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 1	4182	836.4	1	23.09	24.00	1.233	-	-	-0.08	0.105	0.129



FCC SAR Test Report

Report No. : FA3N2109-02

	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	4182	836.4	1	23.09	24.00	1.233	-	-	-0.04	0.135	0.166
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 1	4182	836.4	1	23.09	24.00	1.233	-	-	-0.08	0.099	0.122
04	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 1	4182	836.4	1	22.59	24.00	1.384	-	-	-0.05	0.370	0.512
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 1	4182	836.4	2	22.59	24.00	1.384	-	-	0.01	0.341	0.472
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 1	4182	836.4	1	22.59	24.00	1.384	-	-	-0.04	0.090	0.125
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 1	4182	836.4	1	22.59	24.00	1.384	-	-	-0.08	0.235	0.325
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 1	4182	836.4	1	22.59	24.00	1.384	-	-	-0.13	0.138	0.191
05	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	20525	836.5	1	22.21	24.00	1.510	-	-	-0.11	0.237	0.358
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	20525	836.5	2	22.21	24.00	1.510	-	-	-0.11	0.127	0.192
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 1	20525	836.5	1	21.26	23.00	1.493	-	-	0.04	0.199	0.297
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	20525	836.5	1	22.21	24.00	1.510	-	-	-0.01	0.133	0.201
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 1	20525	836.5	1	21.26	23.00	1.493	-	-	-0.08	0.111	0.166
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	1	22.21	24.00	1.510	-	-	0.05	0.166	0.251
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	1	21.26	23.00	1.493	-	-	0.06	0.138	0.206
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	20525	836.5	1	22.21	24.00	1.510	-	-	-0.09	0.094	0.142
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 1	20525	836.5	1	21.26	23.00	1.493	-	-	-0.08	0.078	0.116
06	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	1	21.65	23.00	1.365	-	-	-0.11	0.167	0.228
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	2	21.65	23.00	1.365	-	-	-0.11	0.098	0.134
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	1	20.63	22.00	1.371	-	-	0.03	0.140	0.192
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	1	21.65	23.00	1.365	-	-	-0.16	0.094	0.128
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	1	20.63	22.00	1.371	-	-	-0.02	0.078	0.107
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	1	21.65	23.00	1.365	-	-	0.15	0.117	0.160
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	1	20.63	22.00	1.371	-	-	-0.09	0.097	0.133
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	1	21.65	23.00	1.365	-	-	0.11	0.066	0.090
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	1	20.63	22.00	1.371	-	-	-0.05	0.055	0.075
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	1	22.66	24.00	1.361	-	-	-0.04	0.136	0.185
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	2	22.66	24.00	1.361	-	-	-0.04	0.127	0.173
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	1	21.68	23.00	1.355	-	-	0.06	0.110	0.149
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	1	22.66	24.00	1.361	-	-	-0.03	0.078	0.106
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	1	21.68	23.00	1.355	-	-	-0.03	0.063	0.085
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	1	22.66	24.00	1.361	-	-	0.08	0.102	0.139
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	1	21.68	23.00	1.355	-	-	-0.07	0.080	0.108
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	1	22.66	24.00	1.361	-	-	0.05	0.071	0.097
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	1	21.68	23.00	1.355	-	-	-0.11	0.056	0.076
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	1	22.80	24.00	1.318	-	-	-0.08	0.152	0.200
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	1	22.72	24.00	1.343	-	-	-0.01	0.153	0.205
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	2	22.72	24.00	1.343	-	-	-0.01	0.072	0.097
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	1	22.80	24.00	1.318	-	-	0.05	0.085	0.112
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	1	22.72	24.00	1.343	-	-	0.05	0.085	0.114
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	1	22.80	24.00	1.318	-	-	-0.03	0.115	0.152
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	1	22.72	24.00	1.343	-	-	-0.15	0.118	0.158
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	1	22.80	24.00	1.318	-	-	0.02	0.084	0.111
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	1	22.72	24.00	1.343	-	-	0.07	0.078	0.105
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	1	22.28	23.00	1.180	-	-	0.13	0.159	0.188
07	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	1	22.19	23.00	1.205	-	-	-0.03	0.237	0.286
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	2	22.19	23.00	1.205	-	-	-0.03	0.111	0.134
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	1	22.28	23.00	1.180	-	-	0.02	0.089	0.105
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	1	22.19	23.00	1.205	-	-	0.16	0.137	0.165
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	1	22.28	23.00	1.180	-	-	-0.03	0.096	0.113
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	1	22.19	23.00	1.205	-	-	0.07	0.157	0.189
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	1	22.28	23.00	1.180	-	-	0.03	0.085	0.100
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	1	22.19	23.00	1.205	-	-	0.01	0.096	0.116
1750MHz																					
08	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.08	0.233	0.310
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	1413	1732.6	2	22.76	24.00	1.330	-	-	-0.08	0.200	0.266
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 1	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.06	0.112	0.149



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	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.04	0.195	0.259
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 1	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.09	0.127	0.169
09	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	132322	1745	1	22.39	24.00	1.449	-	-	-0.09	0.199	0.288
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	132322	1745	2	22.39	24.00	1.449	-	-	-0.09	0.186	0.269
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 1	132322	1745	1	21.28	23.00	1.486	-	-	-0.1	0.154	0.229
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	132322	1745	1	22.39	24.00	1.449	-	-	0.18	0.092	0.133
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 1	132322	1745	1	21.28	23.00	1.486	-	-	-0.17	0.072	0.107
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	132322	1745	1	22.39	24.00	1.449	-	-	-0.04	0.177	0.256
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 1	132322	1745	1	21.28	23.00	1.486	-	-	-0.05	0.139	0.207
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	132322	1745	1	22.39	24.00	1.449	-	-	0.01	0.086	0.125
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 1	132322	1745	1	21.28	23.00	1.486	-	-	-0.13	0.068	0.101
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	1	22.81	24.00	1.315	-	-	-0.09	0.166	0.218
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	1	22.71	24.00	1.346	-	-	0.05	0.135	0.182
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	1	22.81	24.00	1.315	-	-	0.02	0.073	0.096
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	1	22.71	24.00	1.346	-	-	-0.13	0.065	0.087
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	1	22.81	24.00	1.315	-	-	0.03	0.176	0.231
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	2	22.81	24.00	1.315	-	-	0.03	0.103	0.135
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	1	22.71	24.00	1.346	-	-	0.06	0.155	0.209
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	1	22.81	24.00	1.315	-	-	0.02	0.069	0.091
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	1	22.71	24.00	1.346	-	-	-0.04	0.063	0.085
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	349000	1745	1	22.38	24.00	1.452	-	-	0.03	0.191	0.277
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	349000	1745	2	22.38	24.00	1.452	-	-	0.03	0.185	0.269
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	349000	1745	1	22.26	24.00	1.493	-	-	-0.02	0.178	0.266
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	349000	1745	1	22.38	24.00	1.452	-	-	0.1	0.115	0.167
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	349000	1745	1	22.26	24.00	1.493	-	-	0.04	0.104	0.155
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	349000	1745	1	22.38	24.00	1.452	-	-	0.13	0.162	0.235
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	349000	1745	1	22.26	24.00	1.493	-	-	-0.18	0.150	0.224
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	349000	1745	1	22.38	24.00	1.452	-	-	-0.11	0.096	0.139
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	349000	1745	1	22.26	24.00	1.493	-	-	-0.16	0.093	0.139
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	1	22.37	24.00	1.455	-	-	-0.06	0.199	0.290
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	1	22.33	24.00	1.469	-	-	-0.14	0.236	0.347
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	1	22.37	24.00	1.455	-	-	-0.19	0.090	0.131
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	1	22.33	24.00	1.469	-	-	0.01	0.103	0.151
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	1	22.37	24.00	1.455	-	-	0.06	0.233	0.339
10	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	1	22.33	24.00	1.469	-	-	0.05	0.256	0.376
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	2	22.33	24.00	1.469	-	-	0.02	0.198	0.291
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	1	22.37	24.00	1.455	-	-	0.12	0.084	0.122
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	1	22.33	24.00	1.469	-	-	-0.16	0.097	0.142
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 0	DSI 1	661	1880	1	24.54	26.00	1.400	-	-	-0.02	0.056	0.078
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 0	DSI 1	661	1880	1	24.54	26.00	1.400	-	-	-0.13	0.047	0.066
11	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	DSI 1	661	1880	1	24.54	26.00	1.400	-	-	-0.07	0.076	0.106
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	DSI 1	661	1880	2	24.54	26.00	1.400	-	-	-0.07	0.075	0.105
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 0	DSI 1	661	1880	1	24.54	26.00	1.400	-	-	0.16	0.049	0.069
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	9400	1880	1	23.00	24.00	1.259	-	-	-0.16	0.172	0.217
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 1	9400	1880	1	23.00	24.00	1.259	-	-	0.1	0.131	0.165
12	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	9400	1880	1	23.00	24.00	1.259	-	-	-0.06	0.209	0.263
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	9400	1880	2	23.00	24.00	1.259	-	-	-0.06	0.181	0.228
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 1	9400	1880	1	23.00	24.00	1.259	-	-	-0.01	0.136	0.171
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	26340	1880	1	22.46	24.00	1.426	-	-	0.14	0.151	0.215
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 1	26340	1880	1	21.47	23.00	1.422	-	-	0.1	0.122	0.174
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	26340	1880	1	22.46	24.00	1.426	-	-	-0.09	0.110	0.157
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 1	26340	1880	1	21.47	23.00	1.422	-	-	0.07	0.089	0.127
13	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	26340	1880	1	22.46	24.00	1.426	-	-	-0.06	0.182	0.259
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	26340	1880	2	22.46	24.00	1.426	-	-	-0.06	0.174	0.248
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 1	26340	1880	1	21.47	23.00	1.422	-	-	-0.09	0.148	0.211



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	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	26340	1880	1	22.46	24.00	1.426	-	-	-0.16	0.120	0.171
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 1	26340	1880	1	21.47	23.00	1.422	-	-	-0.18	0.093	0.132
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	376500	1882.5	1	22.86	24.00	1.300	-	-	0.14	0.130	0.169
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	376500	1882.5	1	22.73	24.00	1.340	-	-	0.03	0.148	0.198
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	376500	1882.5	1	22.86	24.00	1.300	-	-	0.1	0.092	0.120
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	376500	1882.5	1	22.73	24.00	1.340	-	-	0.16	0.100	0.134
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	376500	1882.5	1	22.86	24.00	1.300	-	-	-0.06	0.176	0.229
14	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	376500	1882.5	1	22.73	24.00	1.340	-	-	-0.03	0.180	0.241
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	376500	1882.5	2	22.73	24.00	1.340	-	-	-0.03	0.167	0.224
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	376500	1882.5	1	22.86	24.00	1.300	-	-	-0.16	0.104	0.135
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	376500	1882.5	1	22.73	24.00	1.340	-	-	0.05	0.111	0.149
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	18900	1880	1	22.68	24.00	1.355	-	-	-0.11	0.123	0.167
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	18900	1880	1	22.59	24.00	1.384	-	-	-0.06	0.131	0.181
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	18900	1880	1	22.68	24.00	1.355	-	-	-0.15	0.010	0.014
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	18900	1880	1	22.59	24.00	1.384	-	-	0.03	0.008	0.011
15	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	18900	1880	1	22.68	24.00	1.355	-	-	-0.13	0.144	0.195
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	18900	1880	2	22.68	24.00	1.355	-	-	0.06	0.059	0.080
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	18900	1880	1	22.59	24.00	1.384	-	-	-0.14	0.139	0.192
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	18900	1880	1	22.68	24.00	1.355	-	-	-0.15	0.015	0.020
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	18900	1880	1	22.59	24.00	1.384	-	-	-0.02	0.011	0.015
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	376000	1880	1	22.79	24.00	1.321	-	-	0.11	0.125	0.165
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	376000	1880	1	22.65	24.00	1.365	-	-	-0.08	0.114	0.156
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	376000	1880	1	22.79	24.00	1.321	-	-	-0.1	0.050	0.066
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	376000	1880	1	22.65	24.00	1.365	-	-	-0.01	0.042	0.057
16	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	376000	1880	1	22.79	24.00	1.321	-	-	-0.04	0.138	0.182
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	376000	1880	2	22.79	24.00	1.321	-	-	-0.04	0.115	0.152
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	376000	1880	1	22.65	24.00	1.365	-	-	-0.06	0.122	0.166
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	376000	1880	1	22.79	24.00	1.321	-	-	-0.17	0.030	0.040
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	376000	1880	1	22.65	24.00	1.365	-	-	-0.01	0.021	0.029
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	21100	2535	1	22.56	24.00	1.393	-	-	-0.03	0.061	0.085
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	21100	2535	1	21.45	23.00	1.429	-	-	0.17	0.047	0.067
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	21100	2535	1	22.56	24.00	1.393	-	-	-0.15	0.045	0.063
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	21100	2535	1	21.45	23.00	1.429	-	-	0.16	0.034	0.049
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	21100	2535	1	22.56	24.00	1.393	-	-	0.06	0.108	0.150
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	21100	2535	2	22.56	24.00	1.393	-	-	0.06	0.101	0.141
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	21100	2535	1	21.45	23.00	1.429	-	-	0.05	0.087	0.124
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	21100	2535	1	22.56	24.00	1.393	-	-	-0.06	0.037	0.052
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	21100	2535	1	21.45	23.00	1.429	-	-	-0.13	0.020	0.029
17	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	21100	2535	1	16.85	18.50	1.462	-	-	-0.11	0.528	0.772
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	21100	2535	2	16.85	18.50	1.462	-	-	0.02	0.436	0.638
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	21100	2535	1	16.81	18.50	1.476	-	-	-0.18	0.495	0.730
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	21100	2535	1	16.85	18.50	1.462	-	-	0.16	0.325	0.475
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	21100	2535	1	16.81	18.50	1.476	-	-	0.13	0.260	0.384
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	21100	2535	1	16.85	18.50	1.462	-	-	0.07	0.198	0.290
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	21100	2535	1	16.81	18.50	1.476	-	-	0.08	0.156	0.230
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	21100	2535	1	16.85	18.50	1.462	-	-	0.19	0.145	0.212
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	21100	2535	1	16.81	18.50	1.476	-	-	-0.06	0.116	0.171
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	1	21.75	23.00	1.334	-	-	-0.07	0.341	0.455
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	2	21.75	23.00	1.334	-	-	0.02	0.280	0.373
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	1	20.70	22.00	1.349	-	-	-0.03	0.304	0.410
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	1	21.75	23.00	1.334	-	-	0.07	0.070	0.093
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	1	20.70	22.00	1.349	-	-	-0.12	0.059	0.080
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	1	21.75	23.00	1.334	-	-	-0.03	0.333	0.444
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	1	20.70	22.00	1.349	-	-	0.02	0.305	0.411
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	1	21.75	23.00	1.334	-	-	0.12	0.053	0.071



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	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	1	20.70	22.00	1.349	-	-	0.02	0.038	0.051
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	21100	2535	1	20.49	22.00	1.416	-	-	0.02	0.431	0.610
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	21100	2535	2	20.49	22.00	1.416	-	-	0.02	0.273	0.387
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	21100	2535	1	19.43	21.00	1.435	-	-	-0.1	0.349	0.501
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	21100	2535	1	20.49	22.00	1.416	-	-	0.05	0.128	0.181
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	21100	2535	1	19.43	21.00	1.435	-	-	0.01	0.104	0.149
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	21100	2535	1	20.49	22.00	1.416	-	-	0.07	0.403	0.571
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	21100	2535	1	19.43	21.00	1.435	-	-	0.15	0.317	0.455
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	21100	2535	1	20.49	22.00	1.416	-	-	-0.05	0.183	0.259
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	21100	2535	1	19.43	21.00	1.435	-	-	-0.08	0.150	0.215
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	40620	2593	1	22.26	24.00	1.493	62.9	1.006	-0.13	0.059	0.089
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	40620	2593	1	21.16	23.00	1.528	62.9	1.006	0.01	0.046	0.071
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	40620	2593	1	22.26	24.00	1.493	62.9	1.006	-0.11	0.044	0.066
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	40620	2593	1	21.16	23.00	1.528	62.9	1.006	0.03	0.035	0.054
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	40620	2593	1	22.26	24.00	1.493	62.9	1.006	-0.05	0.136	0.204
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	40620	2593	2	22.26	24.00	1.493	62.9	1.006	-0.05	0.126	0.189
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.05	0.106	0.163
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	40620	2593	1	22.26	24.00	1.493	62.9	1.006	0.14	0.030	0.045
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.01	0.025	0.038
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	40620	2593	1	17.50	19.00	1.413	62.9	1.006	-0.12	0.473	0.672
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	39750	2506	1	17.46	19.00	1.426	62.9	1.006	0.09	0.477	0.684
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	40185	2549.5	1	17.43	19.00	1.435	62.9	1.006	0.04	0.497	0.718
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	41055	2636.5	1	17.42	19.00	1.439	62.9	1.006	0.11	0.479	0.693
18	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	41490	2680	1	17.44	19.00	1.432	62.9	1.006	0.14	0.516	0.743
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	41490	2680	2	17.44	19.00	1.432	62.9	1.006	0.06	0.430	0.620
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	40620	2593	1	17.46	19.00	1.426	62.9	1.006	-0.13	0.436	0.625
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	39750	2506	1	17.42	19.00	1.439	62.9	1.006	-0.11	0.413	0.598
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	40185	2549.5	1	17.33	19.00	1.469	62.9	1.006	0.17	0.409	0.604
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	41055	2636.5	1	17.39	19.00	1.449	62.9	1.006	-0.16	0.462	0.673
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	41490	2680	1	17.41	19.00	1.442	62.9	1.006	-0.17	0.488	0.708
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 1	40620	2593	1	17.42	19.00	1.439	62.9	1.006	0.11	0.450	0.651
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	40620	2593	1	17.50	19.00	1.413	62.9	1.006	-0.05	0.263	0.374
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	40620	2593	1	17.46	19.00	1.426	62.9	1.006	-0.01	0.227	0.326
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	40620	2593	1	17.50	19.00	1.413	62.9	1.006	-0.14	0.178	0.253
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	40620	2593	1	17.46	19.00	1.426	62.9	1.006	-0.15	0.146	0.209
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	40620	2593	1	17.50	19.00	1.413	62.9	1.006	-0.12	0.122	0.173
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	40620	2593	1	17.46	19.00	1.426	62.9	1.006	-0.17	0.098	0.141
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	1	22.65	24.00	1.365	62.9	1.006	-0.09	0.291	0.399
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	2	22.65	24.00	1.365	62.9	1.006	-0.09	0.263	0.361
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.01	0.287	0.387
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.02	0.094	0.129
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	1	21.73	23.00	1.340	62.9	1.006	-0.11	0.087	0.117
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	1	22.65	24.00	1.365	62.9	1.006	-0.01	0.254	0.349
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.09	0.246	0.332
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.1	0.064	0.088
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	1	21.73	23.00	1.340	62.9	1.006	-0.04	0.057	0.077
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.05	0.338	0.450
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	40620	2593	2	21.28	22.50	1.324	62.9	1.006	-0.05	0.283	0.377
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.16	0.262	0.355
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	40620	2593	1	21.28	22.50	1.324	62.9	1.006	0.05	0.077	0.103
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	40620	2593	1	20.21	21.50	1.346	62.9	1.006	0.08	0.061	0.083
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.18	0.271	0.361
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.03	0.240	0.325
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.04	0.135	0.180
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.09	0.101	0.137
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 6	DSI 1	507000	2535	1	22.27	23.00	1.183	-	-	0.11	0.076	0.090



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	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 6	DSI 1	507000	2535	1	22.18	23.00	1.208	-	-	0.07	0.074	0.089
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 6	DSI 1	507000	2535	1	22.27	23.00	1.183	-	-	-0.03	0.046	0.054
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 6	DSI 1	507000	2535	1	22.18	23.00	1.208	-	-	0.09	0.045	0.054
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 6	DSI 1	507000	2535	1	22.27	23.00	1.183	-	-	0.01	0.134	0.159
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 6	DSI 1	507000	2535	2	22.27	23.00	1.183	-	-	0.01	0.123	0.146
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 6	DSI 1	507000	2535	1	22.18	23.00	1.208	-	-	-0.08	0.126	0.152
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 6	DSI 1	507000	2535	1	22.27	23.00	1.183	-	-	-0.05	0.042	0.050
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 6	DSI 1	507000	2535	1	22.18	23.00	1.208	-	-	-0.03	0.031	0.037
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	507000	2535	1	22.35	23.00	1.161	-	-	-0.14	0.556	0.646
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	507000	2535	1	22.25	23.00	1.189	-	-	0.03	0.558	0.663
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	507000	2535	2	22.25	23.00	1.189	-	-	0.03	0.438	0.521
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	507000	2535	1	22.35	23.00	1.161	-	-	-0.15	0.341	0.396
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	507000	2535	1	22.25	23.00	1.189	-	-	-0.12	0.339	0.403
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	507000	2535	1	22.35	23.00	1.161	-	-	-0.16	0.206	0.239
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	507000	2535	1	22.25	23.00	1.189	-	-	-0.03	0.219	0.260
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	507000	2535	1	22.35	23.00	1.161	-	-	0.17	0.180	0.209
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	507000	2535	1	22.25	23.00	1.189	-	-	0.02	0.165	0.196
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	1	22.56	24.00	1.393	-	-	0.01	0.162	0.226
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	1	22.47	24.00	1.422	-	-	0.02	0.182	0.259
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	2	22.47	24.00	1.422	-	-	0.02	0.169	0.240
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	1	22.56	24.00	1.393	-	-	-0.11	0.051	0.071
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	1	22.47	24.00	1.422	-	-	-0.05	0.054	0.077
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	1	22.56	24.00	1.393	-	-	-0.04	0.156	0.217
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	1	22.47	24.00	1.422	-	-	-0.08	0.157	0.223
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	1	22.56	24.00	1.393	-	-	0.03	0.031	0.043
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	1	22.47	24.00	1.422	-	-	-0.14	0.032	0.046
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 7	DSI 1	507000	2535	1	21.41	23.00	1.442	-	-	0.18	0.489	0.705
19	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 7	DSI 1	507000	2535	1	21.34	23.00	1.466	-	-	0.06	0.539	0.790
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 7	DSI 1	507000	2535	2	21.34	23.00	1.466	-	-	0.03	0.268	0.393
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 7	DSI 1	507000	2535	1	21.41	23.00	1.442	-	-	0.16	0.152	0.219
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 7	DSI 1	507000	2535	1	21.34	23.00	1.466	-	-	0.06	0.154	0.226
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 7	DSI 1	507000	2535	1	21.41	23.00	1.442	-	-	-0.02	0.487	0.702
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 7	DSI 1	507000	2535	1	21.34	23.00	1.466	-	-	0.07	0.524	0.768
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 7	DSI 1	507000	2535	1	21.41	23.00	1.442	-	-	-0.17	0.214	0.309
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 7	DSI 1	507000	2535	1	21.34	23.00	1.466	-	-	0.1	0.208	0.305
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	518598	2592.99	1	22.35	23.00	1.161	-	-	0.02	0.069	0.080
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	518598	2592.99	1	22.25	23.00	1.189	-	-	-0.13	0.062	0.074
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	518598	2592.99	1	22.35	23.00	1.161	-	-	-0.1	0.046	0.053
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	518598	2592.99	1	22.25	23.00	1.189	-	-	-0.07	0.043	0.051
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	518598	2592.99	1	22.35	23.00	1.161	-	-	0.04	0.136	0.158
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	518598	2592.99	2	22.35	23.00	1.161	-	-	0.04	0.125	0.145
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	518598	2592.99	1	22.25	23.00	1.189	-	-	0.11	0.125	0.149
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	518598	2592.99	1	22.35	23.00	1.161	-	-	-0.17	0.040	0.046
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	518598	2592.99	1	22.25	23.00	1.189	-	-	0.01	0.036	0.043
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	518598	2592.99	1	24.39	25.00	1.151	50	1.000	0.04	0.113	0.130
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	518598	2592.99	1	21.80	23.00	1.318	-	-	0.1	0.342	0.451
20	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	518598	2592.99	1	21.54	23.00	1.400	-	-	0.03	0.440	0.616
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	518598	2592.99	2	21.54	23.00	1.400	-	-	0.03	0.362	0.507
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	518598	2592.99	1	21.80	23.00	1.318	-	-	0.18	0.226	0.298
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	518598	2592.99	1	21.54	23.00	1.400	-	-	0.12	0.278	0.389
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	518598	2592.99	1	21.80	23.00	1.318	-	-	0.07	0.132	0.174
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	518598	2592.99	1	21.54	23.00	1.400	-	-	0.15	0.168	0.235
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	518598	2592.99	1	21.80	23.00	1.318	-	-	0.14	0.116	0.153
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	518598	2592.99	1	21.54	23.00	1.400	-	-	-0.03	0.130	0.182
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	518598	2592.99	1	23.60	25.00	1.380	50	1.000	0.04	0.328	0.453
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	1	22.13	23.00	1.222	-	-	0.03	0.223	0.272



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	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	2	22.13	23.00	1.222	-	-	0.03	0.207	0.253
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	1	21.67	23.00	1.358	-	-	0.11	0.196	0.266
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	1	22.13	23.00	1.222	-	-	0.07	0.087	0.106
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	1	21.67	23.00	1.358	-	-	-0.04	0.069	0.094
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	1	22.13	23.00	1.222	-	-	-0.18	0.219	0.268
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	1	21.67	23.00	1.358	-	-	-0.13	0.186	0.253
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	1	22.13	23.00	1.222	-	-	-0.13	0.051	0.062
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	1	21.67	23.00	1.358	-	-	0.02	0.044	0.060
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	1	24.03	25.00	1.250	50	1.000	0.07	0.177	0.221
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	518598	2592.99	1	20.15	21.00	1.216	-	-	0.01	0.371	0.451
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	518598	2592.99	2	20.15	21.00	1.216	-	-	0.01	0.296	0.360
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.09	0.289	0.356
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	518598	2592.99	1	20.15	21.00	1.216	-	-	0.05	0.104	0.126
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	518598	2592.99	1	20.10	21.00	1.230	-	-	0.13	0.065	0.080
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	518598	2592.99	1	20.15	21.00	1.216	-	-	0.03	0.351	0.427
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.12	0.291	0.358
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	518598	2592.99	1	20.15	21.00	1.216	-	-	0.15	0.156	0.190
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.05	0.114	0.140
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	518598	2592.99	1	21.98	23.00	1.265	50	1.000	0.06	0.266	0.336
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	1	18.85	20.00	1.303	62.9	1.006	-0.07	0.165	0.216
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	1	18.78	20.00	1.324	62.9	1.006	0.1	0.117	0.156
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	1	18.85	20.00	1.303	62.9	1.006	-0.11	0.116	0.152
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	1	18.78	20.00	1.324	62.9	1.006	-0.02	0.108	0.144
21	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	1	18.85	20.00	1.303	62.9	1.006	0.08	0.594	0.779
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	2	18.85	20.00	1.303	62.9	1.006	0.03	0.463	0.607
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	1	18.78	20.00	1.324	62.9	1.006	-0.05	0.575	0.766
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	1	18.85	20.00	1.303	62.9	1.006	0.16	0.142	0.186
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	1	18.78	20.00	1.324	62.9	1.006	0.01	0.161	0.214
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	1	18.95	20.00	1.274	62.9	1.006	-0.06	0.139	0.178
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	1	18.94	20.00	1.276	62.9	1.006	0.14	0.110	0.141
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	1	18.95	20.00	1.274	62.9	1.006	-0.09	0.102	0.131
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	1	18.94	20.00	1.276	62.9	1.006	-0.09	0.087	0.112
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	1	18.95	20.00	1.274	62.9	1.006	-0.12	0.526	0.674
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	55340	3560	1	18.90	20.00	1.288	62.9	1.006	-0.06	0.555	0.719
22	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	56150	3641	1	18.91	20.00	1.285	62.9	1.006	-0.09	0.590	0.763
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	56150	3641	2	18.91	20.00	1.285	62.9	1.006	0.01	0.488	0.631
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	56640	3690	1	18.88	20.00	1.294	62.9	1.006	0.09	0.563	0.733
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	1	18.94	20.00	1.276	62.9	1.006	0.13	0.483	0.620
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	55340	3560	1	18.89	20.00	1.291	62.9	1.006	-0.08	0.479	0.622
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	56150	3641	1	18.81	20.00	1.315	62.9	1.006	0.08	0.495	0.655
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	56640	3690	1	18.89	20.00	1.291	62.9	1.006	-0.04	0.468	0.608
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	1	18.91	20.00	1.285	62.9	1.006	0.12	0.487	0.630
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	1	18.95	20.00	1.274	62.9	1.006	0.09	0.152	0.195
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	1	18.94	20.00	1.276	62.9	1.006	-0.02	0.140	0.180
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	1	16.85	18.00	1.303	-	-	-0.03	0.117	0.152
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	1	16.80	18.00	1.318	-	-	-0.06	0.097	0.128
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	1	16.85	18.00	1.303	-	-	0.08	0.078	0.102
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	1	16.80	18.00	1.318	-	-	-0.07	0.070	0.092
23	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	1	16.85	18.00	1.303	-	-	0.02	0.427	0.556
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	2	16.85	18.00	1.303	-	-	0.02	0.383	0.499
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	1	16.80	18.00	1.318	-	-	0.17	0.385	0.508
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	1	16.85	18.00	1.303	-	-	0.18	0.123	0.160
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	1	16.80	18.00	1.318	-	-	0.05	0.108	0.142
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	641666	3624.99	1	22.32	23.00	1.169	-	-	0.08	0.436	0.510
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	641666	3624.99	2	22.32	23.00	1.169	-	-	0.08	0.427	0.499



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	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	641666	3624.99	1	22.14	23.00	1.219	-	-	0.15	0.415	0.506
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	641666	3624.99	1	22.32	23.00	1.169	-	-	0.03	0.124	0.145
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	641666	3624.99	1	22.14	23.00	1.219	-	-	-0.1	0.124	0.151
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	641666	3624.99	1	22.32	23.00	1.169	-	-	0.14	0.196	0.229
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	641666	3624.99	1	22.14	23.00	1.219	-	-	-0.16	0.190	0.232
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	641666	3624.99	1	22.32	23.00	1.169	-	-	-0.02	0.084	0.098
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	641666	3624.99	1	22.14	23.00	1.219	-	-	0.1	0.083	0.101
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	1	14.10	15.50	1.380	-	-	-0.05	0.069	0.095
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	1	14.05	15.50	1.396	-	-	-0.04	0.075	0.105
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	1	14.10	15.50	1.380	-	-	0.01	0.060	0.083
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	1	14.05	15.50	1.396	-	-	-0.09	0.057	0.080
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	1	14.10	15.50	1.380	-	-	0.03	0.288	0.398
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	1	14.05	15.50	1.396	-	-	0.11	0.304	0.424
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	2	14.05	15.50	1.396	-	-	0.02	0.256	0.357
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	1	14.10	15.50	1.380	-	-	0.15	0.126	0.174
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	1	14.05	15.50	1.396	-	-	-0.15	0.131	0.183
	FR1 n77 Part 270 HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	1	16.96	18.50	1.426	50	1.000	-0.09	0.296	0.422
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	1	15.25	15.50	1.059	-	-	-0.1	0.096	0.102
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	1	15.21	15.50	1.069	-	-	0.17	0.093	0.099
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	1	15.25	15.50	1.059	-	-	0.13	0.075	0.079
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	1	15.21	15.50	1.069	-	-	-0.02	0.087	0.093
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	1	15.25	15.50	1.059	-	-	0.05	0.268	0.284
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	1	15.21	15.50	1.069	-	-	0.01	0.290	0.310
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	2	15.21	15.50	1.069	-	-	0.03	0.229	0.245
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	1	15.25	15.50	1.059	-	-	-0.04	0.081	0.086
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	1	15.21	15.50	1.069	-	-	-0.12	0.106	0.113
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	1	17.70	18.50	1.202	50	1.000	-0.01	0.252	0.303
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	656000	3840	1	21.49	23.00	1.416	-	-	-0.04	0.315	0.446
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	656000	3840	1	21.41	23.00	1.442	-	-	0.05	0.267	0.385
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	656000	3840	1	21.49	23.00	1.416	-	-	-0.15	0.109	0.154
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	656000	3840	1	21.41	23.00	1.442	-	-	-0.11	0.096	0.138
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	656000	3840	1	21.49	23.00	1.416	-	-	0.07	0.108	0.153
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	656000	3840	1	21.41	23.00	1.442	-	-	0.06	0.096	0.138
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	656000	3840	1	21.49	23.00	1.416	-	-	-0.12	0.083	0.118
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	656000	3840	1	21.41	23.00	1.442	-	-	0.19	0.078	0.112
	FR1 n77 Part 270 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	656000	3840	1	24.30	26.00	1.479	50	1.000	0.01	0.316	0.467
	FR1 n77 Part 270 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	656000	3840	2	24.30	26.00	1.479	50	1.000	0.06	0.276	0.408
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	633334	3500.01	1	21.60	23.00	1.380	-	-	0.02	0.523	0.722
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.03	0.476	0.694
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.08	0.115	0.159
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	633334	3500.01	1	21.36	23.00	1.459	-	-	0.1	0.120	0.175
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	633334	3500.01	1	21.60	23.00	1.380	-	-	0.15	0.219	0.302
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	633334	3500.01	1	21.36	23.00	1.459	-	-	0.12	0.262	0.382
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.12	0.090	0.124
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.15	0.091	0.133
24	FR1 n77 Part 27Q HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	633334	3500.01	1	24.63	26.00	1.371	50	1.000	0.06	0.538	0.738
	FR1 n77 Part 27Q HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	633334	3500.01	2	24.63	26.00	1.371	50	1.000	0.03	0.471	0.646
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	1	22.44	23.00	1.138	-	-	0.06	0.006	0.007
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	2	22.44	23.00	1.138	-	-	0.06	0.002	0.002
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	1	22.43	23.00	1.140	-	-	-0.12	0.003	0.003
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	1	22.44	23.00	1.138	-	-	0.18	0.001	0.001
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	1	22.43	23.00	1.140	-	-	0.14	0.001	0.001
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	1	22.44	23.00	1.138	-	-	0.03	0.005	0.006
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	1	22.43	23.00	1.140	-	-	0.09	0.004	0.005
	FR1 n77 Part 270	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	1	22.44	23.00	1.138	-	-	-0.13	0.002	0.002
	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	1	22.43	23.00	1.140	-	-	-0.09	0.001	0.001



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FR1 n77 Part 27O HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	1	24.53	26.00	1.403	50	1.000	-0.18	0.005	0.007
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	1	22.23	23.00	1.194	-	-	0.11	0.038	0.045
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	2	22.23	23.00	1.194	-	-	0.11	0.029	0.035
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	1	22.14	23.00	1.219	-	-	0.11	0.021	0.026
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	1	22.23	23.00	1.194	-	-	-0.06	0.010	0.012
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	1	22.14	23.00	1.219	-	-	-0.02	0.008	0.010
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	1	22.23	23.00	1.194	-	-	0.02	0.037	0.044
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	1	22.14	23.00	1.219	-	-	0.12	0.025	0.030
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	1	22.23	23.00	1.194	-	-	0.02	0.006	0.007
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	1	22.14	23.00	1.219	-	-	-0.11	0.004	0.005
FR1 n77 Part 27Q HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	1	24.93	26.00	1.279	50	1.000	-0.11	0.034	0.043
FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	656000	3840	1	23.48	24.00	1.127	-	-	0.03	0.198	0.223
FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	656000	3840	1	23.38	24.00	1.153	-	-	0.06	0.200	0.231
FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	656000	3840	2	23.38	24.00	1.153	-	-	0.06	0.168	0.194
FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	DSI 1	656000	3840	1	23.48	24.00	1.127	-	-	0.01	0.055	0.062
FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	DSI 1	656000	3840	1	23.38	24.00	1.153	-	-	-0.03	0.062	0.072
FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	DSI 1	656000	3840	1	23.48	24.00	1.127	-	-	0.03	0.133	0.150
FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	DSI 1	656000	3840	1	23.38	24.00	1.153	-	-	-0.17	0.127	0.146
FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	DSI 1	656000	3840	1	23.48	24.00	1.127	-	-	0.02	0.097	0.109
FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	DSI 1	656000	3840	1	23.38	24.00	1.153	-	-	-0.11	0.093	0.107
FR1 n77 Part 27O HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	656000	3840	1	25.43	26.00	1.140	50	1.000	-0.02	0.164	0.187
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	633332	3499.98	1	23.77	24.00	1.054	-	-	0.19	0.164	0.173
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	633332	3499.98	1	23.63	24.00	1.089	-	-	0.13	0.219	0.238
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	633332	3499.98	2	23.63	24.00	1.089	-	-	0.13	0.158	0.172
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	DSI 1	633332	3499.98	1	23.77	24.00	1.054	-	-	-0.03	0.064	0.067
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	DSI 1	633332	3499.98	1	23.63	24.00	1.089	-	-	0.12	0.054	0.059
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	DSI 1	633332	3499.98	1	23.77	24.00	1.054	-	-	0.19	0.099	0.104
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	DSI 1	633332	3499.98	1	23.63	24.00	1.089	-	-	-0.09	0.100	0.109
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	DSI 1	633332	3499.98	1	23.77	24.00	1.054	-	-	-0.12	0.087	0.092
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	DSI 1	633332	3499.98	1	23.63	24.00	1.089	-	-	0.07	0.081	0.088
FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	DSI 1	633332	3499.98	1	24.80	26.00	1.318	50	1.000	-0.18	0.139	0.183



FCC SAR Test Report

Report No. : FA3N2109-02

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)
WLAN/BT																	
25	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 2+4(4)	Standalone	1	2412	1	14.72	16.50	1.507	100	1.000	0.01	0.397	0.598
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 2+4(4)	Standalone	1	2412	1	14.72	16.50	1.507	100	1.000	0.03	0.372	0.560
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 2+4(4)	Standalone	1	2412	1	14.72	16.50	1.507	100	1.000	0.13	0.764	1.151
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 2+4(4)	Standalone	1	2412	2	14.72	16.50	1.507	100	1.000	0.03	0.523	0.788
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 2+4(4)	Standalone	6	2437	1	14.59	16.50	1.552	100	1.000	0.06	0.647	1.004
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 2+4(4)	Standalone	1	2412	1	14.72	16.50	1.507	100	1.000	-0.08	0.417	0.628
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 2+4(4)	Simultaneous	1	2412	1	8.67	10.50	1.524	100	1.000	0.08	0.106	0.162
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 2+4(4)	Simultaneous	1	2412	1	8.67	10.50	1.524	100	1.000	0.01	0.099	0.151
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 2+4(4)	Simultaneous	1	2412	1	8.67	10.50	1.524	100	1.000	0.03	0.203	0.309
26	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 2+4(4)	Simultaneous	1	2412	1	8.67	10.50	1.524	100	1.000	-0.08	0.111	0.169
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 2	Full Power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.1	0.143	0.169
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 2	Full Power	39	2441	1	6.62	7.00	1.091	76.91	1.083	-0.18	0.112	0.132
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 2	Full Power	39	2441	1	6.62	7.00	1.091	76.91	1.083	-0.07	0.318	0.376
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 2	Full Power	39	2441	2	6.62	7.00	1.091	76.91	1.083	-0.07	0.285	0.337
27	Bluetooth	1Mbps	Left Tilted	0mm	Ant 2	Full Power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.12	0.211	0.249
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.08	0.340	0.516
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	-0.17	0.267	0.405
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	-0.03	0.555	0.842
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3+4(3)	Full power	52	5260	2	18.22	20.00	1.507	99.32	1.007	0.09	0.452	0.686
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3+4(3)	Full power	56	5280	1	18.15	20.00	1.531	99.32	1.007	0.01	0.400	0.617
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.06	0.381	0.578
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	-0.08	0.117	0.179
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	0.1	0.092	0.141
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	-0.18	0.191	0.292
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	0.1	0.131	0.200
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+4(3)	Standalone	106	5530	1	17.04	18.50	1.400	100	1.000	0.14	0.409	0.572
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+4(3)	Standalone	106	5530	1	17.04	18.50	1.400	100	1.000	0.11	0.329	0.460
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(3)	Standalone	106	5530	1	17.04	18.50	1.400	100	1.000	0.03	0.784	1.097
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(3)	Standalone	106	5530	2	17.04	18.50	1.400	100	1.000	0.01	0.613	0.858
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(3)	Standalone	122	5610	1	16.75	18.50	1.496	100	1.000	0.18	0.721	1.079
28	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+4(3)	Standalone	106	5530	1	17.04	18.50	1.400	100	1.000	0.14	0.484	0.677
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+4(4)	Simultaneous	106	5530	1	6.33	8.00	1.469	100	1.000	0.12	0.106	0.156
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+4(4)	Simultaneous	106	5530	1	6.33	8.00	1.469	100	1.000	0.08	0.085	0.125
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Simultaneous	106	5530	1	6.33	8.00	1.469	100	1.000	-0.17	0.203	0.298
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+4(4)	Simultaneous	106	5530	1	6.33	8.00	1.469	100	1.000	-0.03	0.125	0.184
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	-0.17	0.397	0.570
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	0.17	0.290	0.416
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	-0.01	0.811	1.164
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Standalone	155	5775	2	11.43	13.00	1.435	100	1.000	0.03	0.635	0.912
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	-0.17	0.517	0.742
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	5.19	7.00	1.517	100	1.000	0.14	0.104	0.158
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	5.19	7.00	1.517	100	1.000	0.11	0.076	0.115
29	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	5.19	7.00	1.517	100	1.000	-0.05	0.212	0.322
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	5.19	7.00	1.517	100	1.000	0.18	0.135	0.205



15.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)
750MHz																					
30	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 5	23095	707.5	1	22.57	24.00	1.390	-	-	0.14	0.094	0.131
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 5	23095	707.5	1	21.59	23.00	1.384	-	-	-0.01	0.078	0.108
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	23095	707.5	1	22.57	24.00	1.390	-	-	0.01	0.261	0.363
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	23095	707.5	2	22.57	24.00	1.390	-	-	0.06	0.212	0.295
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 5	23095	707.5	1	21.59	23.00	1.384	-	-	-0.12	0.205	0.284
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 5	23095	707.5	1	22.57	24.00	1.390	-	-	0.07	0.137	0.190
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	DSI 5	23095	707.5	1	21.59	23.00	1.384	-	-	0.09	0.104	0.144
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 5	23095	707.5	1	22.57	24.00	1.390	-	-	0.04	0.167	0.232
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	DSI 5	23095	707.5	1	21.59	23.00	1.384	-	-	0.11	0.133	0.184
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	23095	707.5	1	22.57	24.00	1.390	-	-	-0.13	0.060	0.083
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	DSI 5	23095	707.5	1	21.59	23.00	1.384	-	-	0.12	0.046	0.064
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	23095	707.5	1	21.99	23.00	1.262	-	-	0.01	0.020	0.025
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 5	23095	707.5	1	20.86	22.00	1.300	-	-	0.02	0.011	0.014
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	23095	707.5	1	21.99	23.00	1.262	-	-	0.06	0.061	0.077
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	23095	707.5	2	21.99	23.00	1.262	-	-	0.03	0.036	0.045
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 5	23095	707.5	1	20.86	22.00	1.300	-	-	-0.11	0.052	0.068
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	23095	707.5	1	21.99	23.00	1.262	-	-	-0.01	0.010	0.013
31	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI 5	23095	707.5	1	20.86	22.00	1.300	-	-	0.09	0.006	0.008
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 5	23095	707.5	1	21.99	23.00	1.262	-	-	0.1	0.003	0.004
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI 5	23095	707.5	1	20.86	22.00	1.300	-	-	-0.04	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	23095	707.5	1	21.99	23.00	1.262	-	-	0.15	0.012	0.015
	LTE Band 12	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	DSI 5	23095	707.5	1	20.86	22.00	1.300	-	-	0.09	0.008	0.010
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	141500	707.5	1	22.41	24.00	1.442	-	-	0.17	0.074	0.107
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	141500	707.5	1	22.33	24.00	1.469	-	-	-0.16	0.064	0.094
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	141500	707.5	1	22.41	24.00	1.442	-	-	-0.02	0.207	0.299
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	141500	707.5	2	22.41	24.00	1.442	-	-	0.03	0.176	0.254
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	141500	707.5	1	22.33	24.00	1.469	-	-	0.11	0.195	0.286
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.41	24.00	1.442	-	-	-0.05	0.094	0.136
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.33	24.00	1.469	-	-	-0.01	0.089	0.131
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.41	24.00	1.442	-	-	-0.14	0.120	0.173
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.33	24.00	1.469	-	-	-0.15	0.116	0.170
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.41	24.00	1.442	-	-	-0.12	0.044	0.063
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	141500	707.5	1	22.33	24.00	1.469	-	-	-0.17	0.041	0.060
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	141500	707.5	1	22.08	23.00	1.236	-	-	0.05	0.029	0.036
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	141500	707.5	1	21.96	23.00	1.271	-	-	0.08	0.025	0.032
32	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	141500	707.5	1	22.08	23.00	1.236	-	-	-0.05	0.042	0.052
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	141500	707.5	2	22.08	23.00	1.236	-	-	0.02	0.030	0.037
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	141500	707.5	1	21.96	23.00	1.271	-	-	-0.03	0.037	0.047
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	141500	707.5	1	22.08	23.00	1.236	-	-	-0.04	0.010	0.012
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	141500	707.5	1	21.96	23.00	1.271	-	-	-0.09	0.006	0.008
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	141500	707.5	1	22.08	23.00	1.236	-	-	0.18	0.030	0.037
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	141500	707.5	1	21.96	23.00	1.271	-	-	0.11	0.029	0.037
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	141500	707.5	1	22.08	23.00	1.236	-	-	0.07	0.002	0.002
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	141500	707.5	1	21.96	23.00	1.271	-	-	-0.03	0.001	0.001
	835MHz																				
32	GSM850	-	-	-	-	GPRS (1 Tx slot)	Front	10mm	Ant 0	DSI 5	189	836.4	1	31.64	32.50	1.219	-	-	0.09	0.107	0.130
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Back	10mm	Ant 0	DSI 5	189	836.4	1	31.64	32.50	1.219	-	-	-0.01	0.270	0.329
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Back	10mm	Ant 0	DSI 5	189	836.4	2	31.64	32.50	1.219	-	-	0.03	0.241	0.294
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Left Side	10mm	Ant 0	DSI 5	189	836.4	1	31.64	32.50	1.219	-	-	-0.05	0.093	0.113
	GSM850	-	-	-	-	GPRS (1 Tx slot)	Right Side	10mm	Ant 0	DSI 5	189	836.4	1	31.64	32.50	1.219	-	-	-0.03	0.147	0.179



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	GSM850	-	-	-	-	GPRS (1 Tx slot)	Bottom Side	10mm	Ant 0	DSI 5	189	836.4	1	31.64	32.50	1.219	-	-	0.17	0.139	0.169
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Front	10mm	Ant 1	DSI 5	189	836.4	1	30.69	32.00	1.352	-	-	0.01	0.092	0.124
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Back	10mm	Ant 1	DSI 5	189	836.4	1	30.69	32.00	1.352	-	-	0.07	0.170	0.230
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Back	10mm	Ant 1	DSI 5	189	836.4	2	30.69	32.00	1.352	-	-	0.02	0.082	0.111
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Left Side	10mm	Ant 1	DSI 5	189	836.4	1	30.69	32.00	1.352	-	-	-0.1	0.047	0.064
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Side	10mm	Ant 1	DSI 5	189	836.4	1	30.69	32.00	1.352	-	-	-0.07	0.047	0.064
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Top Side	10mm	Ant 1	DSI 5	189	836.4	1	30.69	32.00	1.352	-	-	0.11	0.069	0.093
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 5	4182	836.4	1	23.09	24.00	1.233	-	-	0.06	0.131	0.162
33	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	4182	836.4	1	23.09	24.00	1.233	-	-	-0.01	0.325	0.401
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	4182	836.4	2	23.09	24.00	1.233	-	-	0.02	0.307	0.379
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	DSI 5	4182	836.4	1	23.09	24.00	1.233	-	-	-0.15	0.096	0.118
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	DSI 5	4182	836.4	1	23.09	24.00	1.233	-	-	-0.12	0.168	0.207
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	4182	836.4	1	23.09	24.00	1.233	-	-	-0.16	0.166	0.205
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI 5	4182	836.4	1	22.59	24.00	1.384	-	-	0.01	0.179	0.248
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 5	4182	836.4	1	22.59	24.00	1.384	-	-	0.09	0.193	0.267
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 5	4182	836.4	2	22.59	24.00	1.384	-	-	0.01	0.150	0.208
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI 5	4182	836.4	1	22.59	24.00	1.384	-	-	0.11	0.080	0.111
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 1	DSI 5	4182	836.4	1	22.59	24.00	1.384	-	-	-0.07	0.077	0.107
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 1	DSI 5	4182	836.4	1	22.59	24.00	1.384	-	-	0.18	0.090	0.125
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 5	26865	831.5	1	22.66	24.00	1.361	-	-	0.17	0.106	0.144
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	DSI 5	26865	831.5	1	21.68	23.00	1.355	-	-	0.02	0.085	0.115
34	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	26865	831.5	1	22.66	24.00	1.361	-	-	-0.02	0.271	0.369
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	26865	831.5	2	22.66	24.00	1.361	-	-	0.06	0.234	0.319
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	DSI 5	26865	831.5	1	21.68	23.00	1.355	-	-	0.01	0.221	0.299
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 5	26865	831.5	1	22.66	24.00	1.361	-	-	0.18	0.083	0.113
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 0	DSI 5	26865	831.5	1	21.68	23.00	1.355	-	-	-0.11	0.069	0.094
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 5	26865	831.5	1	22.66	24.00	1.361	-	-	-0.05	0.134	0.182
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 0	DSI 5	26865	831.5	1	21.68	23.00	1.355	-	-	-0.04	0.106	0.144
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	26865	831.5	1	22.66	24.00	1.361	-	-	-0.08	0.130	0.177
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 0	DSI 5	26865	831.5	1	21.68	23.00	1.355	-	-	0.06	0.105	0.142
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	26865	831.5	1	21.65	23.00	1.365	-	-	0.07	0.020	0.027
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DSI 5	26865	831.5	1	20.63	22.00	1.371	-	-	0.15	0.013	0.018
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	26865	831.5	1	21.65	23.00	1.365	-	-	0.06	0.095	0.130
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	26865	831.5	2	21.65	23.00	1.365	-	-	0.01	0.066	0.090
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI 5	26865	831.5	1	20.63	22.00	1.371	-	-	0.14	0.085	0.117
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	26865	831.5	1	21.65	23.00	1.365	-	-	-0.03	0.006	0.008
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI 5	26865	831.5	1	20.63	22.00	1.371	-	-	-0.14	0.003	0.004
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 5	26865	831.5	1	21.65	23.00	1.365	-	-	0.17	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 1	DSI 5	26865	831.5	1	20.63	22.00	1.371	-	-	0.11	0.001	0.001
	LTE Band 26	15M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	26865	831.5	1	21.65	23.00	1.365	-	-	0.07	0.011	0.015
	LTE Band 26	15M	QPSK	36	0	-	Top Side	10mm	Ant 1	DSI 5	26865	831.5	1	20.63	22.00	1.371	-	-	-0.04	0.008	0.011
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	167300	836.5	1	22.80	24.00	1.318	-	-	0.01	0.077	0.102
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	167300	836.5	1	22.72	24.00	1.343	-	-	0.18	0.054	0.073
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	167300	836.5	1	22.80	24.00	1.318	-	-	0.02	0.228	0.301
35	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	167300	836.5	1	22.72	24.00	1.343	-	-	0.02	0.230	0.309
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	167300	836.5	2	22.72	24.00	1.343	-	-	0.06	0.224	0.301
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.80	24.00	1.318	-	-	0.16	0.039	0.051
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.72	24.00	1.343	-	-	0.06	0.040	0.054
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.80	24.00	1.318	-	-	-0.02	0.099	0.131
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.72	24.00	1.343	-	-	0.07	0.102	0.137
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.80	24.00	1.318	-	-	-0.17	0.069	0.091
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	167300	836.5	1	22.72	24.00	1.343	-	-	0.1	0.076	0.102
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	167300	836.5	1	22.28	23.00	1.180	-	-	-0.13	0.072	0.085
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	167300	836.5	1	22.19	23.00	1.205	-	-	-0.13	0.075	0.090
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	167300	836.5	1	22.28	23.00	1.180	-	-	0.01	0.064	0.076



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	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	167300	836.5	1	22.19	23.00	1.205	-	-	-0.09	0.113	0.136
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	167300	836.5	2	22.19	23.00	1.205	-	-	0.02	0.085	0.102
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.28	23.00	1.180	-	-	-0.15	0.059	0.070
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.19	23.00	1.205	-	-	-0.09	0.054	0.065
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.28	23.00	1.180	-	-	0.05	0.010	0.012
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.19	23.00	1.205	-	-	0.13	0.006	0.007
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.28	23.00	1.180	-	-	0.03	0.079	0.093
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	167300	836.5	1	22.19	23.00	1.205	-	-	-0.12	0.075	0.090
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	20525	836.5	1	22.21	24.00	1.510	-	-	-0.08	0.024	0.036
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 5	20525	836.5	1	21.26	23.00	1.493	-	-	0.1	0.016	0.024
36	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	20525	836.5	1	22.21	24.00	1.510	-	-	-0.05	0.116	0.175
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	20525	836.5	2	22.21	24.00	1.510	-	-	0.02	0.094	0.142
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 5	20525	836.5	1	21.26	23.00	1.493	-	-	0.1	0.104	0.155
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	20525	836.5	1	22.21	24.00	1.510	-	-	0.12	0.007	0.011
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI 5	20525	836.5	1	21.26	23.00	1.493	-	-	0.08	0.004	0.006
	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 5	20525	836.5	1	22.21	24.00	1.510	-	-	-0.17	0.001	0.002
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	DSI 5	20525	836.5	1	21.26	23.00	1.493	-	-	-0.03	0.001	0.001
	LTE Band 5	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	20525	836.5	1	22.21	24.00	1.510	-	-	0.14	0.013	0.020
	LTE Band 5	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	DSI 5	20525	836.5	1	21.26	23.00	1.493	-	-	0.11	0.010	0.015
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 5	1413	1732.6	1	22.76	24.00	1.330	-	-	0.15	0.454	0.604
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.05	0.506	0.673
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	DSI 5	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.07	0.245	0.326
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	DSI 5	1413	1732.6	1	22.76	24.00	1.330	-	-	0.1	0.139	0.185
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	1413	1732.6	1	22.76	24.00	1.330	-	-	-0.11	0.647	0.861
37	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	1312	1712.4	1	22.65	24.00	1.365	-	-	-0.02	0.665	0.907
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	1312	1712.4	2	22.65	24.00	1.365	-	-	0.01	0.628	0.857
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	1513	1752.6	1	22.60	24.00	1.380	-	-	-0.1	0.581	0.802
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 5	132322	1745	1	22.39	24.00	1.449	-	-	0.04	0.521	0.755
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 5	132322	1745	1	21.28	23.00	1.486	-	-	-0.05	0.420	0.624
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	132322	1745	1	22.39	24.00	1.449	-	-	-0.04	0.550	0.797
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 5	132322	1745	1	21.28	23.00	1.486	-	-	0.14	0.440	0.654
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 5	132322	1745	1	22.39	24.00	1.449	-	-	0.03	0.308	0.446
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 5	132322	1745	1	21.28	23.00	1.486	-	-	0.16	0.241	0.358
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 5	132322	1745	1	22.39	24.00	1.449	-	-	0.01	0.162	0.235
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	DSI 5	132322	1745	1	21.28	23.00	1.486	-	-	-0.06	0.127	0.189
38	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	132322	1745	1	22.39	24.00	1.449	-	-	0.02	0.598	0.866
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	132322	1745	2	22.39	24.00	1.449	-	-	0.06	0.567	0.821
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	132072	1720	1	22.24	24.00	1.500	-	-	0.08	0.565	0.847
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	132572	1770	1	22.05	24.00	1.567	-	-	0.01	0.540	0.846
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	DSI 5	132322	1745	1	21.28	23.00	1.486	-	-	0.14	0.491	0.730
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 0	DSI 5	132322	1745	1	21.17	23.00	1.524	-	-	0.03	0.466	0.710
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	132322	1745	1	22.81	24.00	1.315	-	-	-0.02	0.119	0.157
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	132322	1745	1	22.71	24.00	1.346	-	-	-0.16	0.087	0.117
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	132322	1745	1	22.81	24.00	1.315	-	-	-0.08	0.140	0.184
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	132322	1745	2	22.81	24.00	1.315	-	-	0.03	0.094	0.124
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	132322	1745	1	22.71	24.00	1.346	-	-	-0.06	0.135	0.182
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	132322	1745	1	22.81	24.00	1.315	-	-	0.08	0.074	0.097
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 5	132322	1745	1	22.71	24.00	1.346	-	-	-0.07	0.071	0.096
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 5	DSI 5	132322	1745	1	22.81	24.00	1.315	-	-	0.11	0.060	0.079
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 5	DSI 5	132322	1745	1	22.71	24.00	1.346	-	-	-0.13	0.092	0.124
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 5	132322	1745	1	22.81	24.00	1.315	-	-	0.04	0.092	0.121
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 5	132322	1745	1	22.71	24.00	1.346	-	-	0.17	0.067	0.090
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	349000	1745	1	22.38	24.00	1.452	-	-	-0.09	0.388	0.563
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	349000	1745	1	22.26	24.00	1.493	-	-	-0.12	0.357	0.533
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	349000	1745	1	22.38	24.00	1.452	-	-	-0.06	0.411	0.597



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	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	349000	1745	1	22.26	24.00	1.493	-	-	-0.19	0.409	0.611
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	349000	1745	1	22.38	24.00	1.452	-	-	0.09	0.205	0.298
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	349000	1745	1	22.26	24.00	1.493	-	-	0.13	0.189	0.282
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	349000	1745	1	22.38	24.00	1.452	-	-	-0.08	0.113	0.164
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	349000	1745	1	22.26	24.00	1.493	-	-	0.08	0.105	0.157
39	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	349000	1745	1	22.38	24.00	1.452	-	-	0.01	0.545	0.791
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	349000	1745	2	22.38	24.00	1.452	-	-	0.02	0.449	0.652
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	349000	1745	1	22.26	24.00	1.493	-	-	0.12	0.527	0.787
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	349000	1745	1	22.37	24.00	1.455	-	-	0.17	0.046	0.067
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	349000	1745	1	22.33	24.00	1.469	-	-	-0.15	0.054	0.079
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	349000	1745	1	22.37	24.00	1.455	-	-	0.18	0.132	0.192
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	349000	1745	1	22.33	24.00	1.469	-	-	-0.02	0.173	0.254
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	349000	1745	2	22.33	24.00	1.469	-	-	0.01	0.101	0.148
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	349000	1745	1	22.37	24.00	1.455	-	-	0.04	0.087	0.127
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	349000	1745	1	22.33	24.00	1.469	-	-	0.15	0.121	0.178
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	349000	1745	1	22.37	24.00	1.455	-	-	0.03	0.033	0.048
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	349000	1745	1	22.33	24.00	1.469	-	-	-0.1	0.048	0.071
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	349000	1745	1	22.37	24.00	1.455	-	-	0.14	0.045	0.065
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	349000	1745	1	22.33	24.00	1.469	-	-	-0.16	0.050	0.073
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	10mm	Ant 0	DSI 5	661	1880	1	24.54	26.00	1.400	-	-	-0.02	0.146	0.204
40	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	10mm	Ant 0	DSI 5	661	1880	1	24.54	26.00	1.400	-	-	-0.02	0.226	0.316
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	10mm	Ant 0	DSI 5	661	1880	2	24.54	26.00	1.400	-	-	0.01	0.202	0.283
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	10mm	Ant 0	DSI 5	661	1880	1	24.54	26.00	1.400	-	-	-0.1	0.101	0.141
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Side	10mm	Ant 0	DSI 5	661	1880	1	24.54	26.00	1.400	-	-	-0.05	0.059	0.083
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	10mm	Ant 0	DSI 5	661	1880	1	24.54	26.00	1.400	-	-	-0.04	0.224	0.314
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 5	9400	1880	1	23.00	24.00	1.259	-	-	-0.09	0.351	0.442
41	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	9400	1880	1	23.00	24.00	1.259	-	-	-0.04	0.588	0.740
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 5	9400	1880	2	23.00	24.00	1.259	-	-	0.01	0.560	0.705
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	DSI 5	9400	1880	1	23.00	24.00	1.259	-	-	0.15	0.225	0.283
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	DSI 5	9400	1880	1	23.00	24.00	1.259	-	-	-0.15	0.106	0.133
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 5	9400	1880	1	23.00	24.00	1.259	-	-	0.06	0.530	0.667
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 5	26340	1880	1	22.46	24.00	1.426	-	-	0.13	0.314	0.448
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 0	DSI 5	26340	1880	1	21.47	23.00	1.422	-	-	-0.02	0.248	0.353
42	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	26340	1880	1	22.46	24.00	1.426	-	-	-0.15	0.414	0.590
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 5	26340	1880	2	22.46	24.00	1.426	-	-	0.02	0.353	0.503
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 0	DSI 5	26340	1880	1	21.47	23.00	1.422	-	-	0.01	0.326	0.464
	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	DSI 5	26340	1880	1	22.46	24.00	1.426	-	-	0.1	0.203	0.289
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	DSI 5	26340	1880	1	21.47	23.00	1.422	-	-	0.13	0.167	0.238
	LTE Band 25	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 5	26340	1880	1	22.46	24.00	1.426	-	-	-0.04	0.098	0.140
	LTE Band 25	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	DSI 5	26340	1880	1	21.47	23.00	1.422	-	-	-0.12	0.077	0.110
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 5	26340	1880	1	22.46	24.00	1.426	-	-	-0.07	0.392	0.559
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	DSI 5	26340	1880	1	21.47	23.00	1.422	-	-	-0.03	0.314	0.447
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	376500	1882.5	1	22.86	24.00	1.300	-	-	0.05	0.271	0.352
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 5	376500	1882.5	1	22.73	24.00	1.340	-	-	-0.15	0.286	0.383
43	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	376500	1882.5	1	22.86	24.00	1.300	-	-	-0.1	0.440	0.572
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	376500	1882.5	2	22.86	24.00	1.300	-	-	0.03	0.427	0.555
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 5	376500	1882.5	1	22.73	24.00	1.340	-	-	-0.11	0.418	0.560
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.86	24.00	1.300	-	-	0.07	0.173	0.225
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.73	24.00	1.340	-	-	0.01	0.183	0.245
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.86	24.00	1.300	-	-	-0.12	0.080	0.104
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.73	24.00	1.340	-	-	0.19	0.082	0.110
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.86	24.00	1.300	-	-	-0.01	0.409	0.532
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 5	376500	1882.5	1	22.73	24.00	1.340	-	-	-0.19	0.421	0.564



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	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	18900	1880	1	22.68	24.00	1.355	-	-	-0.08	0.054	0.073
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	18900	1880	1	22.59	24.00	1.384	-	-	0.1	0.041	0.057
44	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	18900	1880	1	22.68	24.00	1.355	-	-	-0.11	0.112	0.152
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	18900	1880	2	22.68	24.00	1.355	-	-	0.01	0.085	0.115
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	18900	1880	1	22.59	24.00	1.384	-	-	0.12	0.099	0.137
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	18900	1880	1	22.68	24.00	1.355	-	-	-0.12	0.063	0.085
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 5	18900	1880	1	22.59	24.00	1.384	-	-	-0.15	0.067	0.093
	LTE Band 2	20M	QPSK	1	0	-	Top Side	10mm	Ant 5	DSI 5	18900	1880	1	22.68	24.00	1.355	-	-	-0.19	0.032	0.043
	LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 5	DSI 5	18900	1880	1	22.59	24.00	1.384	-	-	-0.13	0.059	0.082
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 5	18900	1880	1	22.68	24.00	1.355	-	-	-0.05	0.054	0.073
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 5	18900	1880	1	22.59	24.00	1.384	-	-	-0.12	0.047	0.065
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	376000	1880	1	22.79	24.00	1.321	-	-	0.14	0.041	0.054
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	376000	1880	1	22.65	24.00	1.365	-	-	0.03	0.055	0.075
45	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	376000	1880	1	22.79	24.00	1.321	-	-	0.08	0.112	0.148
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	376000	1880	2	22.79	24.00	1.321	-	-	0.02	0.095	0.126
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	376000	1880	1	22.65	24.00	1.365	-	-	0.09	0.108	0.147
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	376000	1880	1	22.79	24.00	1.321	-	-	-0.13	0.083	0.110
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	376000	1880	1	22.65	24.00	1.365	-	-	-0.09	0.064	0.087
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	376000	1880	1	22.79	24.00	1.321	-	-	-0.18	0.033	0.044
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	376000	1880	1	22.65	24.00	1.365	-	-	0.12	0.039	0.053
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	376000	1880	1	22.79	24.00	1.321	-	-	0.11	0.039	0.052
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	376000	1880	1	22.65	24.00	1.365	-	-	0.11	0.036	0.049
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 5	21100	2535	1	22.56	24.00	1.393	-	-	-0.06	0.395	0.550
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 5	21100	2535	1	21.45	23.00	1.429	-	-	-0.02	0.308	0.440
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	21100	2535	1	22.56	24.00	1.393	-	-	0.02	0.602	0.839
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	20850	2510	1	22.27	24.00	1.489	-	-	0.12	0.546	0.813
46	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	21350	2560	1	22.52	24.00	1.406	-	-	-0.06	0.615	0.865
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	21350	2560	2	22.52	24.00	1.406	-	-	0.03	0.551	0.775
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 5	21100	2535	1	21.45	23.00	1.429	-	-	0.02	0.419	0.599
	LTE Band 7	20M	QPSK	100	0	-	Back	10mm	Ant 6	DSI 5	21100	2535	1	21.33	23.00	1.469	-	-	-0.11	0.417	0.613
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI 5	21100	2535	1	22.56	24.00	1.393	-	-	-0.11	0.283	0.394
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 6	DSI 5	21100	2535	1	21.45	23.00	1.429	-	-	-0.05	0.218	0.311
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 6	DSI 5	21100	2535	1	22.56	24.00	1.393	-	-	0.03	0.385	0.536
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 6	DSI 5	21100	2535	1	21.45	23.00	1.429	-	-	-0.06	0.308	0.440
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	21100	2535	1	19.79	21.50	1.483	-	-	0.13	0.321	0.476
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 5	21100	2535	1	19.77	21.50	1.489	-	-	-0.03	0.269	0.401
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	21100	2535	1	19.79	21.50	1.483	-	-	0.12	0.529	0.784
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	21100	2535	2	19.79	21.50	1.483	-	-	0.03	0.425	0.630
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	21100	2535	1	19.77	21.50	1.489	-	-	-0.09	0.500	0.745
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	21100	2535	1	19.79	21.50	1.483	-	-	-0.06	0.369	0.547
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 5	21100	2535	1	19.77	21.50	1.489	-	-	0.07	0.274	0.408
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 5	21100	2535	1	19.79	21.50	1.483	-	-	-0.15	0.031	0.046
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI 5	21100	2535	1	19.77	21.50	1.489	-	-	-0.15	0.029	0.043
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	21100	2535	1	19.79	21.50	1.483	-	-	-0.08	0.243	0.360
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	DSI 5	21100	2535	1	19.77	21.50	1.489	-	-	-0.04	0.208	0.310
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	21100	2535	1	21.75	23.00	1.334	-	-	-0.07	0.083	0.111
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	21100	2535	1	20.70	22.00	1.349	-	-	-0.08	0.075	0.101
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	1	21.75	23.00	1.334	-	-	0.12	0.094	0.125
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	21100	2535	1	20.70	22.00	1.349	-	-	-0.07	0.082	0.111
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	21100	2535	1	21.75	23.00	1.334	-	-	-0.04	0.156	0.208
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	21100	2535	2	21.75	23.00	1.334	-	-	0.01	0.138	0.184
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 5	21100	2535	1	20.70	22.00	1.349	-	-	-0.05	0.135	0.182
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 5	DSI 5	21100	2535	1	21.75	23.00	1.334	-	-	-0.04	0.026	0.035
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 5	DSI 5	21100	2535	1	20.70	22.00	1.349	-	-	0.13	0.016	0.022
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 5	21100	2535	1	21.75	23.00	1.334	-	-	-0.03	0.037	0.049



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	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 5	21100	2535	1	20.70	22.00	1.349	-	-	0.09	0.029	0.039
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 7	DSI 5	21100	2535	1	20.49	22.00	1.416	-	-	-0.04	0.112	0.159
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 7	DSI 5	21100	2535	1	19.43	21.00	1.435	-	-	0.17	0.087	0.125
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 5	21100	2535	1	20.49	22.00	1.416	-	-	0.02	0.246	0.348
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 5	21100	2535	2	20.49	22.00	1.416	-	-	0.09	0.218	0.309
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 7	DSI 5	21100	2535	1	19.43	21.00	1.435	-	-	0.06	0.188	0.270
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 7	DSI 5	21100	2535	1	20.49	22.00	1.416	-	-	0.01	0.205	0.290
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 7	DSI 5	21100	2535	1	19.43	21.00	1.435	-	-	-0.11	0.161	0.231
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 5	21100	2535	1	20.49	22.00	1.416	-	-	0.03	0.067	0.095
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 5	21100	2535	1	19.43	21.00	1.435	-	-	0.09	0.050	0.072
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 7	DSI 5	21100	2535	1	20.49	22.00	1.416	-	-	-0.02	0.028	0.040
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 7	DSI 5	21100	2535	1	19.43	21.00	1.435	-	-	0.15	0.020	0.029
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 5	40620	2593	1	22.26	24.00	1.493	62.9	1.006	-0.03	0.329	0.494
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 5	40620	2593	1	21.16	23.00	1.528	62.9	1.006	0.03	0.263	0.404
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	40620	2593	1	22.26	24.00	1.493	62.9	1.006	0.05	0.456	0.685
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	40620	2593	2	22.26	24.00	1.493	62.9	1.006	0.01	0.437	0.656
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	39750	2506	1	22.16	24.00	1.528	62.9	1.006	0.08	0.422	0.649
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	40185	2549.5	1	22.17	24.00	1.524	62.9	1.006	0.01	0.416	0.638
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	41055	2636.5	1	22.16	24.00	1.528	62.9	1.006	0.03	0.420	0.645
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 5	41490	2680	1	22.24	24.00	1.500	62.9	1.006	-0.08	0.419	0.632
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 5	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.17	0.356	0.547
	LTE Band 41	20M	QPSK	100	0	-	Back	10mm	Ant 6	DSI 5	40620	2593	1	21.07	23.00	1.560	62.9	1.006	0.06	0.341	0.535
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 6	DSI 5	40620	2593	1	22.26	24.00	1.493	62.9	1.006	0.02	0.264	0.396
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 6	DSI 5	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.11	0.215	0.330
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 6	DSI 5	40620	2593	1	22.26	24.00	1.493	62.9	1.006	0.18	0.201	0.302
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 6	DSI 5	40620	2593	1	21.16	23.00	1.528	62.9	1.006	0.16	0.197	0.303
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 5	40620	2593	1	20.00	21.50	1.413	62.9	1.006	0.06	0.241	0.342
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 5	40620	2593	1	19.92	21.50	1.439	62.9	1.006	0.15	0.200	0.289
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	40620	2593	1	20.00	21.50	1.413	62.9	1.006	-0.08	0.521	0.740
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	39750	2506	1	19.92	21.50	1.439	62.9	1.006	-0.05	0.506	0.732
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	40185	2549.5	1	19.95	21.50	1.429	62.9	1.006	-0.18	0.525	0.755
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	41055	2636.5	1	19.94	21.50	1.432	62.9	1.006	-0.08	0.518	0.746
47	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	41490	2680	1	19.97	21.50	1.422	62.9	1.006	-0.05	0.546	0.781
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 5	41490	2680	2	19.97	21.50	1.422	62.9	1.006	0.03	0.434	0.621
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	40620	2593	1	19.92	21.50	1.439	62.9	1.006	0.18	0.496	0.718
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	39750	2506	1	19.84	21.50	1.466	62.9	1.006	0.1	0.497	0.733
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	40185	2549.5	1	19.86	21.50	1.459	62.9	1.006	0.03	0.475	0.697
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	41055	2636.5	1	19.84	21.50	1.466	62.9	1.006	0.04	0.470	0.693
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 5	41490	2680	1	19.91	21.50	1.442	62.9	1.006	-0.09	0.452	0.656
	LTE Band 41	20M	QPSK	100	0	-	Back	10mm	Ant 1	DSI 5	40620	2593	1	19.87	21.50	1.455	62.9	1.006	0.06	0.442	0.647
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 5	40620	2593	1	20.00	21.50	1.413	62.9	1.006	0.11	0.248	0.352
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 5	40620	2593	1	19.92	21.50	1.439	62.9	1.006	0.14	0.211	0.305
	LTE Band 41	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	DSI 5	40620	2593	1	20.00	21.50	1.413	62.9	1.006	-0.15	0.020	0.028
	LTE Band 41	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	DSI 5	40620	2593	1	19.92	21.50	1.439	62.9	1.006	0.02	0.015	0.022
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 5	40620	2593	1	20.00	21.50	1.413	62.9	1.006	-0.03	0.241	0.342
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	DSI 5	40620	2593	1	19.92	21.50	1.439	62.9	1.006	-0.16	0.190	0.275
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 5	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.08	0.086	0.118
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 5	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.01	0.066	0.089
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 5	40620	2593	1	22.65	24.00	1.365	62.9	1.006	-0.04	0.093	0.128
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 5	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.17	0.072	0.097
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.06	0.161	0.221
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 5	40620	2593	2	22.65	24.00	1.365	62.9	1.006	0.02	0.154	0.211
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 5	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.18	0.121	0.163
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 5	DSI 5	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.03	0.039	0.054
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 5	DSI 5	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.01	0.033	0.044
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 5	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.04	0.030	0.041



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	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 5	40620	2593	1	21.73	23.00	1.340	62.9	1.006	-0.16	0.023	0.031
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 7	DSI 5	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.08	0.119	0.159
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 7	DSI 5	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.18	0.095	0.129
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 5	40620	2593	1	21.28	22.50	1.324	62.9	1.006	0.09	0.247	0.329
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 5	40620	2593	2	21.28	22.50	1.324	62.9	1.006	0.03	0.210	0.280
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 7	DSI 5	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.13	0.205	0.278
	LTE Band 41	20M	QPSK	1	0	-	Right Side	10mm	Ant 7	DSI 5	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.03	0.210	0.280
	LTE Band 41	20M	QPSK	50	0	-	Right Side	10mm	Ant 7	DSI 5	40620	2593	1	20.21	21.50	1.346	62.9	1.006	0.02	0.170	0.230
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 5	40620	2593	1	21.28	22.50	1.324	62.9	1.006	0.02	0.063	0.084
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 5	40620	2593	1	20.21	21.50	1.346	62.9	1.006	0.11	0.049	0.066
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 7	DSI 5	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.17	0.034	0.045
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 7	DSI 5	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.04	0.026	0.035
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 6	DSI 5	507000	2535	1	22.27	23.00	1.183	-	-	-0.07	0.421	0.498
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 6	DSI 5	507000	2535	1	22.18	23.00	1.208	-	-	0.04	0.413	0.499
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	507000	2535	1	22.27	23.00	1.183	-	-	0.01	0.677	0.801
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	502000	2510	1	22.20	23.00	1.202	-	-	0.04	0.667	0.802
48	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	512000	2560	1	22.22	23.00	1.197	-	-	-0.07	0.674	0.807
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	512000	2560	2	22.22	23.00	1.197	-	-	0.01	0.624	0.747
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	507000	2535	1	22.18	23.00	1.208	-	-	-0.06	0.632	0.763
	FR1 n7	20M	QPSK	100	0	DFT-SCS-15KHz	Back	10mm	Ant 6	DSI 5	507000	2535	1	21.06	22.00	1.242	-	-	0.03	0.495	0.615
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 6	DSI 5	507000	2535	1	22.27	23.00	1.183	-	-	-0.03	0.317	0.375
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 6	DSI 5	507000	2535	1	22.18	23.00	1.208	-	-	0.09	0.333	0.402
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 6	DSI 5	507000	2535	1	22.27	23.00	1.183	-	-	-0.13	0.455	0.538
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 6	DSI 5	507000	2535	1	22.18	23.00	1.208	-	-	-0.17	0.459	0.554
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	507000	2535	1	22.35	23.00	1.161	-	-	0.1	0.266	0.309
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 5	507000	2535	1	22.25	23.00	1.189	-	-	0.07	0.270	0.321
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	507000	2535	1	22.35	23.00	1.161	-	-	0.01	0.393	0.456
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	507000	2535	2	22.35	23.00	1.161	-	-	0.06	0.262	0.304
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 5	507000	2535	1	22.25	23.00	1.189	-	-	0.04	0.367	0.436
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	507000	2535	1	22.35	23.00	1.161	-	-	-0.18	0.197	0.229
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 5	507000	2535	1	22.25	23.00	1.189	-	-	0.06	0.207	0.246
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	507000	2535	1	22.35	23.00	1.161	-	-	0.18	0.023	0.027
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 1	DSI 5	507000	2535	1	22.25	23.00	1.189	-	-	-0.19	0.031	0.037
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	507000	2535	1	22.35	23.00	1.161	-	-	0.17	0.185	0.215
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 1	DSI 5	507000	2535	1	22.25	23.00	1.189	-	-	-0.16	0.191	0.227
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	507000	2535	1	22.56	24.00	1.393	-	-	0.03	0.058	0.081
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 5	507000	2535	1	22.47	24.00	1.422	-	-	0.12	0.059	0.084
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	507000	2535	1	22.56	24.00	1.393	-	-	-0.17	0.064	0.089
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 5	507000	2535	1	22.47	24.00	1.422	-	-	-0.17	0.067	0.095
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	507000	2535	1	22.56	24.00	1.393	-	-	0.02	0.107	0.149
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	507000	2535	1	22.47	24.00	1.422	-	-	-0.1	0.110	0.156
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 5	507000	2535	2	22.47	24.00	1.422	-	-	0.06	0.102	0.145
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	507000	2535	1	22.56	24.00	1.393	-	-	-0.03	0.025	0.035
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 5	DSI 5	507000	2535	1	22.47	24.00	1.422	-	-	0.01	0.033	0.047
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	507000	2535	1	22.56	24.00	1.393	-	-	0.09	0.028	0.039
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 5	507000	2535	1	22.47	24.00	1.422	-	-	-0.02	0.034	0.048
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 7	DSI 5	507000	2535	1	21.41	23.00	1.442	-	-	-0.16	0.126	0.182
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 7	DSI 5	507000	2535	1	21.34	23.00	1.466	-	-	-0.03	0.123	0.180
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 7	DSI 5	507000	2535	1	21.41	23.00	1.442	-	-	0.03	0.267	0.385
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 7	DSI 5	507000	2535	1	21.34	23.00	1.466	-	-	-0.14	0.277	0.406
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 7	DSI 5	507000	2535	2	21.34	23.00	1.466	-	-	0.02	0.240	0.352
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 7	DSI 5	507000	2535	1	21.41	23.00	1.442	-	-	0.03	0.219	0.316
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 7	DSI 5	507000	2535	1	21.34	23.00	1.466	-	-	0.06	0.213	0.312
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 7	DSI 5	507000	2535	1	21.41	23.00	1.442	-	-	0.12	0.099	0.143
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	10mm	Ant 7	DSI 5	507000	2535	1	21.34	23.00	1.466	-	-	-0.03	0.073	0.107
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 7	DSI 5	507000	2535	1	21.41	23.00	1.442	-	-	0.11	0.071	0.102



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	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 7	DSI 5	507000	2535	1	21.34	23.00	1.466	-	-	0.08	0.078	0.114
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	518598	2592.99	1	22.35	23.00	1.161	-	-	0.09	0.312	0.362
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	518598	2592.99	1	22.25	23.00	1.189	-	-	-0.12	0.264	0.314
49	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	518598	2592.99	1	22.35	23.00	1.161	-	-	-0.08	0.455	0.528
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	518598	2592.99	2	22.35	23.00	1.161	-	-	0.03	0.420	0.488
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	518598	2592.99	1	22.25	23.00	1.189	-	-	0.1	0.290	0.345
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	518598	2592.99	1	22.35	23.00	1.161	-	-	-0.16	0.246	0.286
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	518598	2592.99	1	22.25	23.00	1.189	-	-	-0.1	0.257	0.305
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	518598	2592.99	1	22.35	23.00	1.161	-	-	0.17	0.309	0.359
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	518598	2592.99	1	22.25	23.00	1.189	-	-	0.12	0.182	0.216
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	518598	2592.99	1	24.39	25.00	1.151	50	1.000	-0.07	0.345	0.397
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	518598	2592.99	1	21.80	23.00	1.318	-	-	-0.1	0.082	0.108
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 5	518598	2592.99	1	21.54	23.00	1.400	-	-	0.16	0.110	0.154
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	518598	2592.99	1	21.80	23.00	1.318	-	-	-0.09	0.205	0.270
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	518598	2592.99	1	21.54	23.00	1.400	-	-	-0.06	0.289	0.404
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	518598	2592.99	2	21.54	23.00	1.400	-	-	0.03	0.193	0.270
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.80	23.00	1.318	-	-	-0.09	0.102	0.134
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.54	23.00	1.400	-	-	0.08	0.151	0.211
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.80	23.00	1.318	-	-	0.06	0.023	0.030
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.54	23.00	1.400	-	-	0.1	0.040	0.056
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.80	23.00	1.318	-	-	0.1	0.154	0.203
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 1	DSI 5	518598	2592.99	1	21.54	23.00	1.400	-	-	-0.07	0.173	0.242
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 5	518598	2592.99	1	23.60	25.00	1.380	50	1.000	0.12	0.222	0.306
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	518598	2592.99	1	22.13	23.00	1.222	-	-	0.15	0.064	0.078
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	518598	2592.99	1	21.67	23.00	1.358	-	-	-0.11	0.095	0.129
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	518598	2592.99	1	22.13	23.00	1.222	-	-	-0.05	0.098	0.120
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	518598	2592.99	1	21.67	23.00	1.358	-	-	0.02	0.117	0.159
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	518598	2592.99	1	22.13	23.00	1.222	-	-	0.11	0.131	0.160
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	518598	2592.99	2	22.13	23.00	1.222	-	-	0.02	0.124	0.152
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	518598	2592.99	1	21.67	23.00	1.358	-	-	-0.11	0.117	0.159
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	518598	2592.99	1	22.13	23.00	1.222	-	-	0.03	0.047	0.057
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	518598	2592.99	1	21.67	23.00	1.358	-	-	0.05	0.061	0.083
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	518598	2592.99	1	22.13	23.00	1.222	-	-	-0.14	0.112	0.137
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	518598	2592.99	1	21.67	23.00	1.358	-	-	-0.17	0.074	0.101
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	518598	2592.99	1	24.03	25.00	1.250	50	1.000	-0.18	0.099	0.124
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	518598	2592.99	1	20.15	21.00	1.216	-	-	0.05	0.111	0.135
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 5	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.03	0.140	0.172
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	518598	2592.99	1	20.15	21.00	1.216	-	-	-0.03	0.194	0.236
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	518598	2592.99	2	20.15	21.00	1.216	-	-	0.01	0.176	0.214
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	518598	2592.99	1	20.10	21.00	1.230	-	-	0.02	0.178	0.219
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.15	21.00	1.216	-	-	0.18	0.160	0.195
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.10	21.00	1.230	-	-	0.1	0.154	0.189
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.15	21.00	1.216	-	-	-0.05	0.117	0.142
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.01	0.089	0.109
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.15	21.00	1.216	-	-	0.02	0.033	0.040
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 7	DSI 5	518598	2592.99	1	20.10	21.00	1.230	-	-	-0.03	0.078	0.096
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 5	518598	2592.99	1	21.98	23.00	1.265	50	1.000	-0.01	0.153	0.194
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 5	42590	3500	1	20.86	22.00	1.300	62.9	1.006	0.06	0.139	0.182
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 5	42590	3500	1	20.82	22.00	1.312	62.9	1.006	0.15	0.120	0.158
50	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	42590	3500	1	20.86	22.00	1.300	62.9	1.006	-0.06	0.595	0.778
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	42590	3500	2	20.86	22.00	1.300	62.9	1.006	0.02	0.476	0.623
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	42590	3500	1	20.82	22.00	1.312	62.9	1.006	0.1	0.568	0.750
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	10mm	Ant 8	DSI 5	42590	3500	1	20.86	22.00	1.300	62.9	1.006	-0.02	0.337	0.441
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	10mm	Ant 8	DSI 5	42590	3500	1	20.82	22.00	1.312	62.9	1.006	-0.12	0.314	0.415
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Top Side	10mm	Ant 8	DSI 5	42590	3500	1	20.86	22.00	1.300	62.9	1.006	-0.08	0.114	0.149



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	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Top Side	10mm	Ant 8	DSI 5	42590	3500	1	20.82	22.00	1.312	62.9	1.006	0.04	0.119	0.157
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 5	55830	3609	1	20.95	22.00	1.274	62.9	1.006	-0.02	0.165	0.211
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 5	55830	3609	1	20.88	22.00	1.294	62.9	1.006	0.04	0.133	0.173
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	55830	3609	1	20.95	22.00	1.274	62.9	1.006	-0.18	0.517	0.662
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	55340	3560	1	20.89	22.00	1.291	62.9	1.006	-0.07	0.544	0.707
51	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	56150	3641	1	20.93	22.00	1.279	62.9	1.006	0.03	0.570	0.734
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	56150	3641	2	20.93	22.00	1.279	62.9	1.006	0.01	0.484	0.623
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 5	56640	3690	1	20.88	22.00	1.294	62.9	1.006	-0.07	0.557	0.725
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	55830	3609	1	20.88	22.00	1.294	62.9	1.006	0.1	0.494	0.643
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	55340	3560	1	20.86	22.00	1.300	62.9	1.006	0.05	0.500	0.654
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	56150	3641	1	20.87	22.00	1.297	62.9	1.006	0.18	0.489	0.638
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 5	56640	3690	1	20.79	22.00	1.321	62.9	1.006	0.12	0.497	0.661
	LTE Band 48	20M	QPSK	100	0	-	Back	10mm	Ant 8	DSI 5	55830	3609	1	20.84	22.00	1.306	62.9	1.006	0.02	0.494	0.649
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 8	DSI 5	55830	3609	1	20.95	22.00	1.274	62.9	1.006	0.04	0.296	0.379
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 8	DSI 5	55830	3609	1	20.88	22.00	1.294	62.9	1.006	0.04	0.282	0.367
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 8	DSI 5	55830	3609	1	20.95	22.00	1.274	62.9	1.006	0.1	0.116	0.149
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 8	DSI 5	55830	3609	1	20.88	22.00	1.294	62.9	1.006	-0.09	0.092	0.120
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	641666	3624.99	1	17.60	19.00	1.380	-	-	-0.18	0.121	0.167
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	641666	3624.99	1	17.53	19.00	1.403	-	-	-0.05	0.100	0.140
52	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	641666	3624.99	1	17.60	19.00	1.380	-	-	-0.06	0.354	0.489
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	641666	3624.99	2	17.60	19.00	1.380	-	-	0.01	0.323	0.446
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	641666	3624.99	1	17.53	19.00	1.403	-	-	-0.11	0.330	0.463
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	641666	3624.99	1	17.60	19.00	1.380	-	-	0.08	0.305	0.421
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	641666	3624.99	1	17.53	19.00	1.403	-	-	-0.06	0.281	0.394
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	641666	3624.99	1	17.60	19.00	1.380	-	-	0.15	0.096	0.133
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	641666	3624.99	1	17.53	19.00	1.403	-	-	-0.17	0.095	0.133
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	641666	3624.99	1	21.32	22.00	1.169	-	-	0.18	0.067	0.078
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	641666	3624.99	1	21.14	22.00	1.219	-	-	-0.07	0.097	0.118
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	641666	3624.99	1	21.32	22.00	1.169	-	-	-0.07	0.409	0.478
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	641666	3624.99	2	21.32	22.00	1.169	-	-	0.02	0.339	0.396
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	641666	3624.99	1	21.14	22.00	1.219	-	-	0.03	0.360	0.439
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.32	22.00	1.169	-	-	0.13	0.389	0.455
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.14	22.00	1.219	-	-	-0.15	0.383	0.467
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.32	22.00	1.169	-	-	-0.04	0.058	0.068
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.14	22.00	1.219	-	-	0.12	0.064	0.078
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.32	22.00	1.169	-	-	-0.09	0.098	0.115
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	641666	3624.99	1	21.14	22.00	1.219	-	-	0.07	0.093	0.113
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	656000	3840	1	16.60	18.00	1.380	-	-	0.05	0.114	0.157
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	656000	3840	1	16.55	18.00	1.396	-	-	-0.16	0.109	0.152
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	656000	3840	1	16.60	18.00	1.380	-	-	0.08	0.520	0.718
53	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	656000	3840	1	16.55	18.00	1.396	-	-	0.02	0.552	0.771
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	656000	3840	2	16.55	18.00	1.396	-	-	0.03	0.485	0.677
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	656000	3840	1	16.60	18.00	1.380	-	-	-0.09	0.336	0.464
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	656000	3840	1	16.55	18.00	1.396	-	-	0.18	0.310	0.433
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	656000	3840	1	16.60	18.00	1.380	-	-	0.06	0.193	0.266
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	656000	3840	1	16.55	18.00	1.396	-	-	-0.05	0.179	0.250
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	656000	3840	1	19.46	21.00	1.426	50	1.000	-0.02	0.531	0.757
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	633334	3500.01	1	17.75	18.00	1.059	-	-	0.04	0.094	0.100
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 5	633334	3500.01	1	17.71	18.00	1.069	-	-	-0.16	0.124	0.133
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	633334	3500.01	1	17.75	18.00	1.059	-	-	-0.17	0.505	0.535
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	633334	3500.01	1	17.71	18.00	1.069	-	-	0.02	0.511	0.546
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	633334	3500.01	2	17.71	18.00	1.069	-	-	0.03	0.489	0.523
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	633334	3500.01	1	17.75	18.00	1.059	-	-	-0.04	0.247	0.262
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 8	DSI 5	633334	3500.01	1	17.71	18.00	1.069	-	-	0.03	0.340	0.363
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	633334	3500.01	1	17.75	18.00	1.059	-	-	0.13	0.090	0.095
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 5	633334	3500.01	1	17.71	18.00	1.069	-	-	0.15	0.099	0.106



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FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 5	633334	3500.01	1	20.20	21.00	1.202	50	1.000	0.06	0.429	0.516
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	656000	3840	1	21.49	23.00	1.416	-	-	0.13	0.031	0.044
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	656000	3840	1	21.41	23.00	1.442	-	-	-0.03	0.047	0.068
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	656000	3840	1	21.49	23.00	1.416	-	-	0.13	0.086	0.122
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	656000	3840	1	21.41	23.00	1.442	-	-	-0.19	0.087	0.125
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	656000	3840	2	21.41	23.00	1.442	-	-	0.01	0.072	0.104
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	656000	3840	1	21.49	23.00	1.416	-	-	0.09	0.066	0.093
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	656000	3840	1	21.41	23.00	1.442	-	-	0.15	0.074	0.107
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	656000	3840	1	21.49	23.00	1.416	-	-	-0.11	0.041	0.058
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	656000	3840	1	21.41	23.00	1.442	-	-	0.18	0.018	0.026
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	656000	3840	1	21.49	23.00	1.416	-	-	0.18	0.059	0.084
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	656000	3840	1	21.41	23.00	1.442	-	-	0.14	0.065	0.094
FR1 n77 Part 27Q HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	656000	3840	1	24.09	26.00	1.552	50	1.000	-0.11	0.078	0.121
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.02	0.026	0.036
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 5	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.13	0.052	0.076
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	633334	3500.01	1	21.60	23.00	1.380	-	-	0.05	0.055	0.076
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.09	0.076	0.111
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	633334	3500.01	2	21.36	23.00	1.459	-	-	0.02	0.063	0.092
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.02	0.040	0.055
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.05	0.024	0.035
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.17	0.035	0.048
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.36	23.00	1.459	-	-	0.01	0.028	0.041
FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.60	23.00	1.380	-	-	-0.17	0.044	0.061
FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 5	633334	3500.01	1	21.36	23.00	1.459	-	-	-0.05	0.051	0.074
FR1 n77 Part 27Q HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 5	633334	3500.01	1	24.24	26.00	1.500	50	1.000	-0.07	0.069	0.103
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	656000	3840	1	22.44	23.00	1.138	-	-	0.18	0.036	0.041
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	656000	3840	1	22.43	23.00	1.140	-	-	-0.19	0.034	0.039
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	656000	3840	1	22.44	23.00	1.138	-	-	-0.01	0.069	0.078
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	656000	3840	2	22.44	23.00	1.138	-	-	0.03	0.066	0.075
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	656000	3840	1	22.43	23.00	1.140	-	-	0.04	0.044	0.050
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	656000	3840	1	22.44	23.00	1.138	-	-	0.01	0.031	0.035
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	656000	3840	1	22.43	23.00	1.140	-	-	-0.18	0.033	0.038
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	656000	3840	1	22.44	23.00	1.138	-	-	0.08	0.035	0.040
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	656000	3840	1	22.43	23.00	1.140	-	-	-0.07	0.018	0.021
FR1 n77 Part 27Q HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	656000	3840	1	24.53	26.00	1.403	50	1.000	0.03	0.053	0.074
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	633334	3500.01	1	22.23	23.00	1.194	-	-	-0.05	0.028	0.033
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 5	633334	3500.01	1	22.14	23.00	1.219	-	-	-0.07	0.018	0.022
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	633334	3500.01	1	22.23	23.00	1.194	-	-	-0.06	0.033	0.039
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	633334	3500.01	1	22.14	23.00	1.219	-	-	0.05	0.041	0.050
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	633334	3500.01	2	22.14	23.00	1.219	-	-	0.01	0.033	0.040
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	633334	3500.01	1	22.23	23.00	1.194	-	-	0.04	0.024	0.029
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 6	DSI 5	633334	3500.01	1	22.14	23.00	1.219	-	-	0.08	0.023	0.028
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	633334	3500.01	1	22.23	23.00	1.194	-	-	-0.09	0.027	0.032
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 6	DSI 5	633334	3500.01	1	22.14	23.00	1.219	-	-	0.03	0.020	0.024
FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 5	633334	3500.01	1	24.83	26.00	1.309	50	1.000	-0.12	0.037	0.048
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 9	DSI 5	656000	3840	1	23.48	24.00	1.127	-	-	0.16	0.241	0.272
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 9	DSI 5	656000	3840	1	23.38	24.00	1.153	-	-	-0.1	0.249	0.287
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 9	DSI 5	656000	3840	1	23.48	24.00	1.127	-	-	0.12	0.283	0.319
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 9	DSI 5	656000	3840	1	23.38	24.00	1.153	-	-	0.1	0.260	0.300
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	656000	3840	1	23.48	24.00	1.127	-	-	-0.04	0.387	0.436
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	656000	3840	1	23.38	24.00	1.153	-	-	-0.09	0.419	0.483
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	656000	3840	2	23.38	24.00	1.153	-	-	0.06	0.353	0.407
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 9	DSI 5	656000	3840	1	23.48	24.00	1.127	-	-	0.02	0.198	0.223
FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 9	DSI 5	656000	3840	1	23.38	24.00	1.153	-	-	-0.14	0.178	0.205
FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	650000	3750	1	25.43	26.00	1.140	50	1.000	0.05	0.336	0.383
FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 9	DSI 5	633332	3499.98	1	23.77	24.00	1.054	-	-	0.03	0.304	0.321



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	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 9	DSI 5	633332	3499.98	1	23.63	24.00	1.089	-	-	0.07	0.260	0.283
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 9	DSI 5	633332	3499.98	1	23.77	24.00	1.054	-	-	-0.15	0.222	0.234
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 9	DSI 5	633332	3499.98	1	23.63	24.00	1.089	-	-	0.06	0.202	0.220
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	633332	3499.98	1	23.77	24.00	1.054	-	-	0.02	0.452	0.477
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	633332	3499.98	2	23.77	24.00	1.054	-	-	0.01	0.334	0.352
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	633332	3499.98	1	23.63	24.00	1.089	-	-	0.11	0.355	0.387
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 9	DSI 5	633332	3499.98	1	23.77	24.00	1.054	-	-	-0.03	0.296	0.312
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 9	DSI 5	633332	3499.98	1	23.63	24.00	1.089	-	-	-0.16	0.264	0.287
	FR1 n77 Part 27Q HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 9	DSI 5	633332	3499.98	1	24.93	26.00	1.279	50	1.000	0.01	0.318	0.407

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)
WLAN/BT																	
54	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 2+4(4)	Reduced	1	2412	1	12.72	14.50	1.507	100	1.000	0.04	0.136	0.205
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 2+4(4)	Reduced	1	2412	1	12.72	14.50	1.507	100	1.000	-0.12	0.192	0.289
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 2+4(4)	Reduced	1	2412	2	12.72	14.50	1.507	100	1.000	0.06	0.176	0.265
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 2+4(4)	Reduced	1	2412	1	12.72	14.50	1.507	100	1.000	-0.08	0.085	0.128
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2+4(4)	Reduced	1	2412	1	12.72	14.50	1.507	100	1.000	0.05	0.066	0.099
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 2+4(4)	Reduced	1	2412	1	12.72	14.50	1.507	100	1.000	0.06	0.142	0.214
55	Bluetooth	1Mbps	Front	10mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	-0.09	0.058	0.069
	Bluetooth	1Mbps	Back	10mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	-0.06	0.238	0.281
	Bluetooth	1Mbps	Back	10mm	Ant 2	Full power	39	2441	2	6.62	7.00	1.091	76.91	1.083	0.01	0.196	0.232
	Bluetooth	1Mbps	Left Side	10mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.13	0.085	0.100
	Bluetooth	1Mbps	Right Side	10mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.12	0.134	0.158
	Bluetooth	1Mbps	Top Side	10mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.03	0.087	0.103
56	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+4(4)	Reduced	42	5210	1	9.36	11.00	1.459	100	1.000	0.18	0.063	0.092
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+4(4)	Reduced	42	5210	1	9.36	11.00	1.459	100	1.000	0.07	0.203	0.296
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+4(4)	Reduced	42	5210	2	9.36	11.00	1.459	100	1.000	0.01	0.179	0.261
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3+4(4)	Reduced	42	5210	1	9.36	11.00	1.459	100	1.000	-0.1	0.157	0.229
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3+4(4)	Reduced	42	5210	1	9.36	11.00	1.459	100	1.000	0.07	0.148	0.216
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3+4(4)	Reduced	42	5210	1	9.36	11.00	1.459	100	1.000	0.18	0.150	0.219
57	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+4(3)	Reduced	155	5775	1	11.22	13.00	1.507	100	1.000	-0.08	0.040	0.060
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+4(3)	Reduced	155	5775	1	11.22	13.00	1.507	100	1.000	0.03	0.193	0.291
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+4(3)	Reduced	155	5775	2	11.22	13.00	1.507	100	1.000	0.01	0.141	0.212
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3+4(3)	Reduced	155	5775	1	11.22	13.00	1.507	100	1.000	-0.04	0.096	0.145
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3+4(3)	Reduced	155	5775	1	11.22	13.00	1.507	100	1.000	-0.08	0.130	0.196
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3+4(3)	Reduced	155	5775	1	11.22	13.00	1.507	100	1.000	0.18	0.077	0.116



15.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)
750MHz																					
58	LTE Band 12	10M	QPSK	1	0		Front	15mm	Ant 0	DSI 4	23095	707.5	1	22.57	24.00	1.390		1.000	0.08	0.120	0.167
	LTE Band 12	10M	QPSK	25	0		Front	15mm	Ant 0	DSI 4	23095	707.5	1	21.59	23.00	1.384		1.000	0.01	0.097	0.134
	LTE Band 12	10M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	23095	707.5	1	22.57	24.00	1.390		1.000	-0.03	0.222	0.309
	LTE Band 12	10M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	23095	707.5	2	22.57	24.00	1.390		1.000	0.06	0.128	0.178
	LTE Band 12	10M	QPSK	25	0		Back	15mm	Ant 0	DSI 4	23095	707.5	1	21.59	23.00	1.384		1.000	0.03	0.173	0.239
	LTE Band 12	10M	QPSK	1	0		Front	15mm	Ant 1	DSI 4	23095	707.5	1	21.99	23.00	1.262		1.000	0.12	0.010	0.013
	LTE Band 12	10M	QPSK	25	0		Front	15mm	Ant 1	DSI 4	23095	707.5	1	20.86	22.00	1.300		1.000	0.08	0.005	0.007
	LTE Band 12	10M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	23095	707.5	1	21.99	23.00	1.262		1.000	0.02	0.039	0.049
	LTE Band 12	10M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	23095	707.5	2	21.99	23.00	1.262		1.000	0.01	0.020	0.025
	LTE Band 12	10M	QPSK	25	0		Back	15mm	Ant 1	DSI 4	23095	707.5	1	20.86	22.00	1.300		1.000	-0.17	0.026	0.034
59	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	141500	707.5	1	22.41	24.00	1.442		1.000	-0.08	0.101	0.146
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	141500	707.5	1	22.33	24.00	1.469		1.000	0.1	0.082	0.120
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	141500	707.5	1	22.41	24.00	1.442		1.000	0.05	0.188	0.271
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	141500	707.5	2	22.41	24.00	1.442		1.000	0.08	0.146	0.211
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	141500	707.5	1	22.33	24.00	1.469		1.000	-0.18	0.150	0.220
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	141500	707.5	1	22.08	23.00	1.236		1.000	0.14	0.009	0.011
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	141500	707.5	1	21.96	23.00	1.271		1.000	0.11	0.006	0.008
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	141500	707.5	1	22.08	23.00	1.236		1.000	0.03	0.030	0.037
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	141500	707.5	2	22.08	23.00	1.236		1.000	0.02	0.022	0.027
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	141500	707.5	1	21.96	23.00	1.271		1.000	0.18	0.022	0.028
835MHz																					
60	GSM850					GPRS (1 Tx slot)	Front	15mm	Ant 0	DSI 4	189	836.4	1	31.64	32.50	1.219		1.000	0.17	0.112	0.137
	GSM850					GPRS (1 Tx slot)	Back	15mm	Ant 0	DSI 4	189	836.4	1	31.64	32.50	1.219		1.000	-0.06	0.194	0.236
	GSM850					GPRS (1 Tx slot)	Back	15mm	Ant 0	DSI 4	189	836.4	2	31.64	32.50	1.219		1.000	0.03	0.133	0.162
	GSM850					GPRS (2 Tx slots)	Front	15mm	Ant 1	DSI 4	189	836.4	1	30.69	32.00	1.352		1.000	0.18	0.061	0.082
	GSM850					GPRS (2 Tx slots)	Back	15mm	Ant 1	DSI 4	189	836.4	1	30.69	32.00	1.352		1.000	0.04	0.094	0.127
	GSM850					GPRS (2 Tx slots)	Back	15mm	Ant 1	DSI 4	189	836.4	2	30.69	32.00	1.352		1.000	0.02	0.068	0.092
61	WCDMA V					RMC 12.2Kbps	Front	15mm	Ant 0	DSI 4	4182	836.4	1	23.09	24.00	1.233		1.000	-0.17	0.151	0.186
	WCDMA V					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	4182	836.4	1	23.09	24.00	1.233		1.000	-0.01	0.236	0.291
	WCDMA V					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	4182	836.4	2	23.09	24.00	1.233		1.000	0.01	0.162	0.200
	WCDMA V					RMC 12.2Kbps	Front	15mm	Ant 1	DSI 4	4182	836.4	1	22.59	24.00	1.384		1.000	0.07	0.088	0.122
	WCDMA V					RMC 12.2Kbps	Back	15mm	Ant 1	DSI 4	4182	836.4	1	22.59	24.00	1.384		1.000	0.04	0.114	0.158
	WCDMA V					RMC 12.2Kbps	Back	15mm	Ant 1	DSI 4	4182	836.4	2	22.59	24.00	1.384		1.000	0.03	0.095	0.131
62	LTE Band 26	15M	QPSK	1	0		Front	15mm	Ant 0	DSI 4	26865	831.5	1	22.66	24.00	1.361		1.000	-0.08	0.108	0.147
	LTE Band 26	15M	QPSK	36	0		Front	15mm	Ant 0	DSI 4	26865	831.5	1	21.68	23.00	1.355		1.000	0.05	0.091	0.123
	LTE Band 26	15M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	26865	831.5	1	22.66	24.00	1.361		1.000	-0.05	0.190	0.259
	LTE Band 26	15M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	26865	831.5	2	22.66	24.00	1.361		1.000	0.03	0.126	0.172
	LTE Band 26	15M	QPSK	36	0		Back	15mm	Ant 0	DSI 4	26865	831.5	1	21.68	23.00	1.355		1.000	0.06	0.154	0.209
	LTE Band 26	15M	QPSK	1	0		Front	15mm	Ant 1	DSI 4	26865	831.5	1	21.65	23.00	1.365		1.000	0.01	0.020	0.027
	LTE Band 26	15M	QPSK	36	0		Front	15mm	Ant 1	DSI 4	26865	831.5	1	20.63	22.00	1.371		1.000	-0.15	0.013	0.018
	LTE Band 26	15M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	26865	831.5	1	21.65	23.00	1.365		1.000	-0.02	0.051	0.070
	LTE Band 26	15M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	26865	831.5	2	21.65	23.00	1.365		1.000	0.06	0.031	0.042
	LTE Band 26	15M	QPSK	36	0		Back	15mm	Ant 1	DSI 4	26865	831.5	1	20.63	22.00	1.371		1.000	0.19	0.042	0.058
63	LTE Band 5	10M	QPSK	1	0		Front	15mm	Ant 1	DSI 4	20525	836.5	1	22.21	24.00	1.510		1.000	0.08	0.025	0.038
	LTE Band 5	10M	QPSK	25	0		Front	15mm	Ant 1	DSI 4	20525	836.5	1	21.26	23.00	1.493		1.000	0.01	0.016	0.024
	LTE Band 5	10M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	20525	836.5	1	22.21	24.00	1.510		1.000	-0.04	0.064	0.097
	LTE Band 5	10M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	20525	836.5	2	22.21	24.00	1.510		1.000	0.04	0.052	0.079
	LTE Band 5	10M	QPSK	25	0		Back	15mm	Ant 1	DSI 4	20525	836.5	1	21.26	23.00	1.493		1.000	-0.08	0.053	0.079
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	1	22.80	24.00	1.318		1.000	-0.08	0.102	0.134



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	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	1	22.72	24.00	1.343	1.000	0.13	0.087	0.117
64	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	1	22.80	24.00	1.318	1.000	-0.13	0.178	0.235
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	2	22.80	24.00	1.318	1.000	0.06	0.138	0.182
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	1	22.72	24.00	1.343	1.000	0.12	0.148	0.199
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	1	22.28	23.00	1.180	1.000	-0.18	0.013	0.015
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	1	22.19	23.00	1.205	1.000	0.03	0.021	0.025
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	1	22.28	23.00	1.180	1.000	0.01	0.034	0.040
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	2	22.28	23.00	1.180	1.000	0.06	0.020	0.024
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	1	22.19	23.00	1.205	1.000	-0.15	0.031	0.037
1750MHz																				
	WCDMA IV					RMC 12.2Kbps	Front	15mm	Ant 0	DSI 4	1413	1732.6	1	22.76	24.00	1.330	1.000	0.11	0.249	0.331
65	WCDMA IV					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	1413	1732.6	1	22.76	24.00	1.330	1.000	-0.01	0.273	0.363
	WCDMA IV					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	1413	1732.6	2	22.76	24.00	1.330	1.000	0.03	0.245	0.326
	LTE Band 66	20M	QPSK	1	0		Front	15mm	Ant 0	DSI 4	132322	1745	1	22.39	24.00	1.449	1.000	-0.08	0.213	0.309
	LTE Band 66	20M	QPSK	50	0		Front	15mm	Ant 0	DSI 4	132322	1745	1	21.28	23.00	1.486	1.000	-0.04	0.172	0.256
66	LTE Band 66	20M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	132322	1745	1	22.39	24.00	1.449	1.000	-0.06	0.247	0.358
	LTE Band 66	20M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	132322	1745	2	22.39	24.00	1.449	1.000	0.01	0.228	0.330
	LTE Band 66	20M	QPSK	50	0		Back	15mm	Ant 0	DSI 4	132322	1745	1	21.28	23.00	1.486	1.000	-0.08	0.199	0.296
	LTE Band 66	20M	QPSK	1	0		Front	15mm	Ant 5	DSI 4	132322	1745	1	22.81	24.00	1.315	1.000	-0.13	0.033	0.043
	LTE Band 66	20M	QPSK	50	0		Front	15mm	Ant 5	DSI 4	132322	1745	1	22.71	24.00	1.346	1.000	0.06	0.032	0.043
	LTE Band 66	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	132322	1745	1	22.81	24.00	1.315	1.000	0.02	0.072	0.095
	LTE Band 66	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	132322	1745	2	22.81	24.00	1.315	1.000	0.03	0.055	0.072
	LTE Band 66	20M	QPSK	50	0		Back	15mm	Ant 5	DSI 4	132322	1745	1	22.71	24.00	1.346	1.000	-0.03	0.070	0.094
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	349000	1745	1	22.38	24.00	1.452	1.000	0.18	0.197	0.286
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	349000	1745	1	22.26	24.00	1.493	1.000	-0.04	0.179	0.267
67	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	349000	1745	1	22.38	24.00	1.452	1.000	-0.06	0.202	0.293
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	349000	1745	2	22.38	24.00	1.452	1.000	0.01	0.197	0.286
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	349000	1745	1	22.26	24.00	1.493	1.000	-0.08	0.184	0.275
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	1	22.37	24.00	1.455	1.000	-0.07	0.025	0.036
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	1	22.33	24.00	1.469	1.000	0.05	0.024	0.035
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	1	22.37	24.00	1.455	1.000	0.06	0.054	0.079
	FR1 n66	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	2	22.37	24.00	1.455	1.000	0.01	0.049	0.071
	FR1 n66	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	1	22.33	24.00	1.469	1.000	-0.12	0.052	0.076
1900MHz																				
	GSM1900					GPRS (3 Tx slots)	Front	15mm	Ant 0	DSI 4	661	1880	1	24.54	26.00	1.400	1.000	0.03	0.102	0.143
68	GSM1900					GPRS (3 Tx slots)	Back	15mm	Ant 0	DSI 4	661	1880	1	24.54	26.00	1.400	1.000	0.06	0.127	0.178
	GSM1900					GPRS (3 Tx slots)	Back	15mm	Ant 0	DSI 4	661	1880	2	24.54	26.00	1.400	1.000	0.02	0.115	0.161
	WCDMA II					RMC 12.2Kbps	Front	15mm	Ant 0	DSI 4	9400	1880	1	23.00	24.00	1.259	1.000	0.15	0.217	0.273
69	WCDMA II					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	9400	1880	1	23.00	24.00	1.259	1.000	0.13	0.294	0.370
	WCDMA II					RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	9400	1880	2	23.00	24.00	1.259	1.000	0.02	0.262	0.330
	LTE Band 25	20M	QPSK	1	0		Front	15mm	Ant 0	DSI 4	26340	1880	1	22.46	24.00	1.426	1.000	-0.05	0.167	0.238
	LTE Band 25	20M	QPSK	50	0		Front	15mm	Ant 0	DSI 4	26340	1880	1	21.47	23.00	1.422	1.000	-0.08	0.134	0.191
70	LTE Band 25	20M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	26340	1880	1	22.46	24.00	1.426	1.000	-0.02	0.219	0.312
	LTE Band 25	20M	QPSK	1	0		Back	15mm	Ant 0	DSI 4	26340	1880	2	22.46	24.00	1.426	1.000	0.03	0.203	0.289
	LTE Band 25	20M	QPSK	50	0		Back	15mm	Ant 0	DSI 4	26340	1880	1	21.47	23.00	1.422	1.000	0.16	0.177	0.252
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	376500	1882.5	1	22.86	24.00	1.300	1.000	0.05	0.186	0.242
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	376500	1882.5	1	22.73	24.00	1.340	1.000	-0.03	0.188	0.252
	FR1 n25	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	376500	1882.5	1	22.86	24.00	1.300	1.000	-0.15	0.268	0.348
71	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	376500	1882.5	1	22.73	24.00	1.340	1.000	-0.14	0.276	0.370
	FR1 n25	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	376500	1882.5	2	22.73	24.00	1.340	1.000	0.06	0.258	0.346
	LTE Band 2	20M	QPSK	1	0		Front	15mm	Ant 5	DSI 4	18900	1880	1	22.68	24.00	1.355	1.000	0.07	0.041	0.056
	LTE Band 2	20M	QPSK	50	0		Front	15mm	Ant 5	DSI 4	18900	1880	1	22.59	24.00	1.384	1.000	0.16	0.038	0.053
72	LTE Band 2	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	18900	1880	1	22.68	24.00	1.355	1.000	0.01	0.060	0.081
	LTE Band 2	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	18900	1880	2	22.68	24.00	1.355	1.000	0.03	0.054	0.073
	LTE Band 2	20M	QPSK	50	0		Back	15mm	Ant 5	DSI 4	18900	1880	1	22.59	24.00	1.384	1.000	-0.18	0.054	0.075



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	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	376000	1880	1	22.79	24.00	1.321		1.000	0.16	0.053	0.070
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	376000	1880	1	22.65	24.00	1.365		1.000	-0.03	0.038	0.052
73	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	376000	1880	1	22.79	24.00	1.321		1.000	-0.01	0.058	0.077
	FR1 n2	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	376000	1880	2	22.79	24.00	1.321		1.000	0.06	0.046	0.061
	FR1 n2	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	376000	1880	1	22.65	24.00	1.365		1.000	0.07	0.055	0.075
2600MHz																					
	LTE Band 7	20M	QPSK	1	0		Front	15mm	Ant 6	DSI 4	21100	2535	1	22.56	24.00	1.393		1.000	0.03	0.179	0.249
	LTE Band 7	20M	QPSK	50	0		Front	15mm	Ant 6	DSI 4	21100	2535	1	21.45	23.00	1.429		1.000	0.01	0.142	0.203
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 6	DSI 4	21100	2535	1	22.56	24.00	1.393		1.000	0.06	0.303	0.422
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 6	DSI 4	21100	2535	2	22.56	24.00	1.393		1.000	0.03	0.262	0.365
	LTE Band 7	20M	QPSK	50	0		Back	15mm	Ant 6	DSI 4	21100	2535	1	21.45	23.00	1.429		1.000	-0.01	0.241	0.344
	LTE Band 7	20M	QPSK	1	0		Front	15mm	Ant 1	DSI 4	21100	2535	1	21.29	23.00	1.483		1.000	0.05	0.268	0.397
	LTE Band 7	20M	QPSK	50	0		Front	15mm	Ant 1	DSI 4	21100	2535	1	20.34	22.00	1.466		1.000	0.02	0.224	0.328
74	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	21100	2535	1	21.29	23.00	1.483		1.000	0.01	0.378	0.560
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	21100	2535	2	21.29	23.00	1.483		1.000	0.03	0.323	0.479
	LTE Band 7	20M	QPSK	50	0		Back	15mm	Ant 1	DSI 4	21100	2535	1	20.34	22.00	1.466		1.000	-0.13	0.292	0.428
	LTE Band 7	20M	QPSK	1	0		Front	15mm	Ant 5	DSI 4	21100	2535	1	21.75	23.00	1.334		1.000	-0.15	0.071	0.095
	LTE Band 7	20M	QPSK	50	0		Front	15mm	Ant 5	DSI 4	21100	2535	1	20.70	22.00	1.349		1.000	-0.06	0.055	0.074
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	21100	2535	1	21.75	23.00	1.334		1.000	-0.07	0.072	0.096
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	21100	2535	2	21.75	23.00	1.334		1.000	0.03	0.063	0.084
	LTE Band 7	20M	QPSK	50	0		Back	15mm	Ant 5	DSI 4	21100	2535	1	20.70	22.00	1.349		1.000	-0.14	0.066	0.089
	LTE Band 7	20M	QPSK	1	0		Front	15mm	Ant 7	DSI 4	21100	2535	1	20.49	22.00	1.416		1.000	0.1	0.132	0.187
	LTE Band 7	20M	QPSK	50	0		Front	15mm	Ant 7	DSI 4	21100	2535	1	19.43	21.00	1.435		1.000	-0.04	0.089	0.128
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 7	DSI 4	21100	2535	1	20.49	22.00	1.416		1.000	0.05	0.169	0.239
	LTE Band 7	20M	QPSK	1	0		Back	15mm	Ant 7	DSI 4	21100	2535	2	20.49	22.00	1.416		1.000	0.06	0.074	0.105
	LTE Band 7	20M	QPSK	50	0		Back	15mm	Ant 7	DSI 4	21100	2535	1	19.43	21.00	1.435		1.000	-0.01	0.143	0.205
	LTE Band 41	20M	QPSK	1	0		Front	15mm	Ant 6	DSI 4	40620	2593	1	22.26	24.00	1.493	62.9	1.006	-0.04	0.137	0.206
	LTE Band 41	20M	QPSK	50	0		Front	15mm	Ant 6	DSI 4	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.09	0.102	0.157
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 6	DSI 4	40620	2593	1	22.26	24.00	1.493	62.9	1.006	0.03	0.256	0.384
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 6	DSI 4	40620	2593	2	22.26	24.00	1.493	62.9	1.006	0.01	0.228	0.342
	LTE Band 41	20M	QPSK	50	0		Back	15mm	Ant 6	DSI 4	40620	2593	1	21.16	23.00	1.528	62.9	1.006	-0.17	0.206	0.317
	LTE Band 41	20M	QPSK	1	0		Front	15mm	Ant 1	DSI 4	40620	2593	1	22.45	24.00	1.429	62.9	1.006	0.06	0.219	0.315
	LTE Band 41	20M	QPSK	50	0		Front	15mm	Ant 1	DSI 4	40620	2593	1	21.43	23.00	1.435	62.9	1.006	0.01	0.174	0.251
75	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	40620	2593	1	22.45	24.00	1.429	62.9	1.006	-0.02	0.404	0.581
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 1	DSI 4	40620	2593	2	22.45	24.00	1.429	62.9	1.006	0.06	0.341	0.490
	LTE Band 41	20M	QPSK	50	0		Back	15mm	Ant 1	DSI 4	40620	2593	1	21.43	23.00	1.435	62.9	1.006	-0.04	0.328	0.474
	LTE Band 41	20M	QPSK	1	0		Front	15mm	Ant 5	DSI 4	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.01	0.060	0.082
	LTE Band 41	20M	QPSK	50	0		Front	15mm	Ant 5	DSI 4	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.06	0.034	0.046
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	40620	2593	1	22.65	24.00	1.365	62.9	1.006	0.05	0.091	0.125
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 5	DSI 4	40620	2593	2	22.65	24.00	1.365	62.9	1.006	0.06	0.066	0.091
	LTE Band 41	20M	QPSK	50	0		Back	15mm	Ant 5	DSI 4	40620	2593	1	21.73	23.00	1.340	62.9	1.006	0.01	0.088	0.119
	LTE Band 41	20M	QPSK	1	0		Front	15mm	Ant 7	DSI 4	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.11	0.092	0.123
	LTE Band 41	20M	QPSK	50	0		Front	15mm	Ant 7	DSI 4	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.06	0.072	0.097
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 7	DSI 4	40620	2593	1	21.28	22.50	1.324	62.9	1.006	0.02	0.143	0.191
	LTE Band 41	20M	QPSK	1	0		Back	15mm	Ant 7	DSI 4	40620	2593	2	21.28	22.50	1.324	62.9	1.006	0.06	0.070	0.093
	LTE Band 41	20M	QPSK	50	0		Back	15mm	Ant 7	DSI 4	40620	2593	1	20.21	21.50	1.346	62.9	1.006	-0.15	0.118	0.160
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 6	DSI 4	507000	2535	1	22.27	23.00	1.183		1.000	0.18	0.226	0.267
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 6	DSI 4	507000	2535	1	22.18	23.00	1.208		1.000	-0.17	0.213	0.257
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 6	DSI 4	507000	2535	1	22.27	23.00	1.183		1.000	-0.04	0.345	0.408
76	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 6	DSI 4	507000	2535	1	22.18	23.00	1.208		1.000	-0.02	0.401	0.484
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 6	DSI 4	507000	2535	2	22.18	23.00	1.208		1.000	0.03	0.371	0.448
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	507000	2535	1	22.35	23.00	1.161		1.000	0.11	0.270	0.314
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	507000	2535	1	22.25	23.00	1.189		1.000	-0.02	0.296	0.352
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	507000	2535	1	22.35	23.00	1.161		1.000	0.1	0.383	0.445
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	507000	2535	1	22.25	23.00	1.189		1.000	-0.02	0.399	0.474
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	507000	2535	2	22.25	23.00	1.189		1.000	0.06	0.310	0.368



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	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	1	22.56	24.00	1.393		1.000	-0.16	0.059	0.082
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	1	22.47	24.00	1.422		1.000	-0.12	0.071	0.101
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	1	22.56	24.00	1.393		1.000	0.07	0.077	0.107
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	1	22.47	24.00	1.422		1.000	0.04	0.080	0.114
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	2	22.47	24.00	1.422		1.000	0.06	0.065	0.092
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 7	DSI 4	507000	2535	1	21.41	23.00	1.442		1.000	-0.13	0.069	0.100
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 7	DSI 4	507000	2535	1	21.34	23.00	1.466		1.000	0.16	0.113	0.166
	FR1 n7	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 7	DSI 4	507000	2535	1	21.41	23.00	1.442		1.000	-0.15	0.150	0.216
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 7	DSI 4	507000	2535	1	21.34	23.00	1.466		1.000	0.06	0.166	0.243
	FR1 n7	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 7	DSI 4	507000	2535	2	21.34	23.00	1.466		1.000	0.03	0.091	0.133
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	518598	2592.99	1	22.35	23.00	1.161		1.000	0.06	0.134	0.156
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	518598	2592.99	1	22.25	23.00	1.189		1.000	-0.13	0.202	0.240
77	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	518598	2592.99	1	22.35	23.00	1.161		1.000	-0.02	0.398	0.462
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	518598	2592.99	2	22.35	23.00	1.161		1.000	0.06	0.335	0.389
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	518598	2592.99	1	22.25	23.00	1.189		1.000	-0.01	0.260	0.309
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	518598	2592.99	1	24.39	25.00	1.151	50	1.000	0.08	0.301	0.346
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	518598	2592.99	1	21.80	23.00	1.318		1.000	0.13	0.053	0.070
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	518598	2592.99	1	21.54	23.00	1.400		1.000	-0.18	0.059	0.083
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	518598	2592.99	1	21.80	23.00	1.318		1.000	0.07	0.159	0.210
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	518598	2592.99	2	21.80	23.00	1.318		1.000	0.01	0.143	0.189
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	518598	2592.99	1	21.54	23.00	1.400		1.000	-0.11	0.147	0.206
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	518598	2592.99	1	23.75	25.00	1.334	50	1.000	0.07	0.114	0.152
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	1	22.13	23.00	1.222		1.000	-0.13	0.032	0.039
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	1	21.67	23.00	1.358		1.000	0.08	0.030	0.041
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	1	22.13	23.00	1.222		1.000	0.16	0.032	0.039
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	1	21.67	23.00	1.358		1.000	0.01	0.048	0.065
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	2	21.67	23.00	1.358		1.000	0.06	0.036	0.049
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	1	23.77	25.00	1.327	50	1.000	-0.07	0.039	0.052
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	518598	2592.99	1	20.15	21.00	1.216		1.000	0.14	0.068	0.083
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	518598	2592.99	1	20.10	21.00	1.230		1.000	0.1	0.103	0.127
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	518598	2592.99	1	20.15	21.00	1.216		1.000	-0.11	0.106	0.129
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	518598	2592.99	2	20.15	21.00	1.216		1.000	0.06	0.086	0.105
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	518598	2592.99	1	20.10	21.00	1.230		1.000	0.07	0.101	0.124
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	518598	2592.99	1	21.98	23.00	1.265	50	1.000	0.02	0.080	0.101
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0		Front	15mm	Ant 8	DSI 4	42590	3500	1	23.39	24.50	1.291	62.9	1.006	-0.09	0.091	0.118
	LTE Band 42 Part 27Q	20M	QPSK	50	0		Front	15mm	Ant 8	DSI 4	42590	3500	1	22.43	23.50	1.279	62.9	1.006	-0.16	0.069	0.089
78	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	42590	3500	1	23.39	24.50	1.291	62.9	1.006	-0.07	0.376	0.488
	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	42590	3500	2	23.39	24.50	1.291	62.9	1.006	0.03	0.299	0.388
	LTE Band 42 Part 27Q	20M	QPSK	50	0		Back	15mm	Ant 8	DSI 4	42590	3500	1	22.43	23.50	1.279	62.9	1.006	-0.18	0.304	0.391
	LTE Band 48	20M	QPSK	1	0		Front	15mm	Ant 8	DSI 4	55830	3609	1	23.49	24.50	1.262	62.9	1.006	0.11	0.175	0.222
	LTE Band 48	20M	QPSK	50	0		Front	15mm	Ant 8	DSI 4	55830	3609	1	22.57	23.50	1.239	62.9	1.006	-0.08	0.139	0.173
	LTE Band 48	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	55830	3609	1	23.49	24.50	1.262	62.9	1.006	-0.1	0.658	0.835
	LTE Band 48	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	55340	3560	1	23.30	24.50	1.318	62.9	1.006	-0.01	0.687	0.911
	LTE Band 48	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	56150	3641	1	23.38	24.50	1.294	62.9	1.006	-0.09	0.744	0.969
79	LTE Band 48	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	56640	3690	1	23.39	24.50	1.291	62.9	1.006	-0.05	0.749	0.973
	LTE Band 48	20M	QPSK	1	0		Back	15mm	Ant 8	DSI 4	56640	3690	2	23.39	24.50	1.291	62.9	1.006	0.03	0.648	0.842
	LTE Band 48	20M	QPSK	50	0		Back	15mm	Ant 8	DSI 4	55830	3609	1	22.57	23.50	1.239	62.9	1.006	-0.06	0.522	0.651
	LTE Band 48	20M	QPSK	50	0		Back	15mm	Ant 8	DSI 4	55340	3560	1	22.36	23.50	1.300	62.9	1.006	-0.17	0.500	0.654
	LTE Band 48	20M	QPSK	50	0		Back	15mm	Ant 8	DSI 4	56150	3641	1	22.42	23.50	1.282	62.9	1.006	-0.01	0.568	0.733
	LTE Band 48	20M	QPSK	50	0		Back	15mm	Ant 8	DSI 4	56640	3690	1	22.51	23.50	1.256	62.9	1.006	-0.11	0.607	0.767
	LTE Band 48	20M	QPSK	100	0		Back	15mm	Ant 8	DSI 4	55830	3609	1	22.59	23.50	1.233	62.9	1.006	0.14	0.594	0.737
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	1	22.93	24.00	1.279		1.000	0.1	0.194	0.248
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	1	22.83	24.00	1.309		1.000	0.16	0.188	0.246
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	1	22.93	24.00	1.279		1.000	-0.06	0.707	0.905
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	638000	3570	1	22.75	24.00	1.334		1.000	0.02	0.628	0.837



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	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6453323679.98	1	22.91	24.00	1.285		1.000	-0.16	0.700	0.900
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6416663624.99	1	22.83	24.00	1.309		1.000	0.05	0.699	0.915
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	638000 3570	1	22.51	24.00	1.409		1.000	-0.03	0.601	0.847
80	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6453323679.98	1	22.76	24.00	1.330		1.000	-0.08	0.720	0.958
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6453323679.98	2	22.76	24.00	1.330		1.000	0.06	0.606	0.806
	FR1 n48	40M	BPSK	100	0	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6416663624.99	1	22.15	23.50	1.365		1.000	0.17	0.618	0.843
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	6416663624.99	1	22.32	23.00	1.169		1.000	-0.06	0.027	0.032
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	6416663624.99	1	22.14	23.00	1.219		1.000	0.02	0.034	0.041
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6416663624.99	1	22.32	23.00	1.169		1.000	0.16	0.079	0.092
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6416663624.99	1	22.14	23.00	1.219		1.000	0.04	0.085	0.104
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6416663624.99	2	22.14	23.00	1.219		1.000	0.02	0.079	0.096
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000 3840	1	20.23	21.50	1.340		1.000	0.16	0.144	0.193
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000 3840	1	19.93	21.50	1.435		1.000	0.05	0.116	0.167
81	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000 3840	1	20.23	21.50	1.340		1.000	-0.09	0.704	0.943
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000 3840	2	20.23	21.50	1.340		1.000	0.03	0.601	0.805
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000 3840	1	19.93	21.50	1.435		1.000	-0.06	0.644	0.924
	FR1 n77 Part 27O	100M	BPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000 3840	1	19.01	21.00	1.581		1.000	0.02	0.535	0.846
	FR1 n77 Part 27O HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000 3840	1	22.97	24.50	1.422	50	1.000	0.06	0.644	0.916
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	6333343500.01	1	21.26	21.50	1.057		1.000	-0.11	0.151	0.160
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	6333343500.01	1	21.10	21.50	1.096		1.000	0.19	0.209	0.229
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6333343500.01	1	21.26	21.50	1.057		1.000	-0.14	0.399	0.422
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6333343500.01	1	21.10	21.50	1.096		1.000	-0.06	0.509	0.558
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6333343500.01	1	22.95	24.50	1.429	50	1.000	0.07	0.407	0.582
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	6333343500.01	2	22.95	24.50	1.429	50	1.000	0.03	0.362	0.517
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	656000 3840	1	21.49	23.00	1.416		1.000	0.13	0.025	0.035
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	656000 3840	1	21.41	23.00	1.442		1.000	0.12	0.038	0.055
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	656000 3840	1	21.49	23.00	1.416		1.000	0.07	0.047	0.067
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	656000 3840	1	21.41	23.00	1.442		1.000	0.09	0.054	0.078
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	656000 3840	2	21.41	23.00	1.442		1.000	0.03	0.050	0.072
	FR1 n77 Part 27O HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	656000 3840	1	24.09	26.00	1.552	50	1.000	-0.01	0.049	0.076
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	6333343500.01	1	21.60	23.00	1.380		1.000	-0.06	0.024	0.033
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	6333343500.01	1	21.36	23.00	1.459		1.000	0.01	0.021	0.031
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6333343500.01	1	21.60	23.00	1.380		1.000	0.06	0.046	0.063
	FR1 n77 Part 27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6333343500.01	2	21.60	23.00	1.380		1.000	0.09	0.038	0.052
	FR1 n77 Part 27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6333343500.01	1	21.36	23.00	1.459		1.000	0.01	0.028	0.041
	FR1 n77 Part 27Q HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	6333343500.01	1	24.63	26.00	1.371	50	1.000	0.03	0.042	0.058
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000 3840	1	22.44	23.00	1.138		1.000	-0.03	0.029	0.033
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000 3840	1	22.43	23.00	1.140		1.000	0.02	0.018	0.021
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000 3840	1	22.44	23.00	1.138		1.000	-0.07	0.043	0.049
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000 3840	2	22.44	23.00	1.138		1.000	0.02	0.034	0.039
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000 3840	1	22.43	23.00	1.140		1.000	0.01	0.023	0.026
	FR1 n77 Part 27O HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000 3840	1	24.53	26.00	1.403	50	1.000	0.04	0.034	0.048
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	6333343500.01	1	22.23	23.00	1.194		1.000	0.05	0.013	0.016
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	6333343500.01	1	22.14	23.00	1.219		1.000	-0.1	0.018	0.022
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	6333343500.01	1	22.23	23.00	1.194		1.000	0.1	0.034	0.041
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	6333343500.01	2	22.23	23.00	1.194		1.000	0.02	0.021	0.025
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	6333343500.01	1	22.14	23.00	1.219		1.000	0.06	0.029	0.035
	FR1 n77 Part 27Q HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	6333343500.01	1	24.93	26.00	1.279	50	1.000	0.06	0.031	0.040
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 9	DSI 4	656000 3840	1	23.48	24.00	1.127		1.000	0.15	0.154	0.174
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 9	DSI 4	656000 3840	1	23.38	24.00	1.153		1.000	-0.05	0.150	0.173
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	656000 3840	1	23.48	24.00	1.127		1.000	0.03	0.268	0.302
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	656000 3840	2	23.48	24.00	1.127		1.000	0.01	0.199	0.224
	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	656000 3840	1	23.38	24.00	1.153		1.000	-0.08	0.237	0.273
	FR1 n77 Part 27O HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	656000 3840	1	25.62	26.00	1.091	50	1.000	0.05	0.237	0.259
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 9	DSI 4	6333323499.98	1	23.77	24.00	1.054		1.000	0.01	0.202	0.213
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 9	DSI 4	6333323499.98	1	23.63	24.00	1.089		1.000	-0.11	0.188	0.205



FCC SAR Test Report

Report No. : FA3N2109-02

	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	633332	3499.98	1	23.77	24.00	1.054		1.000	0.03	0.229	0.241
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	633332	3499.98	2	23.77	24.00	1.054		1.000	0.02	0.203	0.214
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	633332	3499.98	1	23.63	24.00	1.089		1.000	-0.05	0.196	0.213
	FR1 n77 Part 27Q HPUE	100M	BPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 9	DSI 4	633332	3499.98	1	24.93	26.00	1.279	50	1.000	0.09	0.147	0.188

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)
WLAN/BT																	
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 2+4(4)	Full power	1	2412	1	16.27	18.00	1.489	100	1.000	-0.04	0.177	0.264
82	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2+4(4)	Full power	1	2412	1	16.27	18.00	1.489	100	1.000	-0.06	0.268	0.399
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2+4(4)	Full power	1	2412	2	16.27	18.00	1.489	100	1.000	0.06	0.212	0.316
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2+4(4)	Simultaneous	1	2412	1	14.72	16.50	1.507	100	1.000	-0.17	0.182	0.274
	WLAN2.4GHz	802.11b 1Mbps	Back	16mm	Ant 2+4(4)	Full power	1	2412	1	16.27	18.00	1.489	100	1.000	0.02	0.171	0.255
	Bluetooth	1Mbps	Front	15mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	-0.13	0.020	0.024
83	Bluetooth	1Mbps	Back	15mm	Ant 2	Full power	39	2441	1	6.62	7.00	1.091	76.91	1.083	0.05	0.174	0.206
	Bluetooth	1Mbps	Back	15mm	Ant 2	Full power	39	2441	2	6.62	7.00	1.091	76.91	1.083	0.06	0.120	0.142
	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.06	0.106	0.161
84	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.08	0.458	0.695
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(3)	Full power	52	5260	2	18.22	20.00	1.507	99.32	1.007	0.03	0.359	0.545
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 3+4(4)	Simultaneous	58	5290	1	9.62	11.50	1.542	100	1.000	0.01	0.195	0.301
	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	-0.03	0.121	0.179
85	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	0.04	0.671	0.995
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(4)	Full power	132	5660	1	12.36	14.00	1.459	99.32	1.007	-0.07	0.603	0.886
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(4)	Full power	100	5500	2	12.32	14.00	1.472	99.32	1.007	0.02	0.636	0.943
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 3+4(3)	Simultaneous	106	5530	1	12.86	14.50	1.459	100	1.000	-0.05	0.182	0.266
	WLAN5.8GHz	802.11a 6Mbps	Front	15mm	Ant 3+4(4)	Full power	165	5825	1	12.63	14.00	1.371	99.32	1.007	0.01	0.107	0.148
	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(4)	Full power	165	5825	1	12.63	14.00	1.371	99.32	1.007	-0.11	0.612	0.845
86	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(3)	Full power	149	5745	1	17.61	19.00	1.377	99.32	1.007	0.05	0.659	0.914
	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 3+4(3)	Full power	149	5745	2	17.61	19.00	1.377	99.32	1.007	0.06	0.604	0.838
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.45	10.00	1.429	100	1.000	0.1	0.197	0.281



15.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)
1900MHz																					
87	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	40620	2593	1	22.45	24.00	1.429	62.9	1.006	-0.02	1.470	2.113
	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	40620	2593	2	22.45	24.00	1.429	62.9	1.006	0.01	1.230	1.768
	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	39750	2506	1	22.21	24.00	1.510	62.9	1.006	0.03	1.330	2.020
	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	40185	2549.5	1	22.27	24.00	1.489	62.9	1.006	-0.08	1.380	2.068
	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	41055	2636.5	1	22.33	24.00	1.469	62.9	1.006	-0.08	1.410	2.084
	LTE Band 41	20M	QPSK	1	0		Back	0mm	Ant 1	DSI 2	41490	2680	1	22.31	24.00	1.476	62.9	1.006	0.1	1.360	2.019
	LTE Band 41	20M	QPSK	50	0		Back	0mm	Ant 1	DSI 2	40620	2593	1	21.43	23.00	1.435	62.9	1.006	-0.18	1.190	1.718
	LTE Band 41	20M	QPSK	50	0		Back	0mm	Ant 1	DSI 2	39750	2506	1	21.24	23.00	1.500	62.9	1.006	0.1	1.100	1.660
	LTE Band 41	20M	QPSK	50	0		Back	0mm	Ant 1	DSI 2	40185	2549.5	1	21.27	23.00	1.489	62.9	1.006	0.12	1.080	1.618
	LTE Band 41	20M	QPSK	50	0		Back	0mm	Ant 1	DSI 2	41055	2636.5	1	21.35	23.00	1.462	62.9	1.006	0.08	1.130	1.662
	LTE Band 41	20M	QPSK	50	0		Back	0mm	Ant 1	DSI 2	41490	2680	1	21.31	23.00	1.476	62.9	1.006	-0.17	1.150	1.707
	LTE Band 41	20M	QPSK	100	0		Back	0mm	Ant 1	DSI 2	40620	2593	1	21.43	23.00	1.435	62.9	1.006	-0.03	1.180	1.704
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	42590	3500	1	23.39	24.50	1.291	62.9	1.006	-0.07	2.140	2.780
88	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	42190	3460	1	23.32	24.50	1.312	62.9	1.006	0.07	2.160	2.851
	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	42190	3460	2	23.32	24.50	1.312	62.9	1.006	0.03	2.060	2.719
	LTE Band 42 Part 27Q	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	42990	3540	1	23.23	24.50	1.340	62.9	1.006	-0.07	2.030	2.736
	LTE Band 42 Part 27Q	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	42590	3500	1	22.43	23.50	1.279	62.9	1.006	0.11	1.920	2.471
	LTE Band 42 Part 27Q	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	42190	3460	1	22.29	23.50	1.321	62.9	1.006	-0.12	1.980	2.632
	LTE Band 42 Part 27Q	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	42990	3540	1	22.22	23.50	1.343	62.9	1.006	-0.08	1.900	2.567
	LTE Band 42 Part 27Q	20M	QPSK	100	0		Back	0mm	Ant 8	DSI 2	42590	3500	1	22.41	23.50	1.285	62.9	1.006	-0.16	1.940	2.508
89	LTE Band 48	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	55830	3609	1	23.49	24.50	1.262	62.9	1.006	0.08	2.090	2.653
	LTE Band 48	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	55830	3609	2	23.49	24.50	1.262	62.9	1.006	0.09	1.980	2.513
	LTE Band 48	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	55340	3560	1	23.30	24.50	1.318	62.9	1.006	0.06	1.950	2.586
	LTE Band 48	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	56150	3641	1	23.38	24.50	1.294	62.9	1.006	0.02	1.990	2.591
	LTE Band 48	20M	QPSK	1	0		Back	0mm	Ant 8	DSI 2	56640	3690	1	23.39	24.50	1.291	62.9	1.006	-0.08	1.940	2.520
	LTE Band 48	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	55830	3609	1	22.57	23.50	1.239	62.9	1.006	-0.03	1.650	2.056
	LTE Band 48	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	55340	3560	1	22.36	23.50	1.300	62.9	1.006	-0.06	1.600	2.093
	LTE Band 48	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	56150	3641	1	22.42	23.50	1.282	62.9	1.006	0.18	1.610	2.077
	LTE Band 48	20M	QPSK	50	0		Back	0mm	Ant 8	DSI 2	56640	3690	1	22.51	23.50	1.256	62.9	1.006	0.01	1.680	2.123
	LTE Band 48	20M	QPSK	100	0		Back	0mm	Ant 8	DSI 2	55830	3609	1	22.59	23.50	1.233	62.9	1.006	0.03	1.640	2.034
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	6416663624.99	3570	1	22.09	23.50	1.384		1.000	-0.02	1.960	2.712
90	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	638000	3570	1	22.02	23.50	1.406		1.000	0.03	2.090	2.939
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	638000	3570	2	22.02	23.50	1.406		1.000	0.02	1.950	2.742
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	6453323679.98	3570	1	22.00	23.50	1.413		1.000	0.1	2.000	2.825
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	6416663624.99	3570	1	21.98	23.50	1.419		1.000	0.12	1.930	2.739
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	638000	3570	1	21.72	23.50	1.507		1.000	-0.11	1.950	2.938
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	6453323679.98	3570	1	21.89	23.50	1.449		1.000	-0.01	1.980	2.869
	FR1 n48	40M	BPSK	100	0	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	6416663624.99	3570	1	21.92	23.50	1.439		1.000	0.14	1.900	2.734
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	6416663624.99	3570	1	22.09	23.50	1.384		1.000	0.12	1.840	2.546
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	638000	3570	1	22.02	23.50	1.406		1.000	-0.03	1.890	2.657
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	6453323679.98	3570	1	22.00	23.50	1.413		1.000	-0.01	1.910	2.698
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	6416663624.99	3570	1	21.98	23.50	1.419		1.000	-0.06	1.840	2.611
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	638000	3570	1	21.72	23.50	1.507		1.000	-0.1	1.780	2.682
	FR1 n48	40M	BPSK	50	28	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	6453323679.98	3570	1	21.89	23.50	1.449		1.000	0.12	1.760	2.550
	FR1 n48	40M	BPSK	100	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	DSI 2	6416663624.99	3570	1	21.92	23.50	1.439		1.000	0.02	1.860	2.676
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	8mm	Ant 8	DSI 4	638000	3570	1	22.55	24.00	1.396		1.000	0.02	0.654	0.913
	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Right Side	4mm	Ant 8	DSI 4	6453323679.98	3570	1	22.71	24.00	1.346		1.000	0.09	1.030	1.386
	FR1 n77 Part 27O	100M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	1	20.23	21.50	1.340		1.000	-0.07	2.010	2.693
91	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	1	19.93	21.50	1.435		1.000	0.02	2.060	2.957



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	FR1 n77 Part 27O	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	2	19.93	21.50	1.435		1.000	0.03	1.930	2.770
	FR1 n77 Part 27O	100M	BPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	1	19.01	21.00	1.581		1.000	-0.11	1.670	2.641
	FR1 n77 Part 27O HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	650000	3750	1	22.75	24.50	1.496	50	1.000	-0.07	1.950	2.918
	FR1 n77 Part 27Q	100M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	21.26	21.50	1.057		1.000	-0.04	2.200	2.325
	FR1 n77 Part 27Q	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	21.10	21.50	1.096		1.000	0.09	2.390	2.621
	FR1 n77 Part 27Q	100M	BPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	20.23	21.50	1.340		1.000	-0.09	1.710	2.291
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	22.95	24.50	1.429	50	1.000	0.09	1.910	2.729
	FR1 n77 Part 27Q HPUE	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	2	22.95	24.50	1.429	50	1.000	0.06	1.880	2.686

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)
WLAN																	
92	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	-0.1	0.375	0.569
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.08	1.200	1.821
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(3)	Full power	52	5260	2	18.22	20.00	1.507	99.32	1.007	0.02	1.130	1.714
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	-0.15	0.533	0.809
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.19	0.281	0.426
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 3+4(3)	Full power	52	5260	1	18.22	20.00	1.507	99.32	1.007	0.07	0.672	1.020
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	0.08	0.144	0.220
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	0.04	0.489	0.747
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	0.03	0.230	0.351
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	-0.08	0.110	0.168
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+4(4)	Simultaneous	58	5290	1	8.66	10.50	1.528	100	1.000	-0.08	0.296	0.452
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	-0.18	0.746	1.106
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	0.07	1.450	2.150
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(4)	Full power	100	5500	2	12.32	14.00	1.472	99.32	1.007	0.02	1.390	2.061
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(4)	Full power	132	5660	1	12.36	14.00	1.459	99.32	1.007	0.06	1.400	2.057
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	-0.15	0.923	1.368
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	-0.15	0.540	0.801
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 3+4(4)	Full power	100	5500	1	12.32	14.00	1.472	99.32	1.007	0.11	0.959	1.422
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+4(3)	Simultaneous	106	5530	1	13.52	15.00	1.406	100	1.000	0.1	0.280	0.394
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+4(3)	Simultaneous	106	5530	1	13.52	15.00	1.406	100	1.000	0.09	0.488	0.686
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+4(3)	Simultaneous	106	5530	1	13.52	15.00	1.406	100	1.000	0.1	0.332	0.467
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+4(3)	Simultaneous	106	5530	1	13.52	15.00	1.406	100	1.000	0.12	0.157	0.221
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+4(3)	Simultaneous	106	5530	1	13.52	15.00	1.406	100	1.000	0.08	0.288	0.405
94	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(4)	Full power	165	5825	1	12.63	14.00	1.371	99.32	1.007	0.01	1.250	1.726
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 3+4(4)	Full power	165	5825	2	12.63	14.00	1.371	99.32	1.007	0.02	1.180	1.629
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.93	10.50	1.435	100	1.000	-0.17	0.108	0.155
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.93	10.50	1.435	100	1.000	0.09	0.519	0.745
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.93	10.50	1.435	100	1.000	0.14	0.258	0.370
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.93	10.50	1.435	100	1.000	0.11	0.349	0.501
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+4(4)	Simultaneous	155	5775	1	8.93	10.50	1.435	100	1.000	-0.05	0.207	0.297

15.5 Repeated SAR Measurement

<1g>

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)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	-0.01	0.811	1	1.164
2nd	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Standalone	155	5775	1	11.43	13.00	1.435	100	1.000	-0.01	0.806	1.006	1.157

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 48	20M	QPSK	1	0	1	Back	0mm	Ant 8	DSI 2	55830	3609	1	23.49	24.50	1.262	62.9	1.006	0.08	2.090	1	2.653
2nd	LTE Band 48	20M	QPSK	1	0	1	Back	0mm	Ant 8	DSI 2	55830	3609	1	23.49	24.50	1.262	62.9	1.006	0.01	2.050	1.020	2.602
1st	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	638000	3570	1	22.02	23.50	1.406	1	1.000	0.03	2.090	1	2.939
2nd	FR1 n48	40M	BPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	638000	3570	1	22.02	23.50	1.406	1	1.000	0.06	2.060	1.015	2.896
1st	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	1	19.93	21.50	1.435	1	1.000	0.02	2.060	1	2.957
2nd	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	656000	3840	1	19.93	21.50	1.435	1	1.000	0.01	2.030	1.015	2.914
1st	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	21.10	21.50	1.096	1	1.000	0.09	2.390	1	2.621
2nd	FR1 n77 Part 270	100M	BPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	DSI 2	633334	3500.01	1	21.10	21.50	1.096	1	1.000	0.06	2.360	1.013	2.588

General Note:

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

15.6 TDD LTE Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for 5GNR n41/n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each NR configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

FR1 n41(HPUE) Ant 6-Linearity Data for Head		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.158	0.130
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.125	
% deviation from expected linearity		3.83%
FR1 n41(HPUE) Ant 6-Linearity Data for Body-worn		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.462	0.346
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.366	
% deviation from expected linearity		-5.49%
FR1 n41(HPUE) Ant 6-Linearity Data for Hotspot		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.528	0.397
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.418	
% deviation from expected linearity		-5.12%
FR1 n77(HPUE) Part270 Ant 8-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	15.50	18.50
Reported 1g SAR (W/kg)	0.424	0.422
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	35.48	35.40
Linearity SAR (W/kg)	0.423	
% deviation from expected linearity		-0.24%
FR1 n77(HPUE) Part270 Ant 8-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)	0.943	0.916
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	0.941	
FR1 n41(HPUE) Ant 1-Linearity Data for Head		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.616	0.453
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.488	
% deviation from expected linearity		-7.20%
FR1 n41(HPUE) Ant 1-Linearity Data for Body-worn		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.210	0.152
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.166	
% deviation from expected linearity		-8.66%
FR1 n41(HPUE) Ant 1-Linearity Data for Hotspot		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.404	0.306
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.320	
% deviation from expected linearity		-4.42%
FR1 n77(HPUE) Part270 Ant 5-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.446	0.467
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.445	
% deviation from expected linearity		4.96%
FR1 n77(HPUE) Part270 Ant 5-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.078	0.076
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.078	



% deviation from expected linearity		-2.63%
FR1 n77(HPUE) Part27O Ant 8-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00
Reported 1g SAR (W/kg)	0.771	0.757
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95
Linearity SAR (W/kg)	0.769	
% deviation from expected linearity		-1.58%
FR1 n77(HPUE) Part27O Ant 8-Linearity Data for Extremity		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50
Reported 10g SAR (W/kg)	2.957	2.918
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	2.950	
% deviation from expected linearity		-1.08%
FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	15.50	18.50
Reported 1g SAR (W/kg)	0.310	0.303
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	35.48	35.40
Linearity SAR (W/kg)	0.309	
% deviation from expected linearity		-2.03%
FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50
Reported 1g SAR (W/kg)	0.558	0.582
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92
Linearity SAR (W/kg)	0.557	
% deviation from expected linearity		4.55%
FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00
Reported 1g SAR (W/kg)	0.546	0.516
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95
Linearity SAR (W/kg)	0.545	
% deviation from expected linearity		-5.27%
FR1 n77(HPUE) Part27Q Ant 8-Linearity Data for Extremity		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.50	24.50
Reported 10g SAR (W/kg)	2.621	2.729
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	141.25	140.92

% deviation from expected linearity		-2.33%
FR1 n77(HPUE) Part27O Ant 5-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.125	0.121
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.125	
% deviation from expected linearity		-2.97%

FR1 n77(HPUE) Part27Q Ant 5-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.722	0.738
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.720	
% deviation from expected linearity		2.46%
FR1 n77(HPUE) Part27Q Ant 5-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.063	0.058
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.063	
% deviation from expected linearity		-7.72%
FR1 n77(HPUE) Part27Q Ant 5-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.111	0.103
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.111	
% deviation from expected linearity		-6.99%

Linearity SAR (W/kg)	2.615	
% deviation from expected linearity		4.37%

FR1 n41(HPUE) Ant 5-Linearity Data for Head		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.272	0.221
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.216	
% deviation from expected linearity		2.53%

FR1 n41(HPUE) Ant 5-Linearity Data for Body-worn		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.065	0.052
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.052	
% deviation from expected linearity		0.95%

FR1 n41(HPUE) Ant 5-Linearity Data for Hotspot		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.160	0.124
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.127	
% deviation from expected linearity		-2.20%

FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.007	0.007
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.007	
% deviation from expected linearity		0.24%

FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.049	0.048
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.049	
% deviation from expected linearity		-1.81%

FR1 n77(HPUE) Part270 Ant 6-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.078	0.074

FR1 n41(HPUE) Ant 7-Linearity Data for Head		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	23.00
Reported 1g SAR (W/kg)	0.451	0.336
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	99.76
Linearity SAR (W/kg)	0.357	
% deviation from expected linearity		-5.99%

FR1 n41(HPUE) Ant 7-Linearity Data for Body-worn		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	23.00
Reported 1g SAR (W/kg)	0.129	0.101
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	99.76
Linearity SAR (W/kg)	0.102	
% deviation from expected linearity		-1.20%

FR1 n41(HPUE) Ant 7-Linearity Data for Hotspot		
	FR1 n41 (Power Class 3)	FR1 n41 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	23.00
Reported 1g SAR (W/kg)	0.236	0.194
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	99.76
Linearity SAR (W/kg)	0.187	
% deviation from expected linearity		3.73%

FR1 n77(HPUE) Part270 Ant 9-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.231	0.187
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.183	
% deviation from expected linearity		2.15%

FR1 n77(HPUE) Part270 Ant 9-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.302	0.259
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.239	
% deviation from expected linearity		8.22%

FR1 n77(HPUE) Part270 Ant 9-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.483	0.383

Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.078	
% deviation from expected linearity		-4.90%
FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.045	0.043
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.045	
% deviation from expected linearity		-4.22%
FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.041	0.040
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.041	
% deviation from expected linearity		-2.21%
FR1 n77(HPUE) Part27Q Ant 6-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.050	0.048
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.050	
% deviation from expected linearity		-3.77%

Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.383	
% deviation from expected linearity		0.06%
FR1 n77(HPUE) Part27Q Ant 9-Linearity Data for Head		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.238	0.183
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.189	
% deviation from expected linearity		-2.97%
FR1 n77(HPUE) Part27Q Ant 9-Linearity Data for Body-worn		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.241	0.188
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.191	
% deviation from expected linearity		-1.56%
FR1 n77(HPUE) Part27Q Ant 9-Linearity Data for Hotspot		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.477	0.407
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR (W/kg)	0.378	
% deviation from expected linearity		7.67%

16. 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/6GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WLAN2.4GHz/5GHz/6GHz + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + WLAN5GHz/6GHz + Bluetooth	Yes	Yes	Yes	Yes
6.	WWAN + WLAN2.4GHz + Bluetooth	Yes	Yes	Yes	Yes
7.	WWAN + WLAN2.4GHz+NFC				Yes
8.	WWAN + WLAN5GHz/6GHz+NFC				Yes
9.	WWAN + Bluetooth+NFC				Yes
10.	WLAN2.4GHz/5GHz/6GHz + Bluetooth+NFC				Yes
11.	WWAN + WLAN5GHz/6GHz + Bluetooth+NFC				Yes
12.	WWAN + WLAN2.4GHz + Bluetooth+NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO mode and MIMO SAR can represent SISO SAR.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- 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). WLAN6GHz has no hotspot function.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth share the same antenna and cannot transmit simultaneously; WLAN 2.4GHz ant 4 and Bluetooth ant2 can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz cannot transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz can't transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- 5GNR MIMO SAR base on standalone SAR summed together as MIMO SAR.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- The maximum SAR summation is calculated based on the same configuration and test position.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
- 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. This is the worst co-located analysis and can represent each band.
- For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE bands within the selected antenna per each test position and also the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands and each 5GNR bands.
- 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.

20. The WLAN6GHz Sim-Tx analysis guidance with other transmitters was based on SAR test results. The simultaneous transmission and test exemption analysis were compliant with KDB 447498 D01. For the device does not support FR2 or other MPE field measurement, therefore section 16 in the SAR report has no TER analysis according to KDB 987594 requirement.

16.1 Head Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4	1+3+4	1+4+5
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 2+4 1g SAR (W/kg)	WLAN5GHz Ant 3+4 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	WLAN6GHz Ant 3+4 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
GSM850 Ant 0	Right Cheek	0.173	0.162	0.179	0.169	0.322	0.50	0.52	0.66
	Right Tilted	0.095	0.151	0.141	0.132	0.235	0.38	0.37	0.46
	Left Cheek	0.112	0.309	0.322	0.376	0.381	0.80	0.81	0.87
	Left Tilted	0.083	0.169	0.205	0.249	0.271	0.50	0.54	0.60
GSM850 Ant 1	Right Cheek	0.419	0.162	0.179	0.169	0.322	0.75	0.77	0.91
	Right Tilted	0.241	0.151	0.141	0.132	0.235	0.52	0.51	0.61
	Left Cheek	0.265	0.309	0.322	0.376	0.381	0.95	0.96	1.02
	Left Tilted	0.161	0.169	0.205	0.249	0.271	0.58	0.62	0.68
GSM1900 Ant 0	Right Cheek	0.078	0.162	0.179	0.169	0.322	0.41	0.43	0.57
	Right Tilted	0.066	0.151	0.141	0.132	0.235	0.35	0.34	0.43
	Left Cheek	0.106	0.309	0.322	0.376	0.381	0.79	0.80	0.86
	Left Tilted	0.069	0.169	0.205	0.249	0.271	0.49	0.52	0.59
WCDMA II Ant 0	Right Cheek	0.217	0.162	0.179	0.169	0.322	0.55	0.57	0.71
	Right Tilted	0.165	0.151	0.141	0.132	0.235	0.45	0.44	0.53
	Left Cheek	0.263	0.309	0.322	0.376	0.381	0.95	0.96	1.02
	Left Tilted	0.171	0.169	0.205	0.249	0.271	0.59	0.63	0.69
WCDMA IV Ant 0	Right Cheek	0.310	0.162	0.179	0.169	0.322	0.64	0.66	0.80
	Right Tilted	0.149	0.151	0.141	0.132	0.235	0.43	0.42	0.52
	Left Cheek	0.259	0.309	0.322	0.376	0.381	0.94	0.96	1.02
	Left Tilted	0.169	0.169	0.205	0.249	0.271	0.59	0.62	0.69
WCDMA V Ant 0	Right Cheek	0.244	0.162	0.179	0.169	0.322	0.58	0.59	0.74
	Right Tilted	0.129	0.151	0.141	0.132	0.235	0.41	0.40	0.50
	Left Cheek	0.166	0.309	0.322	0.376	0.381	0.85	0.86	0.92
	Left Tilted	0.122	0.169	0.205	0.249	0.271	0.54	0.58	0.64
WCDMA V Ant 1	Right Cheek	0.512	0.162	0.179	0.169	0.322	0.84	0.86	1.00
	Right Tilted	0.125	0.151	0.141	0.132	0.235	0.41	0.40	0.49
	Left Cheek	0.325	0.309	0.322	0.376	0.381	1.01	1.02	1.08
	Left Tilted	0.191	0.169	0.205	0.249	0.271	0.61	0.65	0.71
LTE Band 7 Ant 1	Right Cheek	0.772	0.162	0.179	0.169	0.322	1.10	1.12	1.26
	Right Tilted	0.475	0.151	0.141	0.132	0.235	0.76	0.75	0.84
	Left Cheek	0.290	0.309	0.322	0.376	0.381	0.98	0.99	1.05
	Left Tilted	0.212	0.169	0.205	0.249	0.271	0.63	0.67	0.73
LTE Band 7 Ant 5	Right Cheek	0.455	0.162	0.179	0.169	0.322	0.79	0.80	0.95
	Right Tilted	0.093	0.151	0.141	0.132	0.235	0.38	0.37	0.46
	Left Cheek	0.444	0.309	0.322	0.376	0.381	1.13	1.14	1.20
	Left Tilted	0.071	0.169	0.205	0.249	0.271	0.49	0.53	0.59
LTE Band 7 Ant 6	Right Cheek	0.085	0.162	0.179	0.169	0.322	0.42	0.43	0.58
	Right Tilted	0.063	0.151	0.141	0.132	0.235	0.35	0.34	0.43
	Left Cheek	0.150	0.309	0.322	0.376	0.381	0.84	0.85	0.91
	Left Tilted	0.052	0.169	0.205	0.249	0.271	0.47	0.51	0.57
LTE Band 7 Ant 7	Right Cheek	0.610	0.162	0.179	0.169	0.322	0.94	0.96	1.10
	Right Tilted	0.181	0.151	0.141	0.132	0.235	0.46	0.45	0.55
	Left Cheek	0.571	0.309	0.322	0.376	0.381	1.26	1.27	1.33
	Left Tilted	0.259	0.169	0.205	0.249	0.271	0.68	0.71	0.78
LTE Band 12	Right Cheek	0.135	0.162	0.179	0.169	0.322	0.47	0.48	0.63



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Ant 0	Right Tilted	0.081	0.151	0.141	0.132	0.235	0.36	0.35	0.45
	Left Cheek	0.120	0.309	0.322	0.376	0.381	0.81	0.82	0.88
	Left Tilted	0.076	0.169	0.205	0.249	0.271	0.49	0.53	0.60
LTE Band 12 Ant 1	Right Cheek	0.101	0.162	0.179	0.169	0.322	0.43	0.45	0.59
	Right Tilted	0.058	0.151	0.141	0.132	0.235	0.34	0.33	0.43
	Left Cheek	0.061	0.309	0.322	0.376	0.381	0.75	0.76	0.82
LTE Band 25 Ant 0	Left Tilted	0.037	0.169	0.205	0.249	0.271	0.46	0.49	0.56
	Right Cheek	0.215	0.162	0.179	0.169	0.322	0.55	0.56	0.71
	Right Tilted	0.157	0.151	0.141	0.132	0.235	0.44	0.43	0.52
LTE Band 26 Ant 0	Left Cheek	0.259	0.309	0.322	0.376	0.381	0.94	0.96	1.02
	Left Tilted	0.171	0.169	0.205	0.249	0.271	0.59	0.63	0.69
	Right Cheek	0.185	0.162	0.179	0.169	0.322	0.52	0.53	0.68
LTE Band 26 Ant 1	Right Tilted	0.106	0.151	0.141	0.132	0.235	0.39	0.38	0.47
	Left Cheek	0.139	0.309	0.322	0.376	0.381	0.82	0.84	0.90
	Left Tilted	0.097	0.169	0.205	0.249	0.271	0.52	0.55	0.62
LTE Band 66 Ant 0	Right Cheek	0.228	0.162	0.179	0.169	0.322	0.56	0.58	0.72
	Right Tilted	0.128	0.151	0.141	0.132	0.235	0.41	0.40	0.50
	Left Cheek	0.160	0.309	0.322	0.376	0.381	0.85	0.86	0.92
LTE Band 41 Ant 1	Left Tilted	0.090	0.169	0.205	0.249	0.271	0.51	0.54	0.61
	Right Cheek	0.288	0.162	0.179	0.169	0.322	0.62	0.64	0.78
	Right Tilted	0.133	0.151	0.141	0.132	0.235	0.42	0.41	0.50
LTE Band 41 Ant 5	Left Cheek	0.256	0.309	0.322	0.376	0.381	0.94	0.95	1.01
	Left Tilted	0.125	0.169	0.205	0.249	0.271	0.54	0.58	0.65
	Right Cheek	0.743	0.162	0.179	0.169	0.322	1.07	1.09	1.23
LTE Band 41 Ant 6	Right Tilted	0.374	0.151	0.141	0.132	0.235	0.66	0.65	0.74
	Left Cheek	0.253	0.309	0.322	0.376	0.381	0.94	0.95	1.01
	Left Tilted	0.173	0.169	0.205	0.249	0.271	0.59	0.63	0.69
LTE Band 41 Ant 7	Right Cheek	0.399	0.162	0.179	0.169	0.322	0.73	0.75	0.89
	Right Tilted	0.129	0.151	0.141	0.132	0.235	0.41	0.40	0.50
	Left Cheek	0.349	0.309	0.322	0.376	0.381	1.03	1.05	1.11
LTE Band 42 Part 27Q Ant 8	Left Tilted	0.088	0.169	0.205	0.249	0.271	0.51	0.54	0.61
	Right Cheek	0.089	0.162	0.179	0.169	0.322	0.42	0.44	0.58
	Right Tilted	0.066	0.151	0.141	0.132	0.235	0.35	0.34	0.43
LTE Band 48 Ant 8	Left Cheek	0.204	0.309	0.322	0.376	0.381	0.89	0.90	0.96
	Left Tilted	0.045	0.169	0.205	0.249	0.271	0.46	0.50	0.57
	Right Cheek	0.450	0.162	0.179	0.169	0.322	0.78	0.80	0.94
FR1 n5 Ant 0	Right Tilted	0.103	0.151	0.141	0.132	0.235	0.39	0.38	0.47
	Left Cheek	0.361	0.309	0.322	0.376	0.381	1.05	1.06	1.12
	Left Tilted	0.180	0.169	0.205	0.249	0.271	0.60	0.63	0.70
FR1 n5 Ant 1	Right Cheek	0.216	0.162	0.179	0.169	0.322	0.55	0.56	0.71
	Right Tilted	0.152	0.151	0.141	0.132	0.235	0.44	0.43	0.52
	Left Cheek	0.779	0.309	0.322	0.376	0.381	1.46	1.48	1.54
FR1 n7 Ant 1	Left Tilted	0.214	0.169	0.205	0.249	0.271	0.63	0.67	0.73
	Right Cheek	0.178	0.162	0.179	0.169	0.322	0.51	0.53	0.67
	Right Tilted	0.131	0.151	0.141	0.132	0.235	0.41	0.40	0.50
FR1 n5 Ant 0	Left Cheek	0.763	0.309	0.322	0.376	0.381	1.45	1.46	1.52
	Left Tilted	0.195	0.169	0.205	0.249	0.271	0.61	0.65	0.72
	Right Cheek	0.205	0.162	0.179	0.169	0.322	0.54	0.55	0.70
FR1 n5 Ant 1	Right Tilted	0.114	0.151	0.141	0.132	0.235	0.40	0.39	0.48
	Left Cheek	0.158	0.309	0.322	0.376	0.381	0.84	0.86	0.92
	Left Tilted	0.111	0.169	0.205	0.249	0.271	0.53	0.57	0.63
FR1 n7 Ant 1	Right Cheek	0.286	0.162	0.179	0.169	0.322	0.62	0.63	0.78
	Right Tilted	0.165	0.151	0.141	0.132	0.235	0.45	0.44	0.53
	Left Cheek	0.189	0.309	0.322	0.376	0.381	0.87	0.89	0.95
FR1 n7 Ant 1	Left Tilted	0.116	0.169	0.205	0.249	0.271	0.53	0.57	0.64
	Right Cheek	0.663	0.162	0.179	0.169	0.322	0.99	1.01	1.15



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	Right Tilted	0.403	0.151	0.141	0.132	0.235	0.69	0.68	0.77
	Left Cheek	0.260	0.309	0.322	0.376	0.381	0.95	0.96	1.02
	Left Tilted	0.209	0.169	0.205	0.249	0.271	0.63	0.66	0.73
	Right Cheek	0.259	0.162	0.179	0.169	0.322	0.59	0.61	0.75
FR1 n7 Ant 5	Right Tilted	0.077	0.151	0.141	0.132	0.235	0.36	0.35	0.44
	Left Cheek	0.223	0.309	0.322	0.376	0.381	0.91	0.92	0.98
	Left Tilted	0.046	0.169	0.205	0.249	0.271	0.46	0.50	0.57
	Right Cheek	0.090	0.162	0.179	0.169	0.322	0.42	0.44	0.58
FR1 n7 Ant 6	Right Tilted	0.054	0.151	0.141	0.132	0.235	0.34	0.33	0.42
	Left Cheek	0.159	0.309	0.322	0.376	0.381	0.84	0.86	0.92
	Left Tilted	0.050	0.169	0.205	0.249	0.271	0.47	0.50	0.57
	Right Cheek	0.090	0.162	0.179	0.169	0.322	0.42	0.44	0.58

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4	1+3+4	1+4+5
		WWAN	WLAN2.4GHz	WLAN5GHz	Bluetooth	WLAN6GHz	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n7 Ant 7	Right Cheek	0.790	0.162	0.179	0.169	0.322	1.12	1.14	1.28
	Right Tilted	0.226	0.151	0.141	0.132	0.235	0.51	0.50	0.59
	Left Cheek	0.768	0.309	0.322	0.376	0.381	1.45	1.47	1.53
	Left Tilted	0.309	0.169	0.205	0.249	0.271	0.73	0.76	0.83
FR1 n12 Ant 0	Right Cheek	0.126	0.162	0.179	0.169	0.322	0.46	0.47	0.62
	Right Tilted	0.058	0.151	0.141	0.132	0.235	0.34	0.33	0.43
	Left Cheek	0.108	0.309	0.322	0.376	0.381	0.79	0.81	0.87
	Left Tilted	0.043	0.169	0.205	0.249	0.271	0.46	0.50	0.56
FR1 n12 Ant 1	Right Cheek	0.119	0.162	0.179	0.169	0.322	0.45	0.47	0.61
	Right Tilted	0.069	0.151	0.141	0.132	0.235	0.35	0.34	0.44
	Left Cheek	0.067	0.309	0.322	0.376	0.381	0.75	0.77	0.82
	Left Tilted	0.049	0.169	0.205	0.249	0.271	0.47	0.50	0.57
FR1 n25 Ant 0	Right Cheek	0.198	0.162	0.179	0.169	0.322	0.53	0.55	0.69
	Right Tilted	0.134	0.151	0.141	0.132	0.235	0.42	0.41	0.50
	Left Cheek	0.241	0.309	0.322	0.376	0.381	0.93	0.94	1.00
	Left Tilted	0.149	0.169	0.205	0.249	0.271	0.57	0.60	0.67
FR1 n66 Ant 0	Right Cheek	0.277	0.162	0.179	0.169	0.322	0.61	0.63	0.77
	Right Tilted	0.167	0.151	0.141	0.132	0.235	0.45	0.44	0.53
	Left Cheek	0.235	0.309	0.322	0.376	0.381	0.92	0.93	0.99
	Left Tilted	0.139	0.169	0.205	0.249	0.271	0.56	0.59	0.66
FR1 n41 Ant 1	Right Cheek	0.616	0.162	0.179	0.169	0.322	0.95	0.96	1.11
	Right Tilted	0.389	0.151	0.141	0.132	0.235	0.67	0.66	0.76
	Left Cheek	0.235	0.309	0.322	0.376	0.381	0.92	0.93	0.99
	Left Tilted	0.182	0.169	0.205	0.249	0.271	0.60	0.64	0.70
FR1 n41 Ant 5	Right Cheek	0.272	0.162	0.179	0.169	0.322	0.60	0.62	0.76
	Right Tilted	0.106	0.151	0.141	0.132	0.235	0.39	0.38	0.47
	Left Cheek	0.268	0.309	0.322	0.376	0.381	0.95	0.97	1.03
	Left Tilted	0.062	0.169	0.205	0.249	0.271	0.48	0.52	0.58
FR1 n41 Ant 6	Right Cheek	0.080	0.162	0.179	0.169	0.322	0.41	0.43	0.57
	Right Tilted	0.053	0.151	0.141	0.132	0.235	0.34	0.33	0.42
	Left Cheek	0.158	0.309	0.322	0.376	0.381	0.84	0.86	0.92
	Left Tilted	0.046	0.169	0.205	0.249	0.271	0.46	0.50	0.57
FR1 n41 Ant 7	Right Cheek	0.451	0.162	0.179	0.169	0.322	0.78	0.80	0.94
	Right Tilted	0.126	0.151	0.141	0.132	0.235	0.41	0.40	0.49
	Left Cheek	0.427	0.309	0.322	0.376	0.381	1.11	1.13	1.18
	Left Tilted	0.190	0.169	0.205	0.249	0.271	0.61	0.64	0.71
FR1 n48 Ant 8	Right Cheek	0.152	0.162	0.179	0.169	0.322	0.48	0.50	0.64
	Right Tilted	0.102	0.151	0.141	0.132	0.235	0.39	0.38	0.47
	Left Cheek	0.556	0.309	0.322	0.376	0.381	1.24	1.25	1.31
	Left Tilted	0.160	0.169	0.205	0.249	0.271	0.58	0.61	0.68



FR1 n77 Part 27Q Ant 5	Right Cheek	0.467	0.162	0.179	0.169	0.322	0.80	0.82	0.96
	Right Tilted	0.154	0.151	0.141	0.132	0.235	0.44	0.43	0.52
	Left Cheek	0.153	0.309	0.322	0.376	0.381	0.84	0.85	0.91
	Left Tilted	0.118	0.169	0.205	0.249	0.271	0.54	0.57	0.64
FR1 n77 Part 27Q Ant 5	Right Cheek	0.738	0.162	0.179	0.169	0.322	1.07	1.09	1.23
	Right Tilted	0.175	0.151	0.141	0.132	0.235	0.46	0.45	0.54
	Left Cheek	0.382	0.309	0.322	0.376	0.381	1.07	1.08	1.14
	Left Tilted	0.133	0.169	0.205	0.249	0.271	0.55	0.59	0.65
FR1 n77 Part 27Q Ant 6	Right Cheek	0.007	0.162	0.179	0.169	0.322	0.34	0.36	0.50
	Right Tilted	0.001	0.151	0.141	0.132	0.235	0.28	0.27	0.37
	Left Cheek	0.006	0.309	0.322	0.376	0.381	0.69	0.70	0.76
	Left Tilted	0.002	0.169	0.205	0.249	0.271	0.42	0.46	0.52
FR1 n77 Part 27Q Ant 6	Right Cheek	0.045	0.162	0.179	0.169	0.322	0.38	0.39	0.54
	Right Tilted	0.012	0.151	0.141	0.132	0.235	0.30	0.29	0.38
	Left Cheek	0.044	0.309	0.322	0.376	0.381	0.73	0.74	0.80
	Left Tilted	0.007	0.169	0.205	0.249	0.271	0.43	0.46	0.53
FR1 n77 Part 27Q Ant 8	Right Cheek	0.105	0.162	0.179	0.169	0.322	0.44	0.45	0.60
	Right Tilted	0.083	0.151	0.141	0.132	0.235	0.37	0.36	0.45
	Left Cheek	0.424	0.309	0.322	0.376	0.381	1.11	1.12	1.18
	Left Tilted	0.183	0.169	0.205	0.249	0.271	0.60	0.64	0.70
FR1 n77 Part 27Q Ant 8	Right Cheek	0.102	0.162	0.179	0.169	0.322	0.43	0.45	0.59
	Right Tilted	0.093	0.151	0.141	0.132	0.235	0.38	0.37	0.46
	Left Cheek	0.310	0.309	0.322	0.376	0.381	1.00	1.01	1.07
	Left Tilted	0.113	0.169	0.205	0.249	0.271	0.53	0.57	0.63
FR1 n77 Part 27Q Ant 9	Right Cheek	0.231	0.162	0.179	0.169	0.322	0.56	0.58	0.72
	Right Tilted	0.072	0.151	0.141	0.132	0.235	0.36	0.35	0.44
	Left Cheek	0.150	0.309	0.322	0.376	0.381	0.84	0.85	0.91
	Left Tilted	0.109	0.169	0.205	0.249	0.271	0.53	0.56	0.63
FR1 n77 Part 27Q Ant 9	Right Cheek	0.238	0.162	0.179	0.169	0.322	0.57	0.59	0.73
	Right Tilted	0.067	0.151	0.141	0.132	0.235	0.35	0.34	0.43
	Left Cheek	0.109	0.309	0.322	0.376	0.381	0.79	0.81	0.87
	Left Tilted	0.092	0.169	0.205	0.249	0.271	0.51	0.55	0.61
LTE Band 5 Ant 1	Right Cheek	0.358	0.162	0.179	0.169	0.322	0.69	0.71	0.85
	Right Tilted	0.201	0.151	0.141	0.132	0.235	0.48	0.47	0.57
	Left Cheek	0.251	0.309	0.322	0.376	0.381	0.94	0.95	1.01
	Left Tilted	0.142	0.169	0.205	0.249	0.271	0.56	0.60	0.66



<ENDC>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	1+2+3+5	1+2+4+5	1+2+5+6
			WWAN	FR1	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	WLAN6GHz Ant 3+4	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 0	FR1 n77 Ant 5	Right Cheek	0.215	0.738	0.162	0.179	0.169	0.322	1.28	1.30	1.44
		Right Tilted	0.157	0.175	0.151	0.141	0.132	0.235	0.62	0.61	0.70
		Left Cheek	0.259	0.382	0.309	0.322	0.376	0.381	1.33	1.34	1.40
		Left Tilted	0.171	0.133	0.169	0.205	0.249	0.271	0.72	0.76	0.82
LTE Band 2 Ant 0	FR1 n78 Ant 5	Right Cheek	0.215	0.738	0.162	0.179	0.169	0.322	1.28	1.30	1.44
		Right Tilted	0.157	0.175	0.151	0.141	0.132	0.235	0.62	0.61	0.70
		Left Cheek	0.259	0.382	0.309	0.322	0.376	0.381	1.33	1.34	1.40
		Left Tilted	0.171	0.133	0.169	0.205	0.249	0.271	0.72	0.76	0.82
LTE Band 4 Ant 0	FR1 n78 Ant 5	Right Cheek	0.288	0.738	0.162	0.179	0.169	0.322	1.36	1.37	1.52
		Right Tilted	0.133	0.175	0.151	0.141	0.132	0.235	0.59	0.58	0.68
		Left Cheek	0.256	0.382	0.309	0.322	0.376	0.381	1.32	1.34	1.40
		Left Tilted	0.125	0.133	0.169	0.205	0.249	0.271	0.68	0.71	0.78
LTE Band 5 Ant 0	FR1 n77 Ant 5	Right Cheek	0.185	0.738	0.162	0.179	0.169	0.322	1.25	1.27	1.41
		Right Tilted	0.106	0.175	0.151	0.141	0.132	0.235	0.56	0.55	0.65
		Left Cheek	0.139	0.382	0.309	0.322	0.376	0.381	1.21	1.22	1.28
		Left Tilted	0.097	0.133	0.169	0.205	0.249	0.271	0.65	0.68	0.75
LTE Band 7 Ant 6	FR1 n78 Ant 5	Right Cheek	0.085	0.738	0.162	0.179	0.169	0.322	1.15	1.17	1.31
		Right Tilted	0.063	0.175	0.151	0.141	0.132	0.235	0.52	0.51	0.61
		Left Cheek	0.150	0.382	0.309	0.322	0.376	0.381	1.22	1.23	1.29
		Left Tilted	0.052	0.133	0.169	0.205	0.249	0.271	0.60	0.64	0.71
LTE Band 12 Ant 0	FR1 n77 Ant 5	Right Cheek	0.135	0.738	0.162	0.179	0.169	0.322	1.20	1.22	1.36
		Right Tilted	0.081	0.175	0.151	0.141	0.132	0.235	0.54	0.53	0.62
		Left Cheek	0.120	0.382	0.309	0.322	0.376	0.381	1.19	1.20	1.26
		Left Tilted	0.076	0.133	0.169	0.205	0.249	0.271	0.63	0.66	0.73
LTE Band 38 Ant 6	FR1 n78 Ant 5	Right Cheek	0.089	0.738	0.162	0.179	0.169	0.322	1.16	1.18	1.32
		Right Tilted	0.066	0.175	0.151	0.141	0.132	0.235	0.52	0.51	0.61
		Left Cheek	0.204	0.382	0.309	0.322	0.376	0.381	1.27	1.28	1.34
		Left Tilted	0.045	0.133	0.169	0.205	0.249	0.271	0.60	0.63	0.70
LTE Band 41 Ant 6	FR1 n78 Ant 5	Right Cheek	0.089	0.738	0.162	0.179	0.169	0.322	1.16	1.18	1.32
		Right Tilted	0.066	0.175	0.151	0.141	0.132	0.235	0.52	0.51	0.61
		Left Cheek	0.204	0.382	0.309	0.322	0.376	0.381	1.27	1.28	1.34
		Left Tilted	0.045	0.133	0.169	0.205	0.249	0.271	0.60	0.63	0.70
LTE Band 66 Ant 0	FR1 n77 Ant 5	Right Cheek	0.288	0.738	0.162	0.179	0.169	0.322	1.36	1.37	1.52
		Right Tilted	0.133	0.175	0.151	0.141	0.132	0.235	0.59	0.58	0.68
		Left Cheek	0.256	0.382	0.309	0.322	0.376	0.381	1.32	1.34	1.40
		Left Tilted	0.125	0.133	0.169	0.205	0.249	0.271	0.68	0.71	0.78
LTE Band 66 Ant 0	FR1 n78 Ant 5	Right Cheek	0.288	0.738	0.162	0.179	0.169	0.322	1.36	1.37	1.52
		Right Tilted	0.133	0.175	0.151	0.141	0.132	0.235	0.59	0.58	0.68
		Left Cheek	0.256	0.382	0.309	0.322	0.376	0.381	1.32	1.34	1.40
		Left Tilted	0.125	0.133	0.169	0.205	0.249	0.271	0.68	0.71	0.78
LTE Band 2 Ant 5	FR1 n5 Ant 0	Right Cheek	0.181	0.205	0.162	0.179	0.169	0.322	0.72	0.73	0.88
		Right Tilted	0.014	0.114	0.151	0.141	0.132	0.235	0.41	0.40	0.50
		Left Cheek	0.195	0.158	0.309	0.322	0.376	0.381	1.04	1.05	1.11
		Left Tilted	0.020	0.111	0.169	0.205	0.249	0.271	0.55	0.59	0.65
LTE Band 2 Ant 0	FR1 n41 Ant 5	Right Cheek	0.215	0.272	0.162	0.179	0.169	0.322	0.82	0.84	0.98
		Right Tilted	0.157	0.106	0.151	0.141	0.132	0.235	0.55	0.54	0.63
		Left Cheek	0.259	0.268	0.309	0.322	0.376	0.381	1.21	1.23	1.28
		Left Tilted	0.171	0.062	0.169	0.205	0.249	0.271	0.65	0.69	0.75
LTE Band 2 Ant 0	FR1 n66 Ant 5	Right Cheek	0.215	0.347	0.162	0.179	0.169	0.322	0.89	0.91	1.05
		Right Tilted	0.157	0.151	0.151	0.141	0.132	0.235	0.59	0.58	0.68
		Left Cheek	0.259	0.376	0.309	0.322	0.376	0.381	1.32	1.33	1.39



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LTE Band 5 Ant 0	FR1 n2 Ant 5	Left Tilted	0.171	0.142	0.169	0.205	0.249	0.271	0.73	0.77	0.83
		Right Cheek	0.185	0.165	0.162	0.179	0.169	0.322	0.68	0.70	0.84
		Right Tilted	0.106	0.066	0.151	0.141	0.132	0.235	0.46	0.45	0.54
		Left Cheek	0.139	0.182	0.309	0.322	0.376	0.381	1.01	1.02	1.08
		Left Tilted	0.097	0.040	0.169	0.205	0.249	0.271	0.56	0.59	0.66
LTE Band 5 Ant 0	FR1 n41 Ant 5	Right Cheek	0.185	0.272	0.162	0.179	0.169	0.322	0.79	0.81	0.95
		Right Tilted	0.106	0.106	0.151	0.141	0.132	0.235	0.50	0.49	0.58
		Left Cheek	0.139	0.268	0.309	0.322	0.376	0.381	1.09	1.11	1.16
		Left Tilted	0.097	0.062	0.169	0.205	0.249	0.271	0.58	0.61	0.68
LTE Band 5 Ant 0	FR1 n66 Ant 5	Right Cheek	0.185	0.347	0.162	0.179	0.169	0.322	0.86	0.88	1.02
		Right Tilted	0.106	0.151	0.151	0.141	0.132	0.235	0.54	0.53	0.62
		Left Cheek	0.139	0.376	0.309	0.322	0.376	0.381	1.20	1.21	1.27
		Left Tilted	0.097	0.142	0.169	0.205	0.249	0.271	0.66	0.69	0.76
LTE Band 12 Ant 0	FR1 n2 Ant 5	Right Cheek	0.135	0.165	0.162	0.179	0.169	0.322	0.63	0.65	0.79
		Right Tilted	0.081	0.066	0.151	0.141	0.132	0.235	0.43	0.42	0.51
		Left Cheek	0.120	0.182	0.309	0.322	0.376	0.381	0.99	1.00	1.06
		Left Tilted	0.076	0.040	0.169	0.205	0.249	0.271	0.53	0.57	0.64
LTE Band 12 Ant 0	FR1 n41 Ant 5	Right Cheek	0.135	0.272	0.162	0.179	0.169	0.322	0.74	0.76	0.90
		Right Tilted	0.081	0.106	0.151	0.141	0.132	0.235	0.47	0.46	0.55
		Left Cheek	0.120	0.268	0.309	0.322	0.376	0.381	1.07	1.09	1.15
		Left Tilted	0.076	0.062	0.169	0.205	0.249	0.271	0.56	0.59	0.66
LTE Band 12 Ant 0	FR1 n66 Ant 5	Right Cheek	0.135	0.347	0.162	0.179	0.169	0.322	0.81	0.83	0.97
		Right Tilted	0.081	0.151	0.151	0.141	0.132	0.235	0.52	0.51	0.60
		Left Cheek	0.120	0.376	0.309	0.322	0.376	0.381	1.18	1.19	1.25
		Left Tilted	0.076	0.142	0.169	0.205	0.249	0.271	0.64	0.67	0.74
LTE Band 66 Ant 0	FR1 n2 Ant 5	Right Cheek	0.288	0.165	0.162	0.179	0.169	0.322	0.78	0.80	0.94
		Right Tilted	0.133	0.066	0.151	0.141	0.132	0.235	0.48	0.47	0.57
		Left Cheek	0.256	0.182	0.309	0.322	0.376	0.381	1.12	1.14	1.20
		Left Tilted	0.125	0.040	0.169	0.205	0.249	0.271	0.58	0.62	0.69
LTE Band 66 Ant 5	FR1 n5 Ant 0	Right Cheek	0.218	0.205	0.162	0.179	0.169	0.322	0.75	0.77	0.91
		Right Tilted	0.096	0.114	0.151	0.141	0.132	0.235	0.49	0.48	0.58
		Left Cheek	0.231	0.158	0.309	0.322	0.376	0.381	1.07	1.09	1.15
		Left Tilted	0.091	0.111	0.169	0.205	0.249	0.271	0.62	0.66	0.72
LTE Band 66 Ant 0	FR1 n41 Ant 5	Right Cheek	0.288	0.272	0.162	0.179	0.169	0.322	0.89	0.91	1.05
		Right Tilted	0.133	0.106	0.151	0.141	0.132	0.235	0.52	0.51	0.61
		Left Cheek	0.256	0.268	0.309	0.322	0.376	0.381	1.21	1.22	1.28
		Left Tilted	0.125	0.062	0.169	0.205	0.249	0.271	0.61	0.64	0.71



<UL MIMO>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	1+2+3+5	1+2+4+5	1+2+5+6
			WWAN	FR1	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	WLAN6GHz Ant 3+4	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n41 Ant 6	FR1 n41 Ant 5	Right Cheek	0.080	0.272	0.162	0.179	0.169	0.322	0.68	0.70	0.84
		Right Tilted	0.053	0.106	0.151	0.141	0.132	0.235	0.44	0.43	0.53
		Left Cheek	0.158	0.268	0.309	0.322	0.376	0.381	1.11	1.12	1.18
		Left Tilted	0.046	0.062	0.169	0.205	0.249	0.271	0.53	0.56	0.63
FR1 n48 Ant 8	FR1 n48 Ant 5	Right Cheek	0.152	0.510	0.162	0.179	0.169	0.322	0.99	1.01	1.15
		Right Tilted	0.102	0.151	0.151	0.141	0.132	0.235	0.54	0.53	0.62
		Left Cheek	0.556	0.232	0.309	0.322	0.376	0.381	1.47	1.49	1.55
		Left Tilted	0.160	0.101	0.169	0.205	0.249	0.271	0.68	0.72	0.78
FR1 n77 Ant 8	FR1 n77 Ant 5	Right Cheek	0.105	0.738	0.162	0.179	0.169	0.322	1.17	1.19	1.33
		Right Tilted	0.093	0.175	0.151	0.141	0.132	0.235	0.55	0.54	0.64
		Left Cheek	0.424	0.382	0.309	0.322	0.376	0.381	1.49	1.50	1.56
		Left Tilted	0.183	0.133	0.169	0.205	0.249	0.271	0.73	0.77	0.84
FR1 n78 Ant 8	FR1 n78 Ant 5	Right Cheek	0.105	0.738	0.162	0.179	0.169	0.322	1.17	1.19	1.33
		Right Tilted	0.093	0.175	0.151	0.141	0.132	0.235	0.55	0.54	0.64
		Left Cheek	0.424	0.382	0.309	0.322	0.376	0.381	1.49	1.50	1.56
		Left Tilted	0.183	0.133	0.169	0.205	0.249	0.271	0.73	0.77	0.84



16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2+4	1+3+4
		WWAN	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Front	0.130	0.205	0.092	0.069	0.40	0.29
	Back	0.329	0.289	0.296	0.281	0.90	0.91
	Left side	0.113	0.128	0.229	0.100	0.34	0.44
	Right side	0.179	0.099	0.216	0.158	0.44	0.55
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.169				0.17	0.17
GSM850 Ant 1	Front	0.124	0.205	0.092	0.069	0.40	0.29
	Back	0.230	0.289	0.296	0.281	0.80	0.81
	Left side	0.064	0.128	0.229	0.100	0.29	0.39
	Right side	0.064	0.099	0.216	0.158	0.32	0.44
	Top side	0.093	0.214	0.219	0.103	0.41	0.42
	Bottom side					0.00	0.00
GSM1900 Ant 0	Front	0.204	0.205	0.092	0.069	0.48	0.37
	Back	0.316	0.289	0.296	0.281	0.89	0.89
	Left side	0.141	0.128	0.229	0.100	0.37	0.47
	Right side	0.083	0.099	0.216	0.158	0.34	0.46
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.314				0.31	0.31
WCDMA II Ant 0	Front	0.442	0.205	0.092	0.069	0.72	0.60
	Back	0.740	0.289	0.296	0.281	1.31	1.32
	Left side	0.283	0.128	0.229	0.100	0.51	0.61
	Right side	0.133	0.099	0.216	0.158	0.39	0.51
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.667				0.67	0.67
WCDMA IV Ant 0	Front	0.604	0.205	0.092	0.069	0.88	0.77
	Back	0.673	0.289	0.296	0.281	1.24	1.25
	Left side	0.326	0.128	0.229	0.100	0.55	0.66
	Right side	0.185	0.099	0.216	0.158	0.44	0.56
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.907				0.91	0.91
WCDMA V Ant 0	Front	0.162	0.205	0.092	0.069	0.44	0.32
	Back	0.401	0.289	0.296	0.281	0.97	0.98
	Left side	0.118	0.128	0.229	0.100	0.35	0.45
	Right side	0.207	0.099	0.216	0.158	0.46	0.58
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.205				0.21	0.21
WCDMA V Ant 1	Front	0.248	0.205	0.092	0.069	0.52	0.41
	Back	0.267	0.289	0.296	0.281	0.84	0.84
	Left side	0.111	0.128	0.229	0.100	0.34	0.44
	Right side	0.107	0.099	0.216	0.158	0.36	0.48
	Top side	0.125	0.214	0.219	0.103	0.44	0.45
	Bottom side					0.00	0.00
LTE Band 7 Ant 1	Front	0.476	0.205	0.092	0.069	0.75	0.64
	Back	0.784	0.289	0.296	0.281	1.35	1.36
	Left side	0.547	0.128	0.229	0.100	0.78	0.88
	Right side	0.046	0.099	0.216	0.158	0.30	0.42
	Top side	0.360	0.214	0.219	0.103	0.68	0.68
	Bottom side					0.00	0.00
LTE Band 7 Ant	Front	0.111	0.205	0.092	0.069	0.39	0.27



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5	Back	0.125	0.289	0.296	0.281	0.70	0.70
	Left side	0.208	0.128	0.229	0.100	0.44	0.54
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.035	0.214	0.219	0.103	0.35	0.36
	Bottom side					0.00	0.00
LTE Band 7 Ant 6	Front	0.550	0.205	0.092	0.069	0.82	0.71
	Back	0.865	0.289	0.296	0.281	1.44	1.44
	Left side	0.394	0.128	0.229	0.100	0.62	0.72
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
LTE Band 7 Ant 7	Bottom side	0.536				0.54	0.54
	Front	0.159	0.205	0.092	0.069	0.43	0.32
	Back	0.348	0.289	0.296	0.281	0.92	0.93
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.290	0.099	0.216	0.158	0.55	0.66
LTE Band 12 Ant 0	Top side	0.095	0.214	0.219	0.103	0.41	0.42
	Bottom side	0.040				0.04	0.04
	Front	0.131	0.205	0.092	0.069	0.41	0.29
	Back	0.363	0.289	0.296	0.281	0.93	0.94
	Left side	0.190	0.128	0.229	0.100	0.42	0.52
LTE Band 12 Ant 1	Right side	0.232	0.099	0.216	0.158	0.49	0.61
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.083				0.08	0.08
	Front	0.025	0.205	0.092	0.069	0.30	0.19
	Back	0.077	0.289	0.296	0.281	0.65	0.65
LTE Band 25 Ant 0	Left side	0.013	0.128	0.229	0.100	0.24	0.34
	Right side	0.004	0.099	0.216	0.158	0.26	0.38
	Top side	0.015	0.214	0.219	0.103	0.33	0.34
	Bottom side					0.00	0.00
	Front	0.448	0.205	0.092	0.069	0.72	0.61
LTE Band 26 Ant 0	Back	0.590	0.289	0.296	0.281	1.16	1.17
	Left side	0.289	0.128	0.229	0.100	0.52	0.62
	Right side	0.140	0.099	0.216	0.158	0.40	0.51
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.559				0.56	0.56
LTE Band 26 Ant 1	Front	0.144	0.205	0.092	0.069	0.42	0.31
	Back	0.369	0.289	0.296	0.281	0.94	0.95
	Left side	0.113	0.128	0.229	0.100	0.34	0.44
	Right side	0.182	0.099	0.216	0.158	0.44	0.56
	Top side		0.214	0.219	0.103	0.32	0.32
LTE Band 66 Ant 0	Bottom side	0.177				0.18	0.18
	Front	0.027	0.205	0.092	0.069	0.30	0.19
	Back	0.130	0.289	0.296	0.281	0.70	0.71
	Left side	0.008	0.128	0.229	0.100	0.24	0.34
	Right side	0.001	0.099	0.216	0.158	0.26	0.38
LTE Band 41 Ant 1	Top side	0.015	0.214	0.219	0.103	0.33	0.34
	Bottom side					0.00	0.00
	Front	0.755	0.205	0.092	0.069	1.03	0.92
	Back	0.797	0.289	0.296	0.281	1.37	1.37
	Left side	0.446	0.128	0.229	0.100	0.67	0.78
LTE Band 41 Ant 1	Right side	0.235	0.099	0.216	0.158	0.49	0.61
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.866				0.87	0.87
	Front	0.342	0.205	0.092	0.069	0.62	0.50
	Back	0.781	0.289	0.296	0.281	1.35	1.36
LTE Band 41 Ant 1	Left side	0.352	0.128	0.229	0.100	0.58	0.68



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	Right side	0.028	0.099	0.216	0.158	0.29	0.40
	Top side	0.342	0.214	0.219	0.103	0.66	0.66
	Bottom side					0.00	0.00
LTE Band 41 Ant 5	Front	0.118	0.205	0.092	0.069	0.39	0.28
	Back	0.128	0.289	0.296	0.281	0.70	0.71
	Left side	0.221	0.128	0.229	0.100	0.45	0.55
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.054	0.214	0.219	0.103	0.37	0.38
	Bottom side	0.041				0.04	0.04
LTE Band 41 Ant 6	Front	0.494	0.205	0.092	0.069	0.77	0.66
	Back	0.685	0.289	0.296	0.281	1.26	1.26
	Left side	0.396	0.128	0.229	0.100	0.62	0.73
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.303				0.30	0.30
LTE Band 41 Ant 7	Front	0.159	0.205	0.092	0.069	0.43	0.32
	Back	0.329	0.289	0.296	0.281	0.90	0.91
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.280	0.099	0.216	0.158	0.54	0.65
	Top side	0.084	0.214	0.219	0.103	0.40	0.41
	Bottom side	0.045				0.05	0.05
LTE Band 42 Part 27Q Ant 8	Front	0.182	0.205	0.092	0.069	0.46	0.34
	Back	0.778	0.289	0.296	0.281	1.35	1.36
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.441	0.099	0.216	0.158	0.70	0.82
	Top side	0.157	0.214	0.219	0.103	0.47	0.48
	Bottom side					0.00	0.00
LTE Band 48 Ant 8	Front	0.211	0.205	0.092	0.069	0.49	0.37
	Back	0.734	0.289	0.296	0.281	1.30	1.31
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.379	0.099	0.216	0.158	0.64	0.75
	Top side	0.149	0.214	0.219	0.103	0.47	0.47
	Bottom side					0.00	0.00
FR1 n5 Ant 0	Front	0.102	0.205	0.092	0.069	0.38	0.26
	Back	0.309	0.289	0.296	0.281	0.88	0.89
	Left side	0.054	0.128	0.229	0.100	0.28	0.38
	Right side	0.137	0.099	0.216	0.158	0.39	0.51
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.102				0.10	0.10
FR1 n5 Ant 1	Front	0.090	0.205	0.092	0.069	0.36	0.25
	Back	0.136	0.289	0.296	0.281	0.71	0.71
	Left side	0.070	0.128	0.229	0.100	0.30	0.40
	Right side	0.012	0.099	0.216	0.158	0.27	0.39
	Top side	0.093	0.214	0.219	0.103	0.41	0.42
	Bottom side					0.00	0.00
FR1 n7 Ant 1	Front	0.321	0.205	0.092	0.069	0.60	0.48
	Back	0.456	0.289	0.296	0.281	1.03	1.03
	Left side	0.246	0.128	0.229	0.100	0.47	0.58
	Right side	0.037	0.099	0.216	0.158	0.29	0.41
	Top side	0.227	0.214	0.219	0.103	0.54	0.55
	Bottom side					0.00	0.00
FR1 n7 Ant 5	Front	0.084	0.205	0.092	0.069	0.36	0.25
	Back	0.095	0.289	0.296	0.281	0.67	0.67
	Left side	0.156	0.128	0.229	0.100	0.38	0.49
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.047	0.214	0.219	0.103	0.36	0.37



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FR1 n7 Ant 6	Bottom side	0.048				0.05	0.05
	Front	0.499	0.205	0.092	0.069	0.77	0.66
	Back	0.807	0.289	0.296	0.281	1.38	1.38
	Left side	0.402	0.128	0.229	0.100	0.63	0.73
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.554				0.55	0.55

WWAN Band	Exposure Position	1	2	3	4	1+2+4	1+3+4
		WWAN	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n7 Ant 7	Front	0.182	0.205	0.092	0.069	0.46	0.34
	Back	0.406	0.289	0.296	0.281	0.98	0.98
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.316	0.099	0.216	0.158	0.57	0.69
	Top side	0.143	0.214	0.219	0.103	0.46	0.47
	Bottom side	0.114				0.11	0.11
FR1 n12 Ant 0	Front	0.107	0.205	0.092	0.069	0.38	0.27
	Back	0.299	0.289	0.296	0.281	0.87	0.88
	Left side	0.136	0.128	0.229	0.100	0.36	0.47
	Right side	0.173	0.099	0.216	0.158	0.43	0.55
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.063				0.06	0.06
FR1 n12 Ant 1	Front	0.036	0.205	0.092	0.069	0.31	0.20
	Back	0.052	0.289	0.296	0.281	0.62	0.63
	Left side	0.012	0.128	0.229	0.100	0.24	0.34
	Right side	0.037	0.099	0.216	0.158	0.29	0.41
	Top side	0.002	0.214	0.219	0.103	0.32	0.32
	Bottom side					0.00	0.00
FR1 n25 Ant 0	Front	0.383	0.205	0.092	0.069	0.66	0.54
	Back	0.572	0.289	0.296	0.281	1.14	1.15
	Left side	0.245	0.128	0.229	0.100	0.47	0.57
	Right side	0.110	0.099	0.216	0.158	0.37	0.48
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.564				0.56	0.56
FR1 n66 Ant 0	Front	0.563	0.205	0.092	0.069	0.84	0.72
	Back	0.611	0.289	0.296	0.281	1.18	1.19
	Left side	0.298	0.128	0.229	0.100	0.53	0.63
	Right side	0.164	0.099	0.216	0.158	0.42	0.54
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.791				0.79	0.79
FR1 n41 Ant 1	Front	0.154	0.205	0.092	0.069	0.43	0.32
	Back	0.404	0.289	0.296	0.281	0.97	0.98
	Left side	0.211	0.128	0.229	0.100	0.44	0.54
	Right side	0.056	0.099	0.216	0.158	0.31	0.43
	Top side	0.242	0.214	0.219	0.103	0.56	0.56
	Bottom side					0.00	0.00
FR1 n41 Ant 5	Front	0.129	0.205	0.092	0.069	0.40	0.29
	Back	0.159	0.289	0.296	0.281	0.73	0.74
	Left side	0.160	0.128	0.229	0.100	0.39	0.49
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.083	0.214	0.219	0.103	0.40	0.41
	Bottom side	0.137				0.14	0.14
FR1 n41 Ant 6	Front	0.362	0.205	0.092	0.069	0.64	0.52
	Back	0.528	0.289	0.296	0.281	1.10	1.11



	Left side	0.305	0.128	0.229	0.100	0.53	0.63
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.359				0.36	0.36
FR1 n41 Ant 7	Front	0.172	0.205	0.092	0.069	0.45	0.33
	Back	0.236	0.289	0.296	0.281	0.81	0.81
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.195	0.099	0.216	0.158	0.45	0.57
	Top side	0.142	0.214	0.219	0.103	0.46	0.46
	Bottom side	0.096				0.10	0.10
FR1 n48 Ant 8	Front	0.167	0.205	0.092	0.069	0.44	0.33
	Back	0.489	0.289	0.296	0.281	1.06	1.07
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.421	0.099	0.216	0.158	0.68	0.80
	Top side	0.133	0.214	0.219	0.103	0.45	0.46
	Bottom side					0.00	0.00
FR1 n77 Part 27O Ant 5	Front	0.068	0.205	0.092	0.069	0.34	0.23
	Back	0.125	0.289	0.296	0.281	0.70	0.70
	Left side	0.107	0.128	0.229	0.100	0.34	0.44
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.058	0.214	0.219	0.103	0.38	0.38
	Bottom side	0.094				0.09	0.09
FR1 n77 Part 27Q Ant 5	Front	0.076	0.205	0.092	0.069	0.35	0.24
	Back	0.111	0.289	0.296	0.281	0.68	0.69
	Left side	0.055	0.128	0.229	0.100	0.28	0.38
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side	0.048	0.214	0.219	0.103	0.37	0.37
	Bottom side	0.074				0.07	0.07
FR1 n77 Part 27O Ant 6	Front	0.041	0.205	0.092	0.069	0.32	0.20
	Back	0.078	0.289	0.296	0.281	0.65	0.66
	Left side	0.038	0.128	0.229	0.100	0.27	0.37
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.040				0.04	0.04
FR1 n77 Part 27Q Ant 6	Front	0.033	0.205	0.092	0.069	0.31	0.19
	Back	0.050	0.289	0.296	0.281	0.62	0.63
	Left side	0.029	0.128	0.229	0.100	0.26	0.36
	Right side		0.099	0.216	0.158	0.26	0.37
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.032				0.03	0.03
FR1 n77 Part 27O Ant 8	Front	0.157	0.205	0.092	0.069	0.43	0.32
	Back	0.771	0.289	0.296	0.281	1.34	1.35
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.464	0.099	0.216	0.158	0.72	0.84
	Top side	0.266	0.214	0.219	0.103	0.58	0.59
	Bottom side					0.00	0.00
FR1 n77 Part 27Q Ant 8	Front	0.133	0.205	0.092	0.069	0.41	0.29
	Back	0.416	0.289	0.296	0.281	0.99	0.99
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.363	0.099	0.216	0.158	0.62	0.74
	Top side	0.106	0.214	0.219	0.103	0.42	0.43
	Bottom side					0.00	0.00
FR1 n77 Part 27O Ant 9	Front	0.287	0.205	0.092	0.069	0.56	0.45
	Back	0.319	0.289	0.296	0.281	0.89	0.90
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.483	0.099	0.216	0.158	0.74	0.86



	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.223				0.22	0.22
FR1 n77 Part 27Q Ant 9	Front	0.321	0.205	0.092	0.069	0.60	0.48
	Back	0.234	0.289	0.296	0.281	0.80	0.81
	Left side		0.128	0.229	0.100	0.23	0.33
	Right side	0.477	0.099	0.216	0.158	0.73	0.85
	Top side		0.214	0.219	0.103	0.32	0.32
	Bottom side	0.312				0.31	0.31
LTE Band 5 Ant 1	Front	0.036	0.205	0.092	0.069	0.31	0.20
	Back	0.175	0.289	0.296	0.281	0.75	0.75
	Left side	0.011	0.128	0.229	0.100	0.24	0.34
	Right side	0.002	0.099	0.216	0.158	0.26	0.38
	Top side	0.020	0.214	0.219	0.103	0.34	0.34
	Bottom side					0.00	0.00

<ENDC>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3+5	1+2+4+5
			WWAN	FR1	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 0	FR1 n77 Ant 5	Front	0.448	0.076	0.205	0.092	0.069	0.80	0.69
		Back	0.590	0.125	0.289	0.296	0.281	1.29	1.29
		Left side	0.289	0.107	0.128	0.229	0.100	0.62	0.73
		Right side	0.140		0.099	0.216	0.158	0.40	0.51
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.559	0.094				0.65	0.65
LTE Band 2 Ant 0	FR1 n78 Ant 5	Front	0.448	0.076	0.205	0.092	0.069	0.80	0.69
		Back	0.590	0.125	0.289	0.296	0.281	1.29	1.29
		Left side	0.289	0.107	0.128	0.229	0.100	0.62	0.73
		Right side	0.140		0.099	0.216	0.158	0.40	0.51
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.559	0.094				0.65	0.65
LTE Band 4 Ant 0	FR1 n78 Ant 5	Front	0.755	0.076	0.205	0.092	0.069	1.11	0.99
		Back	0.797	0.125	0.289	0.296	0.281	1.49	1.50
		Left side	0.446	0.107	0.128	0.229	0.100	0.78	0.88
		Right side	0.235		0.099	0.216	0.158	0.49	0.61
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.866	0.094				0.96	0.96
LTE Band 5 Ant 0	FR1 n77 Ant 5	Front	0.144	0.076	0.205	0.092	0.069	0.49	0.38
		Back	0.369	0.125	0.289	0.296	0.281	1.06	1.07
		Left side	0.113	0.107	0.128	0.229	0.100	0.45	0.55
		Right side	0.182		0.099	0.216	0.158	0.44	0.56
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.177	0.094				0.27	0.27
LTE Band 7 Ant 6	FR1 n78 Ant 5	Front	0.550	0.076	0.205	0.092	0.069	0.90	0.79
		Back	0.865	0.125	0.289	0.296	0.281	1.56	1.57
		Left side	0.394	0.107	0.128	0.229	0.100	0.73	0.83
		Right side			0.099	0.216	0.158	0.26	0.37
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.536	0.094				0.63	0.63
LTE Band 12 Ant 0	FR1 n77 Ant 5	Front	0.131	0.076	0.205	0.092	0.069	0.48	0.37
		Back	0.363	0.125	0.289	0.296	0.281	1.06	1.07
		Left side	0.190	0.107	0.128	0.229	0.100	0.53	0.63
		Right side	0.232		0.099	0.216	0.158	0.49	0.61
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.083	0.094				0.18	0.18



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LTE Band 38 Ant 6	FR1 n78 Ant 5	Front	0.494	0.076	0.205	0.092	0.069	0.84	0.73
		Back	0.685	0.125	0.289	0.296	0.281	1.38	1.39
		Left side	0.396	0.107	0.128	0.229	0.100	0.73	0.83
		Right side			0.099	0.216	0.158	0.26	0.37
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.303	0.094				0.40	0.40
LTE Band 41 Ant 6	FR1 n78 Ant 5	Front	0.494	0.076	0.205	0.092	0.069	0.84	0.73
		Back	0.685	0.125	0.289	0.296	0.281	1.38	1.39
		Left side	0.396	0.107	0.128	0.229	0.100	0.73	0.83
		Right side			0.099	0.216	0.158	0.26	0.37
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.303	0.094				0.40	0.40
LTE Band 66 Ant 0	FR1 n77 Ant 5	Front	0.755	0.076	0.205	0.092	0.069	1.11	0.99
		Back	0.797	0.125	0.289	0.296	0.281	1.49	1.50
		Left side	0.446	0.107	0.128	0.229	0.100	0.78	0.88
		Right side	0.235		0.099	0.216	0.158	0.49	0.61
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.866	0.094				0.96	0.96
LTE Band 66 Ant 0	FR1 n78 Ant 5	Front	0.755	0.076	0.205	0.092	0.069	1.11	0.99
		Back	0.797	0.125	0.289	0.296	0.281	1.49	1.50
		Left side	0.446	0.107	0.128	0.229	0.100	0.78	0.88
		Right side	0.235		0.099	0.216	0.158	0.49	0.61
		Top side		0.058	0.214	0.219	0.103	0.38	0.38
		Bottom side	0.866	0.094				0.96	0.96
LTE Band 2 Ant 5	FR1 n5 Ant 0	Front	0.073	0.102	0.205	0.092	0.069	0.45	0.34
		Back	0.152	0.309	0.289	0.296	0.281	1.03	1.04
		Left side	0.093	0.054	0.128	0.229	0.100	0.38	0.48
		Right side		0.137	0.099	0.216	0.158	0.39	0.51
		Top side	0.082		0.214	0.219	0.103	0.40	0.40
		Bottom side	0.073	0.102				0.18	0.18
LTE Band 2 Ant 0	FR1 n41 Ant 5	Front	0.448	0.129	0.205	0.092	0.069	0.85	0.74
		Back	0.590	0.159	0.289	0.296	0.281	1.32	1.33
		Left side	0.289	0.160	0.128	0.229	0.100	0.68	0.78
		Right side	0.140		0.099	0.216	0.158	0.40	0.51
		Top side		0.083	0.214	0.219	0.103	0.40	0.41
		Bottom side	0.559	0.137				0.70	0.70
LTE Band 2 Ant 0	FR1 n66 Ant 5	Front	0.448	0.079	0.205	0.092	0.069	0.80	0.69
		Back	0.590	0.254	0.289	0.296	0.281	1.41	1.42
		Left side	0.289	0.178	0.128	0.229	0.100	0.70	0.80
		Right side	0.140		0.099	0.216	0.158	0.40	0.51
		Top side		0.071	0.214	0.219	0.103	0.39	0.39
		Bottom side	0.559	0.073				0.63	0.63
LTE Band 5 Ant 0	FR1 n2 Ant 5	Front	0.144	0.075	0.205	0.092	0.069	0.49	0.38
		Back	0.369	0.148	0.289	0.296	0.281	1.09	1.09
		Left side	0.113	0.110	0.128	0.229	0.100	0.45	0.55
		Right side	0.182		0.099	0.216	0.158	0.44	0.56
		Top side		0.053	0.214	0.219	0.103	0.37	0.38
		Bottom side	0.177	0.052				0.23	0.23
LTE Band 5 Ant 0	FR1 n41 Ant 5	Front	0.144	0.129	0.205	0.092	0.069	0.55	0.43
		Back	0.369	0.159	0.289	0.296	0.281	1.10	1.11
		Left side	0.113	0.160	0.128	0.229	0.100	0.50	0.60
		Right side	0.182		0.099	0.216	0.158	0.44	0.56
		Top side		0.083	0.214	0.219	0.103	0.40	0.41
		Bottom side	0.177	0.137				0.31	0.31
LTE Band 5 Ant 0	FR1 n66 Ant 5	Front	0.144	0.079	0.205	0.092	0.069	0.50	0.38
		Back	0.369	0.254	0.289	0.296	0.281	1.19	1.20



		Left side	0.113	0.178	0.128	0.229	0.100	0.52	0.62
		Right side	0.182		0.099	0.216	0.158	0.44	0.56
		Top side		0.071	0.214	0.219	0.103	0.39	0.39
		Bottom side	0.177	0.073				0.25	0.25
LTE Band 12 Ant 0	FR1 n2 Ant 5	Front	0.131	0.075	0.205	0.092	0.069	0.48	0.37
		Back	0.363	0.148	0.289	0.296	0.281	1.08	1.09
		Left side	0.190	0.110	0.128	0.229	0.100	0.53	0.63
		Right side	0.232		0.099	0.216	0.158	0.49	0.61
		Top side		0.053	0.214	0.219	0.103	0.37	0.38
		Bottom side	0.083	0.052				0.14	0.14
LTE Band 12 Ant 0	FR1 n41 Ant 5	Front	0.131	0.129	0.205	0.092	0.069	0.53	0.42
		Back	0.363	0.159	0.289	0.296	0.281	1.09	1.10
		Left side	0.190	0.160	0.128	0.229	0.100	0.58	0.68
		Right side	0.232		0.099	0.216	0.158	0.49	0.61
		Top side		0.083	0.214	0.219	0.103	0.40	0.41
		Bottom side	0.083	0.137				0.22	0.22
LTE Band 12 Ant 0	FR1 n66 Ant 5	Front	0.131	0.079	0.205	0.092	0.069	0.48	0.37
		Back	0.363	0.254	0.289	0.296	0.281	1.19	1.19
		Left side	0.190	0.178	0.128	0.229	0.100	0.60	0.70
		Right side	0.232		0.099	0.216	0.158	0.49	0.61
		Top side		0.071	0.214	0.219	0.103	0.39	0.39
		Bottom side	0.083	0.073				0.16	0.16
LTE Band 66 Ant 0	FR1 n2 Ant 5	Front	0.755	0.075	0.205	0.092	0.069	1.10	0.99
		Back	0.797	0.148	0.289	0.296	0.281	1.52	1.52
		Left side	0.446	0.110	0.128	0.229	0.100	0.78	0.89
		Right side	0.235		0.099	0.216	0.158	0.49	0.61
		Top side		0.053	0.214	0.219	0.103	0.37	0.38
		Bottom side	0.866	0.052				0.92	0.92
LTE Band 66 Ant 5	FR1 n5 Ant 0	Front	0.157	0.102	0.205	0.092	0.069	0.53	0.42
		Back	0.184	0.309	0.289	0.296	0.281	1.06	1.07
		Left side	0.097	0.054	0.128	0.229	0.100	0.38	0.48
		Right side		0.137	0.099	0.216	0.158	0.39	0.51
		Top side	0.124		0.214	0.219	0.103	0.44	0.45
		Bottom side	0.121	0.102				0.22	0.22
LTE Band 66 Ant 0	FR1 n41 Ant 5	Front	0.755	0.129	0.205	0.092	0.069	1.16	1.05
		Back	0.797	0.159	0.289	0.296	0.281	1.53	1.53
		Left side	0.446	0.160	0.128	0.229	0.100	0.83	0.94
		Right side	0.235		0.099	0.216	0.158	0.49	0.61
		Top side		0.083	0.214	0.219	0.103	0.40	0.41
		Bottom side	0.866	0.137				1.00	1.00

<UL MIMO>

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3+5	1+2+4+5
			WWAN	FR1	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n41 Ant 6	FR1 n41 Ant 5	Front	0.362	0.129	0.205	0.092	0.069	0.77	0.65
		Back	0.528	0.159	0.289	0.296	0.281	1.26	1.26
		Left side	0.305	0.160	0.128	0.229	0.100	0.69	0.79
		Right side			0.099	0.216	0.158	0.26	0.37
		Top side		0.083	0.214	0.219	0.103	0.40	0.41
		Bottom side	0.359	0.137				0.50	0.50
FR1 n48 Ant 8	FR1 n48 Ant 5	Front	0.167	0.118	0.205	0.092	0.069	0.56	0.45
		Back	0.489	0.478	0.289	0.296	0.281	1.54	1.54
		Left side		0.467	0.128	0.229	0.100	0.70	0.80
		Right side	0.421		0.099	0.216	0.158	0.68	0.80
		Top side	0.133	0.078	0.214	0.219	0.103	0.53	0.53
		Bottom side		0.115				0.12	0.12
FR1 n77 Ant 8	FR1 n77 Ant 5	Front	0.157	0.076	0.205	0.092	0.069	0.51	0.39
		Back	0.771	0.125	0.289	0.296	0.281	1.47	1.47
		Left side		0.107	0.128	0.229	0.100	0.34	0.44
		Right side	0.464		0.099	0.216	0.158	0.72	0.84
		Top side	0.266	0.058	0.214	0.219	0.103	0.64	0.65
		Bottom side		0.094				0.09	0.09
FR1 n78 Ant 8	FR1 n78 Ant 5	Front	0.157	0.076	0.205	0.092	0.069	0.51	0.39
		Back	0.771	0.125	0.289	0.296	0.281	1.47	1.47
		Left side		0.107	0.128	0.229	0.100	0.34	0.44
		Right side	0.464		0.099	0.216	0.158	0.72	0.84
		Top side	0.266	0.058	0.214	0.219	0.103	0.64	0.65
		Bottom side		0.094				0.09	0.09

16.3 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4	1+3+4	1+4+5
		WWAN	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	WLAN6GHz Ant 3+4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Front	0.137	0.264	0.179	0.024	0.174	0.43	0.34	0.34
	Back	0.236	0.274	0.301	0.206	0.031	0.72	0.74	0.47
GSM850 Ant 1	Front	0.082	0.264	0.179	0.024	0.174	0.37	0.29	0.28
	Back	0.127	0.274	0.301	0.206	0.031	0.61	0.63	0.36
GSM1900 Ant 0	Front	0.143	0.264	0.179	0.024	0.174	0.43	0.35	0.34
	Back	0.178	0.274	0.301	0.206	0.031	0.66	0.69	0.42
WCDMA II Ant 0	Front	0.273	0.264	0.179	0.024	0.174	0.56	0.48	0.47
	Back	0.370	0.274	0.301	0.206	0.031	0.85	0.88	0.61
WCDMA IV Ant 0	Front	0.331	0.264	0.179	0.024	0.174	0.62	0.53	0.53
	Back	0.363	0.274	0.301	0.206	0.031	0.84	0.87	0.60
WCDMA V Ant 0	Front	0.186	0.264	0.179	0.024	0.174	0.47	0.39	0.38
	Back	0.291	0.274	0.301	0.206	0.031	0.77	0.80	0.53
WCDMA V Ant 1	Front	0.122	0.264	0.179	0.024	0.174	0.41	0.33	0.32
	Back	0.158	0.274	0.301	0.206	0.031	0.64	0.67	0.40
LTE Band 7 Ant 1	Front	0.397	0.264	0.179	0.024	0.174	0.69	0.60	0.60
	Back	0.560	0.274	0.301	0.206	0.031	1.04	1.07	0.80
LTE Band 7 Ant 5	Front	0.095	0.264	0.179	0.024	0.174	0.38	0.30	0.29
	Back	0.096	0.274	0.301	0.206	0.031	0.58	0.60	0.33
LTE Band 7 Ant 6	Front	0.249	0.264	0.179	0.024	0.174	0.54	0.45	0.45
	Back	0.422	0.274	0.301	0.206	0.031	0.90	0.93	0.66
LTE Band 7 Ant 7	Front	0.187	0.264	0.179	0.024	0.174	0.48	0.39	0.39
	Back	0.239	0.274	0.301	0.206	0.031	0.72	0.75	0.48
LTE Band 12 Ant 0	Front	0.167	0.264	0.179	0.024	0.174	0.46	0.37	0.37
	Back	0.309	0.274	0.301	0.206	0.031	0.79	0.82	0.55
LTE Band 12 Ant 1	Front	0.013	0.264	0.179	0.024	0.174	0.30	0.22	0.21
	Back	0.049	0.274	0.301	0.206	0.031	0.53	0.56	0.29
LTE Band 25 Ant 0	Front	0.238	0.264	0.179	0.024	0.174	0.53	0.44	0.44
	Back	0.312	0.274	0.301	0.206	0.031	0.79	0.82	0.55
LTE Band 26 Ant 0	Front	0.147	0.264	0.179	0.024	0.174	0.44	0.35	0.35
	Back	0.259	0.274	0.301	0.206	0.031	0.74	0.77	0.50
LTE Band 26 Ant 1	Front	0.027	0.264	0.179	0.024	0.174	0.32	0.23	0.23
	Back	0.070	0.274	0.301	0.206	0.031	0.55	0.58	0.31
LTE Band 66 Ant 0	Front	0.309	0.264	0.179	0.024	0.174	0.60	0.51	0.51
	Back	0.358	0.274	0.301	0.206	0.031	0.84	0.87	0.60
LTE Band 41 Ant 1	Front	0.315	0.264	0.179	0.024	0.174	0.60	0.52	0.51
	Back	0.581	0.274	0.301	0.206	0.031	1.06	1.09	0.82
LTE Band 41 Ant 5	Front	0.082	0.264	0.179	0.024	0.174	0.37	0.29	0.28
	Back	0.125	0.274	0.301	0.206	0.031	0.61	0.63	0.36
LTE Band 41 Ant 6	Front	0.206	0.264	0.179	0.024	0.174	0.49	0.41	0.40
	Back	0.384	0.274	0.301	0.206	0.031	0.86	0.89	0.62
LTE Band 41 Ant 7	Front	0.123	0.264	0.179	0.024	0.174	0.41	0.33	0.32
	Back	0.191	0.274	0.301	0.206	0.031	0.67	0.70	0.43
LTE Band 42 Part 27Q Ant 8	Front	0.118	0.264	0.179	0.024	0.174	0.41	0.32	0.32
	Back	0.488	0.274	0.301	0.206	0.031	0.97	1.00	0.73
LTE Band 48 Ant 8	Front	0.222	0.264	0.179	0.024	0.174	0.51	0.43	0.42
	Back	0.973	0.274	0.301	0.206	0.031	1.45	1.48	1.21
FR1 n5 Ant 0	Front	0.134	0.264	0.179	0.024	0.174	0.42	0.34	0.33
	Back	0.235	0.274	0.301	0.206	0.031	0.72	0.74	0.47
FR1 n5 Ant 1	Front	0.025	0.264	0.179	0.024	0.174	0.31	0.23	0.22
	Back	0.040	0.274	0.301	0.206	0.031	0.52	0.55	0.28



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FR1 n7 Ant 1	Front	0.352	0.264	0.179	0.024	0.174	0.64	0.56	0.55
	Back	0.474	0.274	0.301	0.206	0.031	0.95	0.98	0.71
FR1 n7 Ant 5	Front	0.101	0.264	0.179	0.024	0.174	0.39	0.30	0.30
	Back	0.114	0.274	0.301	0.206	0.031	0.59	0.62	0.35
FR1 n7 Ant 6	Front	0.267	0.264	0.179	0.024	0.174	0.56	0.47	0.47
	Back	0.484	0.274	0.301	0.206	0.031	0.96	0.99	0.72

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4	1+3+4	1+4+5
		WWAN	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	WLAN6GHz Ant 3+4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n7 Ant 7	Front	0.166	0.264	0.179	0.024	0.174	0.45	0.37	0.36
	Back	0.243	0.274	0.301	0.206	0.031	0.72	0.75	0.48
FR1 n12 Ant 0	Front	0.146	0.264	0.179	0.024	0.174	0.43	0.35	0.34
	Back	0.271	0.274	0.301	0.206	0.031	0.75	0.78	0.51
FR1 n12 Ant 1	Front	0.011	0.264	0.179	0.024	0.174	0.30	0.21	0.21
	Back	0.037	0.274	0.301	0.206	0.031	0.52	0.54	0.27
FR1 n25 Ant 0	Front	0.252	0.264	0.179	0.024	0.174	0.54	0.46	0.45
	Back	0.370	0.274	0.301	0.206	0.031	0.85	0.88	0.61
FR1 n66 Ant 0	Front	0.286	0.264	0.179	0.024	0.174	0.57	0.49	0.48
	Back	0.293	0.274	0.301	0.206	0.031	0.77	0.80	0.53
FR1 n41 Ant 1	Front	0.083	0.264	0.179	0.024	0.174	0.37	0.29	0.28
	Back	0.210	0.274	0.301	0.206	0.031	0.69	0.72	0.45
FR1 n41 Ant 5	Front	0.041	0.264	0.179	0.024	0.174	0.33	0.24	0.24
	Back	0.065	0.274	0.301	0.206	0.031	0.55	0.57	0.30
FR1 n41 Ant 6	Front	0.240	0.264	0.179	0.024	0.174	0.53	0.44	0.44
	Back	0.462	0.274	0.301	0.206	0.031	0.94	0.97	0.70
FR1 n41 Ant 7	Front	0.127	0.264	0.179	0.024	0.174	0.42	0.33	0.33
	Back	0.129	0.274	0.301	0.206	0.031	0.61	0.64	0.37
FR1 n48 Ant 8	Front	0.248	0.264	0.179	0.024	0.174	0.54	0.45	0.45
	Back	0.958	0.274	0.301	0.206	0.031	1.44	1.47	1.20
FR1 n77 Part 27O Ant 5	Front	0.055	0.264	0.179	0.024	0.174	0.34	0.26	0.25
	Back	0.078	0.274	0.301	0.206	0.031	0.56	0.59	0.32
FR1 n77 Part 27Q Ant 5	Front	0.033	0.264	0.179	0.024	0.174	0.32	0.24	0.23
	Back	0.063	0.274	0.301	0.206	0.031	0.54	0.57	0.30
FR1 n77 Part 27O Ant 6	Front	0.033	0.264	0.179	0.024	0.174	0.32	0.24	0.23
	Back	0.049	0.274	0.301	0.206	0.031	0.53	0.56	0.29
FR1 n77 Part 27Q Ant 6	Front	0.022	0.264	0.179	0.024	0.174	0.31	0.23	0.22
	Back	0.041	0.274	0.301	0.206	0.031	0.52	0.55	0.28
FR1 n77 Part 27O Ant 8	Front	0.193	0.264	0.179	0.024	0.174	0.48	0.40	0.39
	Back	0.943	0.274	0.301	0.206	0.031	1.42	1.45	1.18
FR1 n77 Part 27Q Ant 8	Front	0.229	0.264	0.179	0.024	0.174	0.52	0.43	0.43
	Back	0.582	0.274	0.301	0.206	0.031	1.06	1.09	0.82
FR1 n77 Part 27O Ant 9	Front	0.174	0.264	0.179	0.024	0.174	0.46	0.38	0.37
	Back	0.302	0.274	0.301	0.206	0.031	0.78	0.81	0.54
FR1 n77 Part 27Q Ant 9	Front	0.213	0.264	0.179	0.024	0.174	0.50	0.42	0.41
	Back	0.241	0.274	0.301	0.206	0.031	0.72	0.75	0.48
LTE Band 5 Ant 1	Front	0.038	0.264	0.179	0.024	0.174	0.33	0.24	0.24
	Back	0.097	0.274	0.301	0.206	0.031	0.58	0.60	0.33

<ENDC>

WWAN Band	FR1 Band	Exposure Position	Exposure Position	1	2	3	4	5	6	1+2+3+5	1+2+4+5	1+2+5+6
				WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	WLAN2.4GHz Ant 2+4 1g SAR (W/kg)	WLAN5GHz Ant 3+4 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	WLAN6GHz Ant 3+4 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
LTE Band 2 Ant 0	FR1 n77 Ant 5	Front	Front	0.238	0.055	0.264	0.179	0.024	0.174	0.58	0.50	0.49
		Back	Back	0.312	0.078	0.274	0.301	0.206	0.031	0.87	0.90	0.63
LTE Band 2 Ant 0	FR1 n78 Ant 5	Front	Front	0.238	0.055	0.264	0.179	0.024	0.174	0.58	0.50	0.49
		Back	Back	0.312	0.078	0.274	0.301	0.206	0.031	0.87	0.90	0.63
LTE Band 4 Ant 0	FR1 n78 Ant 5	Front	Front	0.309	0.055	0.264	0.179	0.024	0.174	0.65	0.57	0.56
		Back	Back	0.358	0.078	0.274	0.301	0.206	0.031	0.92	0.94	0.67
LTE Band 5 Ant 0	FR1 n77 Ant 5	Front	Front	0.147	0.055	0.264	0.179	0.024	0.174	0.49	0.41	0.40
		Back	Back	0.259	0.078	0.274	0.301	0.206	0.031	0.82	0.84	0.57
LTE Band 7 Ant 6	FR1 n78 Ant 5	Front	Front	0.249	0.055	0.264	0.179	0.024	0.174	0.59	0.51	0.50
		Back	Back	0.422	0.078	0.274	0.301	0.206	0.031	0.98	1.01	0.74
LTE Band 12 Ant 0	FR1 n77 Ant 5	Front	Front	0.167	0.055	0.264	0.179	0.024	0.174	0.51	0.43	0.42
		Back	Back	0.309	0.078	0.274	0.301	0.206	0.031	0.87	0.89	0.62
LTE Band 38 Ant 6	FR1 n78 Ant 5	Front	Front	0.206	0.055	0.264	0.179	0.024	0.174	0.55	0.46	0.46
		Back	Back	0.384	0.078	0.274	0.301	0.206	0.031	0.94	0.97	0.70
LTE Band 41 Ant 6	FR1 n78 Ant 5	Front	Front	0.206	0.055	0.264	0.179	0.024	0.174	0.55	0.46	0.46
		Back	Back	0.384	0.078	0.274	0.301	0.206	0.031	0.94	0.97	0.70
LTE Band 66 Ant 0	FR1 n77 Ant 5	Front	Front	0.309	0.055	0.264	0.179	0.024	0.174	0.65	0.57	0.56
		Back	Back	0.358	0.078	0.274	0.301	0.206	0.031	0.92	0.94	0.67
LTE Band 66 Ant 0	FR1 n78 Ant 5	Front	Front	0.309	0.055	0.264	0.179	0.024	0.174	0.65	0.57	0.56
		Back	Back	0.358	0.078	0.274	0.301	0.206	0.031	0.92	0.94	0.67
LTE Band 2 Ant 5	FR1 n5 Ant 0	Front	Front	0.056	0.134	0.264	0.179	0.024	0.174	0.48	0.39	0.39
		Back	Back	0.081	0.235	0.274	0.301	0.206	0.031	0.80	0.82	0.55
LTE Band 2 Ant 0	FR1 n41 Ant 5	Front	Front	0.238	0.041	0.264	0.179	0.024	0.174	0.57	0.48	0.48
		Back	Back	0.312	0.065	0.274	0.301	0.206	0.031	0.86	0.88	0.61
LTE Band 2 Ant 0	FR1 n66 Ant 5	Front	Front	0.238	0.036	0.264	0.179	0.024	0.174	0.56	0.48	0.47
		Back	Back	0.312	0.079	0.274	0.301	0.206	0.031	0.87	0.90	0.63
LTE Band 5 Ant 0	FR1 n2 Ant 5	Front	Front	0.147	0.070	0.264	0.179	0.024	0.174	0.51	0.42	0.42
		Back	Back	0.259	0.077	0.274	0.301	0.206	0.031	0.82	0.84	0.57
LTE Band 5 Ant 0	FR1 n41 Ant 5	Front	Front	0.147	0.041	0.264	0.179	0.024	0.174	0.48	0.39	0.39
		Back	Back	0.259	0.065	0.274	0.301	0.206	0.031	0.80	0.83	0.56
LTE Band 5 Ant 0	FR1 n66 Ant 5	Front	Front	0.147	0.036	0.264	0.179	0.024	0.174	0.47	0.39	0.38
		Back	Back	0.259	0.079	0.274	0.301	0.206	0.031	0.82	0.85	0.58
LTE Band 12 Ant 0	FR1 n2 Ant 5	Front	Front	0.167	0.070	0.264	0.179	0.024	0.174	0.53	0.44	0.44
		Back	Back	0.309	0.077	0.274	0.301	0.206	0.031	0.87	0.89	0.62
LTE Band 12 Ant 0	FR1 n41 Ant 5	Front	Front	0.167	0.041	0.264	0.179	0.024	0.174	0.50	0.41	0.41
		Back	Back	0.309	0.065	0.274	0.301	0.206	0.031	0.85	0.88	0.61
LTE Band 12 Ant 0	FR1 n66 Ant 5	Front	Front	0.167	0.036	0.264	0.179	0.024	0.174	0.49	0.41	0.40
		Back	Back	0.309	0.079	0.274	0.301	0.206	0.031	0.87	0.90	0.63
LTE Band 66 Ant 0	FR1 n2 Ant 5	Front	Front	0.309	0.070	0.264	0.179	0.024	0.174	0.67	0.58	0.58
		Back	Back	0.358	0.077	0.274	0.301	0.206	0.031	0.92	0.94	0.67
LTE Band 66 Ant 5	FR1 n5 Ant 0	Front	Front	0.043	0.134	0.264	0.179	0.024	0.174	0.47	0.38	0.38
		Back	Back	0.095	0.235	0.274	0.301	0.206	0.031	0.81	0.84	0.57
LTE Band 66 Ant 0	FR1 n41 Ant 5	Front	Front	0.309	0.041	0.264	0.179	0.024	0.174	0.64	0.55	0.55
		Back	Back	0.358	0.065	0.274	0.301	0.206	0.031	0.90	0.93	0.66

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WWAN Band	FR1 Band	Exposure Position	Exposure Position	1	2	3	4	5	6	1+2+3+5	1+2+4+5	1+2+5+6
				FR1	FR1	WLAN2.4GHz Ant 2+4	WLAN5GHz Ant 3+4	Bluetooth Ant 2	WLAN6GHz Ant 3+4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n41 Ant 6	FR1 n41 Ant 5	Front	Front	0.240	0.041	0.264	0.179	0.024	0.174	0.57	0.48	0.48
		Back	Back	0.462	0.065	0.274	0.301	0.206	0.031	1.01	1.03	0.76
FR1 n48 Ant 8	FR1 n48 Ant 5	Front	Front	0.248	0.041	0.264	0.179	0.024	0.174	0.58	0.49	0.49
		Back	Back	0.958	0.104	0.274	0.301	0.206	0.031	1.54	1.57	1.30
FR1 n77 Ant 8	FR1 n77 Ant 5	Front	Front	0.229	0.055	0.264	0.179	0.024	0.174	0.57	0.49	0.48
		Back	Back	0.943	0.078	0.274	0.301	0.206	0.031	1.50	1.53	1.26
FR1 n78 Ant 8	FR1 n78 Ant 5	Front	Front	0.229	0.055	0.264	0.179	0.024	0.174	0.57	0.49	0.48
		Back	Back	0.943	0.078	0.274	0.301	0.206	0.031	1.50	1.53	1.26

16.4 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.

WWAN Band	Exposure Position	1	2	3	4	1+2+4	1+3+4
		WWAN	WLAN5GHz Ant 3+4	WLAN6GHz Ant 3+4	NFC	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
LTE Band 42 Part 27Q Ant 8	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.851	0.747	0.208	0.038	3.64	3.10
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side		0.501	0.102	0.001	0.50	0.10
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00
LTE Band 48 Ant 8	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.653	0.747	0.208	0.038	3.44	2.90
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side		0.501	0.102	0.001	0.50	0.10
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00
FR1 n48 Ant 8	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.939	0.747	0.208	0.038	3.72	3.19
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side	2.698	0.501	0.102	0.001	3.20	2.80
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00
FR1 n77 Part 27O Ant 8	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.957	0.747	0.208	0.038	3.74	3.20
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side		0.501	0.102	0.001	0.50	0.10
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00
FR1 n77 Part 27Q Ant 8	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.729	0.747	0.208	0.038	3.51	2.98
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side		0.501	0.102	0.001	0.50	0.10
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00
LTE Band 41 Ant 1	Front		0.394	0.186	0.001	0.40	0.19
	Back	2.113	0.747	0.208	0.038	2.90	2.36
	Left side		0.467	0.019	0.001	0.47	0.02
	Right side		0.501	0.102	0.001	0.50	0.10
	Top side		0.452	0.256	0.001	0.45	0.26
	Bottom side				0.001	0.00	0.00

Test Engineer : Martin Li, Varus Wang, Light Wang, Ricky Gu

17. 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.

18. 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.
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